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GOARN Weekly Ops Call Notes

Date: 28 May 2020

Time: 8:00 EDT/ 14:00 CET

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From: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP)
Sent: Thu, 4 Jun 2020 20:41:50 +0000
To: Armstrong, Gregory (CDC/DDID/NCEZID/OD);Beach, Michael J. (CDC/DDID/NCEZID/DFWED);Ben Hamida, Amen (em-EN) (CDC/DDPHSIS/CGH/DGHP);Bennett, Sarah D. (CDC/DDPHSIS/CGH/GID);Bresee, Joseph (CDC/DDID/NCIRD/ID);Bunga, Sudhir (CDC state.gov);Christie, Athalia (CDC/DDPHSIS/CGH/OD);Clarke, Kevin R. (CDC/DDPHSIS/CGH/DGHP);Dahl, Benjamin A. (CDC/DDPHSIS/CGH/GID);Damon, Inger K. (CDC/DDID/NCEZID/DHCPP);Dawood, Fatimah S. (CDC/DDID/NCIRD/ID);EOC IM;Farag, Noha (CDC/DDPHSIS/CGH/GID);Fitter, David L. (CDC/DDPHSIS/CGH/GID);Fox, LeAnne M. (CDC/DDID/NCIRD/DBD);GDD-OUTBREAK (CDC);Geissler, Aimee L. (CDC/DDID/NCEZID/DFWED);Ghiselli, Margherita (CDC/DDPHSIS/CGH/GID);Greene, Carolyn M. (CDC/DDID/NCIRD/ID);Greiner, Ashley L. (CDC/DDPHSIS/CGH/DGHP);Hagan, Jose Edward (CDC/DDPHSIS/CGH/GID);Hakim, Avi (CDC/DDPHSIS/CGH/DGHT);Helfand, Rita (CDC/DDID/NCEZID/OD);Henao, Olga (CDC/DDPHSIS/CGH/DGHP);Hyde, Terri (CDC/DDPHSIS/CGH/GID);Kaiser, Reinhard (CDC/DDPHSIS/CGH/DGHP);Klena, John D. (CDC/DDID/NCEZID/DHCPP);Knight, Nancy (CDC/DDPHSIS/CGH/DGHP);Kolwaite, Amy R. (CDC/DDID/NCEZID/DHQP);Lessa, Fernanda (CDC/DDID/NCEZID/DHQP);Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM);McCarron, Margaret (Meg) (CDC/DDID/NCIRD/ID);McQuiston, Jennifer H. (CDC/DDID/NCEZID/DHCPP);Mirza, Sara (CDC/DDID/NCIRD/DBD);Montandon, Michele (CDC/DDPHSIS/CGH/DGHT);Montgomery, Joel M. (CDC/DDID/NCEZID/DHCPP);Moolenaar, Ronald L. (CDC/DDPHSIS/CGH/DGHP);Mounts, Anthony (Tony) (CDC/DDPHSIS/CGH/GID);Neatherlin, John C. (CDC/DDPHSIS/CGH/DGHP);Nelson, Lisa J. (CDC/DDPHSIS/CGH/DGHT);Nichol, Stuart T. (CDC/DDID/NCEZID/DHCPP);OConnor, John (CDC/DDID/NCEZID/OD);Park, Benjamin (CDC/DDID/NCEZID/DHQP);Patel, Anita (CDC/DDID/NCIRD/OD);Pesik, Nicki (CDC/DDID/NCEZID/OD);Prue, Christine (CDC/DDID/NCEZID/OD);Raghunathan, Pratima (CDC/DDPHSIS/CGH/OD);Roohi, Shahrokh (CDC/DDID/NCEZID/DGMQ);Rotz, Lisa (CDC/DDID/NCEZID/DGMQ);Rouse, Edward N. (CDC/DDPHSIS/CPR/DEO);Simonds, R. J. (CDC/DDPHSIS/CGH/OD);Smith, Rachel M. (CDC/DDID/NCEZID/DHQP);Soeters, Heidi (CDC/DDPHSIS/CGH/GID);Soke, Gnakub (Norbert) (CDC/DDPHSIS/CGH/GID);Spath (CDC);Williams, Seymour (CDC/DDPHSIS/CGH/DGHP);Zhou, Weigong (CDC/DDID/NCIRD/ID)
Subject: FW: 4 June GOARN Weekly Ops Call Notes/Slides
Attachments: GOARN Weekly Ops Call Slides 2020 06 04.pptx, DRC EVD Data Pack 2020 06 04.pptx, COVID-19 Situation Update 2020 06 04.pdf, GOARN Weekly Ops Call Notes 2020 06 04.docx

Colleagues,

These are the call notes and slides from today's call.

Many thanks Puneet.

Best,
Ray

From: Anantharam, Puneet (CDC/DDPHSIS/CGH/DGHP) <ogq2@cdc.gov>
Sent: Thursday, June 4, 2020 4:19 PM
To: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP) <rca8@cdc.gov>; GDD-OUTBREAK (CDC)

<GDDOUTBREAK@cdc.gov>
Subject: 4 June GOARN Weekly Ops Call Notes/Slides

Hi Ray and team,

Attached are the 08:00 EDT/ 14:00 CET GOARN Ops call notes/slides (includes all presentations), DRC EVD Data Pack, and other presentations from today.

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Regards,
Puneet Anantharam



-

Please copy GDDOUTBREAK@CDC.GOV on all outbreak related e-mails.

Global Disease Detection Operations Center (GDDOC)
Division of Global Health Protection
Center for Global Health
Centers for Disease Control and Prevention
1600 Clifton Road NE, Mailstop D68
Atlanta, GA 30333

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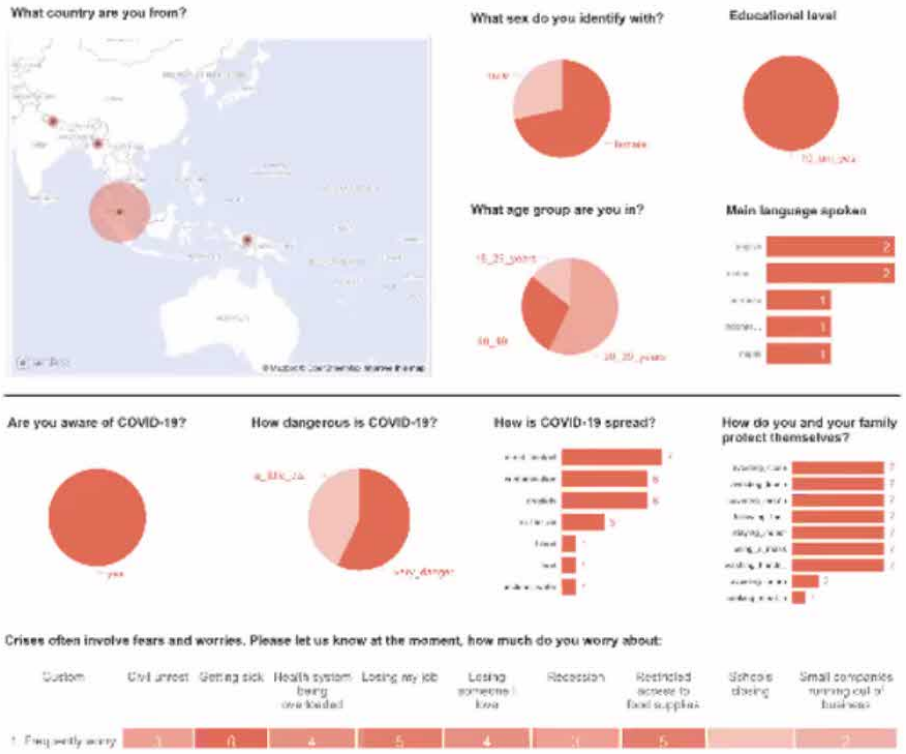
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JOINT OUTPUTS

RCCE - Community Insights for C...

Community Insights for COVID-19

*This dashboard aims to track the results of the **Community Insights for COVID-19** survey which aims to understand what people already know and still want to know about COVID-19*



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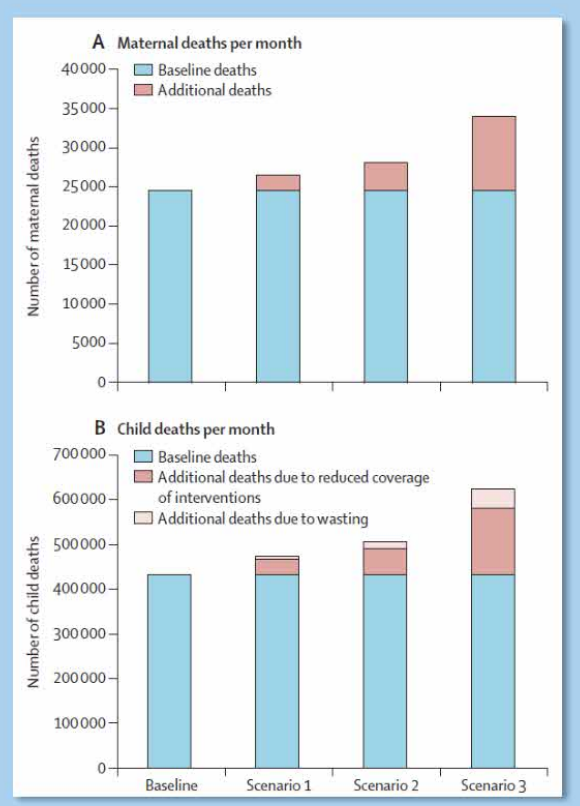
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Progress toward decreasing mortality of pregnant women and children is threatened

- Pregnant women are at increased risk of mortality because of reduced access to services with skilled health professionals due to re-deployment of skilled birth attendants from MNH facilities to COVID only facilities as well as reduced care-seeking at health facilities due to fear of exposure to COVID-19 if seek care in a facility.
- Although there is no evidence that the COVID-19 virus can be transmitted through breastmilk, public concerns affect breastfeeding are strong. IPC measures are essential for preventing contact transmission during breastfeeding.
- Although children are less likely to die from COVID than adults over X age, they are now at increased risk for mortality from other preventable and treatable conditions as access and availability to health services are disrupted due to the COVID pandemic.



Early estimates of the indirect effects of the COVID-19 pandemic on maternal and child mortality in low-income and middle-income countries: a modelling study. *The Lancet Global Health*.

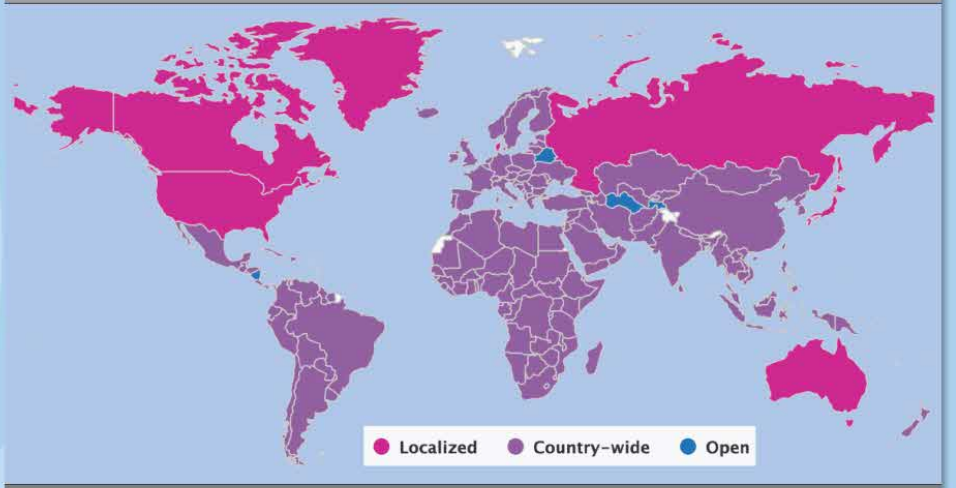
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School age children and their families face additional challenges as a result of this pandemic

- School closures as part of preventing COVID spread can have further detrimental impacts on children and adolescents and parents especially among families of low socioeconomic status.

- These negative impact can include interrupted learning, poor nutrition, social isolation, and increased child abuse.

FIGURE 2: SCHOOL CLOSURES (SOURCE: UNESCO)



The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations.

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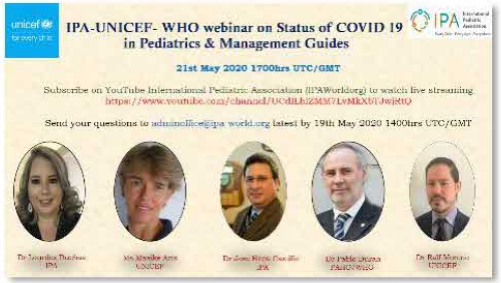
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Child Health (research reported separately)

Guidance/Webinars

Contributed to:

- WHO Academy application – contributed to the Oxygen therapy in COVID-19 training videos.
- Clinical management of severe acute respiratory infection when COVID-19 is suspected (contribution).
- WHO-IPA-UNICEF COVID-19 Webinars (joint organizers).



Advocacy

Reviewed and revised:

- UN Briefs and Joint Statements.
- Call for Coordinated Action to Protect and Support ALL Young Children and Their Caregivers.
- The Impact of COVID-19 on Children.

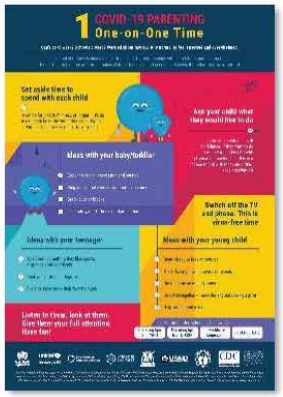




Advice for the public

Helped develop:

- COVID-19 Healthy Parenting Tips.
- Helping children cope with stress during COVID-19.
- Qs and As on Breast Feeding.





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Research

Coordination

- Implementation of a new grant to help countries mitigate indirect effects of COVID in 20 countries
- Coordinating a new three-country project to use ongoing women (including pregnant women) and child cohorts (n=10,000) to study COVID-19

Investigation

Leading the working group on case definition, clinical characterization and treatment of Multisystem Inflammatory syndrome in children and adolescents.


Multisystem inflammatory syndrome in children and adolescents with COVID-19

Scientific brief

15 May 2020

World Health Organization

Leadership

Leading a global network on MNCAH COVID research which aims to share and harmonize ongoing research, identify research priorities and promote early use of research results.

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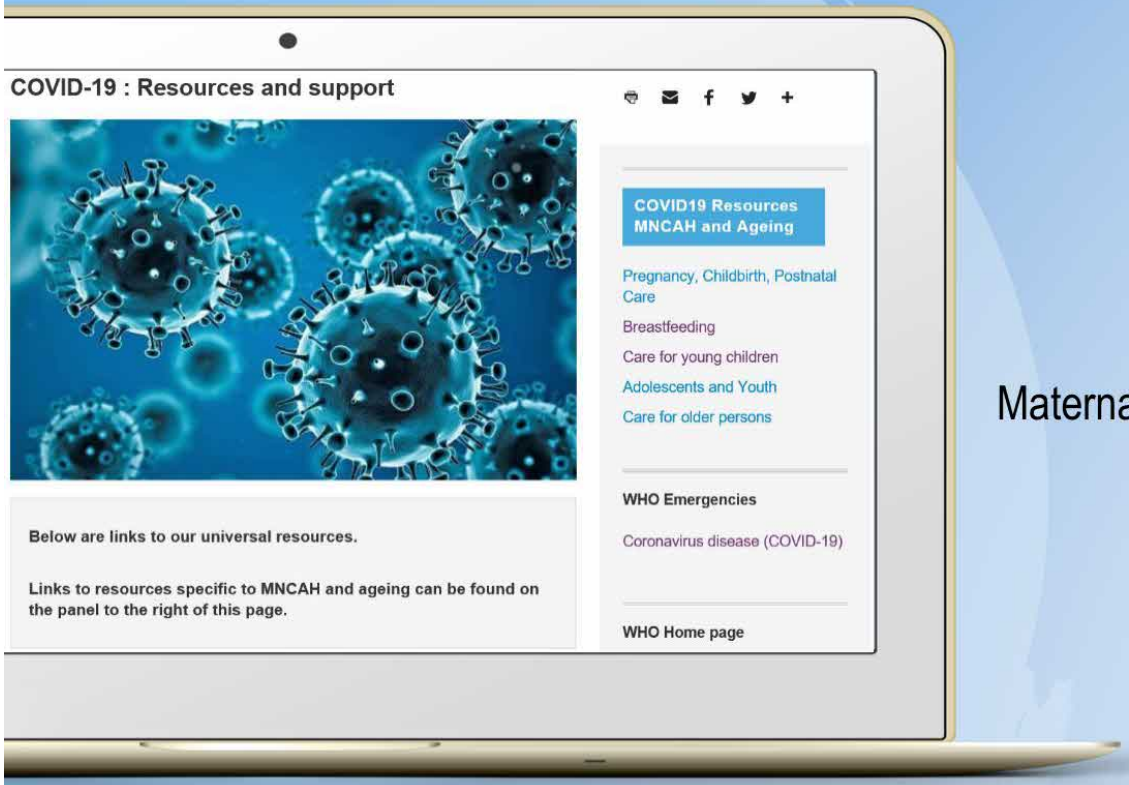
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Resources

Maternal, Newborn, Child and Adolescent Health and Ageing

COVID-19: Resources and support



https://www.who.int/maternal_child_adolescent/links/covid19-resources-and-support-for-mncah-and-ageing/en/

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GOARN Weekly Ops Call Notes

Date: 4 June 2020

Time: 8:00 EDT/ 14:00 CET

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From: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP)
Sent: Thu, 23 Apr 2020 16:25:18 +0000
To: Armstrong, Gregory (CDC/DDID/NCEZID/OD);Beach, Michael J. (CDC/DDID/NCEZID/DFWED);Ben Hamida, Amen (em-EN) (CDC/DDPHSIS/CGH/DGHP);Bennett, Sarah D. (CDC/DDPHSIS/CGH/GID);Bresee, Joseph (CDC/DDID/NCIRD/ID);Bunga, Sudhir (CDC state.gov);Clarke, Kevin R. (CDC/DDPHSIS/CGH/DGHP);Dahl, Benjamin A. (CDC/DDPHSIS/CGH/GID);Damon, Inger K. (CDC/DDID/NCEZID/DHCPP);Dawood, Fatimah S. (CDC/DDID/NCIRD/ID);EOC IM;Fitter, David L. (CDC/DDPHSIS/CGH/GID);Fox, LeAnne M. (CDC/DDID/NCIRD/DBD);GDD-OUTBREAK (CDC);Geissler, Aimee L. (CDC/DDID/NCEZID/DFWED);Greene, Carolyn M. (CDC/DDID/NCIRD/ID);Helfand, Rita (CDC/DDID/NCEZID/OD);Henao, Olga (CDC/DDPHSIS/CGH/DGHP);Hyde, Terri (CDC/DDPHSIS/CGH/GID);Kaiser, Reinhard (CDC/DDPHSIS/CGH/DGHP);Klena, John D. (CDC/DDID/NCEZID/DHCPP);Knight, Nancy (CDC/DDPHSIS/CGH/DGHP);Kolwaite, Amy R. (CDC/DDID/NCEZID/DHQP);Lessa, Fernanda (CDC/DDID/NCEZID/DHQP);Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM);McCarron, Margaret (Meg) (CDC/DDID/NCIRD/ID);McQuiston, Jennifer H. (CDC/DDID/NCEZID/DHCPP);Mirza, Sara (CDC/DDID/NCIRD/DBD);Montandon, Michele (CDC/DDPHSIS/CGH/DGHT);Moolenaar, Ronald L. (CDC/DDPHSIS/CGH/DGHP);Neatherlin, John C. (CDC/DDPHSIS/CGH/DGHP);Nelson, Lisa J. (CDC/DDPHSIS/CGH/DGHT);Nichol, Stuart T. (CDC/DDID/NCEZID/DHCPP);OConnor, John (CDC/DDID/NCEZID/OD);Park, Benjamin (CDC/DDID/NCEZID/DHQP);Patel, Anita (CDC/DDID/NCIRD/OD);Pesik, Nicki (CDC/DDID/NCEZID/OD);Prue, Christine (CDC/DDID/NCEZID/OD);Raghunathan, Pratima (CDC/DDPHSIS/CGH/OD);Roohi, Shahrokh (CDC/DDID/NCEZID/DGMQ);Rotz, Lisa (CDC/DDID/NCEZID/DGMQ);Rouse, Edward N. (CDC/DDPHSIS/CPR/DEO);Simonds, R. J. (CDC/DDPHSIS/CGH/OD);Smith, Rachel M. (CDC/DDID/NCEZID/DHQP);Soke, Gnakub (Norbert) (CDC/DDPHSIS/CGH/GID);Spath (CDC)
Subject: FW: 23 April GOARN Weekly Ops Call Notes/Slides
Attachments: GOARN Weekly Ops Call Notes 2020 04 23.docx, DRC EVD Data Pack_Final_ 2020 04 23.pptx, GOARN Weekly Ops Call Slides 2020 04 23.pptx

Thanks Puneet,

All,

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Thanks.
Ray

From: Anantharam, Puneet (CDC/DDPHSIS/CGH/DGHP) <ogq2@cdc.gov>
Sent: Thursday, April 23, 2020 12:10 PM
To: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP) <rca8@cdc.gov>; GDD-OUTBREAK (CDC) <GDDOUTBREAK@cdc.gov>
Subject: 23 April GOARN Weekly Ops Call Notes/Slides

Hi Ray and team,

Attached are the 08:00 EDT/ 14:00 CET GOARN Ops call notes, EVD Epi Data Pack, and slides (includes EVD/COVID) from today.

(b)(4); (b)(5)

Regards,
Puneet Anantharam, MPH

Please copy GDDOUTBREAK@CDC.GOV on all outbreak related e-mails.

Global Disease Detection Operations Center (GDDOC)
Division of Global Health Protection
Center for Global Health
Centers for Disease Control and Prevention
1600 Clifton Road NE, Mailstop D68
Atlanta, GA 30333

GDDOC secure mailbox: gddoutbreak@cdc.gov

Ray Arthur, PhD, Director | tel: +1.404.639.3855, mobile: (b)(6)
Puneet Anantharam, MPH, ORISE Fellow | mobile: (b)(6)
Catherine Chow, MD, MPH, Captain, USPHS, Analyst | tel: +1.404.553.7659, mobile: (b)(6)
Kira Christian Coggeshall, DVM, MPH, DACVPM, Analyst | tel: +1.404.553.7666, mobile (b)(6)
James Fuller, PhD, MSPH, Analyst | tel: +1.404.639.7361, mobile: (b)(6)
Christine Hercik, PhD, Analyst | tel: +1.404.718.6669, mobile: (b)(6)
Lawrence Hinkle, MSPH, Analyst | tel: +1.404.718.5654, mobile: (b)(6)
Rossanne M. Philen, MD, MS, Analyst | tel: +1.404.553.7660, mobile: (b)(6)
Philip M. Ricks, PhD, MPH, Analyst | tel: +1 404.553.7664, mobile: (b)(6)

For after hours support, please phone the EOC Watch Desk at: (b)(6)

GOARN Weekly Ops Call Notes

Date: 23 April 2020

Time: 8:00 EDT/ 14:00 CET

EVD, DRC

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Health Operations: Points of Entry (POE) Surveillance, Week 16

January 2021

From 13 April to 19 April, 1 408 981 screenings were performed, bringing the cumulative number of screenings to over 173 millionWeek 16: 209 alerts were notified, of which 48 (23%) were validated as suspect casesNone confirmed as EVD following laboratory testing - cumulative number of EVD positive cases identified at PoEs and PoCs remains 30 The average number of operational PoEs and PoCs reporting daily screening information - 102 out of 109 (94%)PNHF/IOM Joint supervision to strengthen surveillance at Goma airport, Grand barrère and Mumbabiro POCCases of insecurity continue to affect POE activities in North Kivu and Ituri Provinces - interruption at PoC Makeke and Deviation Makeke in Mangina on 17 AprilIOM completed evaluations and gap analysis of Bujumbura rural and Rumonge POEs in Uganda

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From: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP)
Sent: Tue, 28 Apr 2020 15:08:11 +0000
To: Armstrong, Gregory (CDC/DDID/NCEZID/OD);Beach, Michael J. (CDC/DDID/NCEZID/DFWED);Ben Hamida, Amen (em-EN) (CDC/DDPHSIS/CGH/DGHP);Bennett, Sarah D. (CDC/DDPHSIS/CGH/GID);Bresee, Joseph (CDC/DDID/NCIRD/ID);Bunga, Sudhir (CDC state.gov);Clarke, Kevin R. (CDC/DDPHSIS/CGH/DGHP);Dahl, Benjamin A. (CDC/DDPHSIS/CGH/GID);Damon, Inger K. (CDC/DDID/NCEZID/DHCPP);Dawood, Fatimah S. (CDC/DDID/NCIRD/ID);EOC IM;Fitter, David L. (CDC/DDPHSIS/CGH/GID);Fox, LeAnne M. (CDC/DDID/NCIRD/DBD);GDD-OUTBREAK (CDC);Geissler, Aimee L. (CDC/DDID/NCEZID/DFWED);Greene, Carolyn M. (CDC/DDID/NCIRD/ID);Helfand, Rita (CDC/DDID/NCEZID/OD);Henao, Olga (CDC/DDPHSIS/CGH/DGHP);Hyde, Terri (CDC/DDPHSIS/CGH/GID);Kaiser, Reinhard (CDC/DDPHSIS/CGH/DGHP);Klena, John D. (CDC/DDID/NCEZID/DHCPP);Knight, Nancy (CDC/DDPHSIS/CGH/DGHP);Kolwaite, Amy R. (CDC/DDID/NCEZID/DHQP);Lessa, Fernanda (CDC/DDID/NCEZID/DHQP);Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM);McCarron, Margaret (Meg) (CDC/DDID/NCIRD/ID);McQuiston, Jennifer H. (CDC/DDID/NCEZID/DHCPP);Mirza, Sara (CDC/DDID/NCIRD/DBD);Montandon, Michele (CDC/DDPHSIS/CGH/DGHT);Moolenaar, Ronald L. (CDC/DDPHSIS/CGH/DGHP);Neatherlin, John C. (CDC/DDPHSIS/CGH/DGHP);Nelson, Lisa J. (CDC/DDPHSIS/CGH/DGHT);Nichol, Stuart T. (CDC/DDID/NCEZID/DHCPP);OConnor, John (CDC/DDID/NCEZID/OD);Park, Benjamin (CDC/DDID/NCEZID/DHQP);Patel, Anita (CDC/DDID/NCIRD/OD);Pesik, Nicki (CDC/DDID/NCEZID/OD);Prue, Christine (CDC/DDID/NCEZID/OD);Raghunathan, Pratima (CDC/DDPHSIS/CGH/OD);Roohi, Shahrokh (CDC/DDID/NCEZID/DGMQ);Rotz, Lisa (CDC/DDID/NCEZID/DGMQ);Rouse, Edward N. (CDC/DDPHSIS/CPR/DEO);Simonds, R. J. (CDC/DDPHSIS/CGH/OD);Smith, Rachel M. (CDC/DDID/NCEZID/DHQP);Soke, Gnakub (Norbert) (CDC/DDPHSIS/CGH/GID);Spath (CDC)
Subject: Weekly GOARN Ops Call Thurs. 30 April 2020 at 08:00 EDT

Colleagues, (b)(4) (b)(4) I suggest you join the call 5 min. before the start of the call. Thanks. Ray

GOARN Operational Support Team is inviting you to a scheduled Zoom meeting.

Topic: GOARN Weekly Ops Call
Agenda:

1. EVD
2. COVID-19
3. AOB

Time: Apr 30, 2020 02:00 PM Amsterdam, Berlin, Rome, Stockholm, Vienna

IMPORTANT: All participants must enter full name and institution acronym when joining the zoom meeting.

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(b)(6) Canada Toll-free

GOARN Operational Support Team

Global Outbreak Alert and Response Network (GOARN)
Division of Emergency Response (WRE)
WHO Health Emergencies Programme (WHE)

World Health Organization
Avenue Appia 20
1211 Geneva 27, Switzerland

E-mail: goarn@who.int

Ray R. Arthur, PhD
Lead, Global Disease Detection Operations Center
Emergency Response and Recovery Branch

Division of Global Health Protection
Center for Global Health
Centers for Disease Control and Prevention

1600 Clifton Road, NE
MS: H21-9
Atlanta, GA 30329
Phone: 404-639-3855
Mobile: (b)(6)
rarthur@cdc.gov

From: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP)
Sent: Thu, 30 Apr 2020 22:34:06 +0000
To: Anantharam, Puneet (CDC/DDPHSIS/CGH/DGHP);Armstrong, Gregory (CDC/DDID/NCEZID/OD);Beach, Michael J. (CDC/DDID/NCEZID/DFWED);Ben Hamida, Amen (em-EN) (CDC/DDPHSIS/CGH/DGHP);Bennett, Sarah D. (CDC/DDPHSIS/CGH/GID);Bresee, Joseph (CDC/DDID/NCIRD/ID);Bunga, Sudhir (CDC state.gov);Clarke, Kevin R. (CDC/DDPHSIS/CGH/DGHP);Dahl, Benjamin A. (CDC/DDPHSIS/CGH/GID);Damon, Inger K. (CDC/DDID/NCEZID/DHCPP);Dawood, Fatimah S. (CDC/DDID/NCIRD/ID);EOC IM;Fitter, David L. (CDC/DDPHSIS/CGH/GID);Fox, LeAnne M. (CDC/DDID/NCIRD/DBD);GDD-OUTBREAK (CDC);Geissler, Aimee L. (CDC/DDID/NCEZID/DFWED);Greene, Carolyn M. (CDC/DDID/NCIRD/ID);Helfand, Rita (CDC/DDID/NCEZID/OD);Henao, Olga (CDC/DDPHSIS/CGH/DGHP);Hyde, Terri (CDC/DDPHSIS/CGH/GID);Kaiser, Reinhard (CDC/DDPHSIS/CGH/DGHP);Klena, John D. (CDC/DDID/NCEZID/DHCPP);Knight, Nancy (CDC/DDPHSIS/CGH/DGHP);Kolwaite, Amy R. (CDC/DDID/NCEZID/DHQP);Lessa, Fernanda (CDC/DDID/NCEZID/DHQP);Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM);McCarron, Margaret (Meg) (CDC/DDID/NCIRD/ID);McQuiston, Jennifer H. (CDC/DDID/NCEZID/DHCPP);Mirza, Sara (CDC/DDID/NCIRD/DBD);Montandon, Michele (CDC/DDPHSIS/CGH/DGHT);Moolenaar, Ronald L. (CDC/DDPHSIS/CGH/DGHP);Neatherlin, John C. (CDC/DDPHSIS/CGH/DGHP);Nelson, Lisa J. (CDC/DDPHSIS/CGH/DGHT);Nichol, Stuart T. (CDC/DDID/NCEZID/DHCPP);OConnor, John (CDC/DDID/NCEZID/OD);Park, Benjamin (CDC/DDID/NCEZID/DHQP);Patel, Anita (CDC/DDID/NCIRD/OD);Pesik, Nicki (CDC/DDID/NCEZID/OD);Prue, Christine (CDC/DDID/NCEZID/OD);Raghunathan, Pratima (CDC/DDPHSIS/CGH/OD);Roohi, Shahrokh (CDC/DDID/NCEZID/DGMQ);Rotz, Lisa (CDC/DDID/NCEZID/DGMQ);Rouse, Edward N. (CDC/DDPHSIS/CPR/DEO);Simonds, R. J. (CDC/DDPHSIS/CGH/OD);Smith, Rachel M. (CDC/DDID/NCEZID/DHQP);Soke, Gnakub (Norbert) (CDC/DDPHSIS/CGH/GID);Spath (CDC)
Subject: FW: 30 April GOARN Weekly Ops Call Notes/Slides
Attachments: DRC EVD Data Pack 2020 04 30.pptx, GOARN Weekly Ops Call Slides 2020 04 30.pptx, GOARN Weekly Ops Call Notes 2020 04 30.docx

Thanks Puneet. Forwarding to all call participants.

All, Please remember to you provide your name and "CDC" when you join next week's call so that there are no delays in admitting you to the call.

Best,
Ray

From: Anantharam, Puneet (CDC/DDPHSIS/CGH/DGHP) <ogq2@cdc.gov>
Sent: Thursday, April 30, 2020 11:57 AM
To: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP) <rca8@cdc.gov>; GDD-OUTBREAK (CDC) <GDDOUTBREAK@cdc.gov>
Subject: 30 April GOARN Weekly Ops Call Notes/Slides

Hi Ray and team,

Attached are the 08:00 EDT/ 14:00 CET GOARN Ops call notes, EVD Epi Data Pack, and slides (includes EVD/COVID) from today.

Tuesday, April 28, 2020 was the 20th Anniversary of GOARN!!!

(b)(4); (b)(5)

Regards,
Puneet Anantharam



-
Please copy GDDOUTBREAK@CDC.GOV on all outbreak related e-mails.

Global Disease Detection Operations Center (GDDOC)
Division of Global Health Protection
Center for Global Health
Centers for Disease Control and Prevention
1600 Clifton Road NE, Mailstop D68
Atlanta, GA 30333

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GOARN Weekly Ops Call Notes

Date: 30 April 2020
Time: 8:00 EDT/ 14:00 CET

Tuesday, April 28, 2020 was the 20th Anniversary of GOARN!!!

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From: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP)
Sent: Wed, 6 May 2020 21:13:04 +0000
To: Armstrong, Gregory (CDC/DDID/NCEZID/OD);Beach, Michael J. (CDC/DDID/NCEZID/DFWED);Ben Hamida, Amen (em-EN) (CDC/DDPHSIS/CGH/DGHP);Bennett, Sarah D. (CDC/DDPHSIS/CGH/GID);Bresee, Joseph (CDC/DDID/NCIRD/ID);Bunga, Sudhir (CDC state.gov);Clarke, Kevin R. (CDC/DDPHSIS/CGH/DGHP);Dahl, Benjamin A. (CDC/DDPHSIS/CGH/GID);Damon, Inger K. (CDC/DDID/NCEZID/DHCPP);Dawood, Fatimah S. (CDC/DDID/NCIRD/ID);EOC IM;Fitter, David L. (CDC/DDPHSIS/CGH/GID);Fox, LeAnne M. (CDC/DDID/NCIRD/DBD);GDD-OUTBREAK (CDC);Geissler, Aimee L. (CDC/DDID/NCEZID/DFWED);Greene, Carolyn M. (CDC/DDID/NCIRD/ID);Helfand, Rita (CDC/DDID/NCEZID/OD);Henao, Olga (CDC/DDPHSIS/CGH/DGHP);Hyde, Terri (CDC/DDPHSIS/CGH/GID);Kaiser, Reinhard (CDC/DDPHSIS/CGH/DGHP);Klena, John D. (CDC/DDID/NCEZID/DHCPP);Knight, Nancy (CDC/DDPHSIS/CGH/DGHP);Kolwaite, Amy R. (CDC/DDID/NCEZID/DHQP);Lessa, Fernanda (CDC/DDID/NCEZID/DHQP);Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM);McCarron, Margaret (Meg) (CDC/DDID/NCIRD/ID);McQuiston, Jennifer H. (CDC/DDID/NCEZID/DHCPP);Mirza, Sara (CDC/DDID/NCIRD/DBD);Montandon, Michele (CDC/DDPHSIS/CGH/DGHT);Moolenaar, Ronald L. (CDC/DDPHSIS/CGH/DGHP);Neatherlin, John C. (CDC/DDPHSIS/CGH/DGHP);Nelson, Lisa J. (CDC/DDPHSIS/CGH/DGHT);Nichol, Stuart T. (CDC/DDID/NCEZID/DHCPP);OConnor, John (CDC/DDID/NCEZID/OD);Park, Benjamin (CDC/DDID/NCEZID/DHQP);Patel, Anita (CDC/DDID/NCIRD/OD);Pesik, Nicki (CDC/DDID/NCEZID/OD);Prue, Christine (CDC/DDID/NCEZID/OD);Raghunathan, Pratima (CDC/DDPHSIS/CGH/OD);Roohi, Shahrokh (CDC/DDID/NCEZID/DGMQ);Rotz, Lisa (CDC/DDID/NCEZID/DGMQ);Rouse, Edward N. (CDC/DDPHSIS/CPR/DEO);Simonds, R. J. (CDC/DDPHSIS/CGH/OD);Smith, Rachel M. (CDC/DDID/NCEZID/DHQP);Soke, Gnakub (Norbert) (CDC/DDPHSIS/CGH/GID);Spath (CDC)
Subject: Weekly GOARN Ops Call - 7 May 2020 at 08:00

Colleagues,

WHO is now sending calendar invitations directly to those who have participated on recent calls, but others at CDC may not have received them so I am sending this to all. Apologies for any duplication.

Best,
Ray

GOARN Operational Support Team is inviting you to a scheduled Zoom meeting.

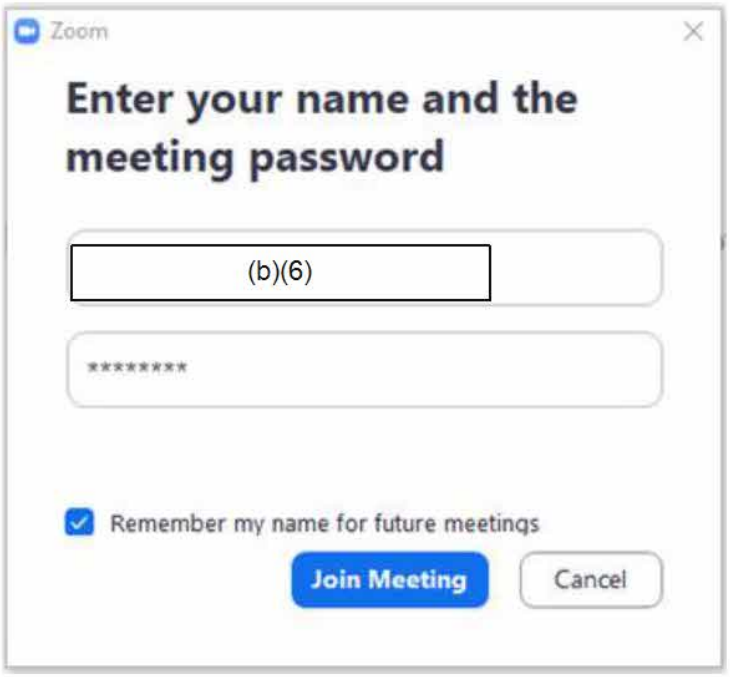
Topic: GOARN Weekly Ops Call
Agenda:

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Time: May 07, 2020 02:00 PM Amsterdam, Berlin, Rome, Stockholm, Vienna

IMPORTANT: All participants must enter full name and institution acronym when joining the zoom meeting.

If you don't enter this information, we will keep you in the waiting room and ask you to identify yourself, and this might delay your entry into the meeting.



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GOARN Operational Support Team

Global Outbreak Alert and Response Network (GOARN)
Division of Emergency Response (WRE)
WHO Health Emergencies Programme (WHE)
World Health Organization
Avenue Appia 20
1211 Geneva 27, Switzerland

E-mail: goarn@who.int

Ray R. Arthur, PhD
Lead, Global Disease Detection Operations Center
Emergency Response and Recovery Branch

Division of Global Health Protection
Center for Global Health
Centers for Disease Control and Prevention

1600 Clifton Road, NE
MS: H21-9
Atlanta, GA 30329
Phone: 404-639-3855
Mobile (b)(6)
rarthur@cdc.gov

From: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP)
Sent: Wed, 6 May 2020 18:09:20 +0000
To: Pat Drury (druryp@who.int);Armstrong, Gregory (CDC/DDID/NCEZID/OD);Beach, Michael J. (CDC/DDID/NCEZID/DFWED);Ben Hamida, Amen (em-EN) (CDC/DDPHSIS/CGH/DGHP);Bennett, Sarah D. (CDC/DDPHSIS/CGH/GID);Bresee, Joseph (CDC/DDID/NCIRD/ID);Bunga, Sudhir (CDC state.gov);Clarke, Kevin R. (CDC/DDPHSIS/CGH/DGHP);Dahl, Benjamin A. (CDC/DDPHSIS/CGH/GID);Damon, Inger K. (CDC/DDID/NCEZID/DHCPP);Dawood, Fatimah S. (CDC/DDID/NCIRD/ID);EOC IM;Fitter, David L. (CDC/DDPHSIS/CGH/GID);Fox, LeAnne M. (CDC/DDID/NCIRD/DBD);GDD-OUTBREAK (CDC);Geissler, Aimee L. (CDC/DDID/NCEZID/DFWED);Greene, Carolyn M. (CDC/DDID/NCIRD/ID);Helfand, Rita (CDC/DDID/NCEZID/OD);Henao, Olga (CDC/DDPHSIS/CGH/DGHP);Hyde, Terri (CDC/DDPHSIS/CGH/GID);Kaiser, Reinhard (CDC/DDPHSIS/CGH/DGHP);Klena, John D. (CDC/DDID/NCEZID/DHCPP);Knight, Nancy (CDC/DDPHSIS/CGH/DGHP);Kolwaite, Amy R. (CDC/DDID/NCEZID/DHQP);Lessa, Fernanda (CDC/DDID/NCEZID/DHQP);Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM);McCarron, Margaret (Meg) (CDC/DDID/NCIRD/ID);McQuiston, Jennifer H. (CDC/DDID/NCEZID/DHCPP);Mirza, Sara (CDC/DDID/NCIRD/DBD);Montandon, Michele (CDC/DDPHSIS/CGH/DGHT);Moolenaar, Ronald L. (CDC/DDPHSIS/CGH/DGHP);Neatherlin, John C. (CDC/DDPHSIS/CGH/DGHP);Nelson, Lisa J. (CDC/DDPHSIS/CGH/DGHT);Nichol, Stuart T. (CDC/DDID/NCEZID/DHCPP);OConnor, John (CDC/DDID/NCEZID/OD);Park, Benjamin (CDC/DDID/NCEZID/DHQP);Patel, Anita (CDC/DDID/NCIRD/OD);Pesik, Nicki (CDC/DDID/NCEZID/OD);Prue, Christine (CDC/DDID/NCEZID/OD);Raghunathan, Pratima (CDC/DDPHSIS/CGH/OD);Roohi, Shahrokh (CDC/DDID/NCEZID/DGMQ);Rotz, Lisa (CDC/DDID/NCEZID/DGMQ);Rouse, Edward N. (CDC/DDPHSIS/CPR/DEO);Simonds, R. J. (CDC/DDPHSIS/CGH/OD);Smith, Rachel M. (CDC/DDID/NCEZID/DHQP);Soke, Gnakub (Norbert) (CDC/DDPHSIS/CGH/GID);Spath (CDC)
Subject: Is there a weekly GOARN Ops Call tomorrow?

Still no joy from Rick.

Best,
Ray

Ray R. Arthur, PhD
Lead, Global Disease Detection Operations Center
Emergency Response and Recovery Branch

Division of Global Health Protection
Center for Global Health
Centers for Disease Control and Prevention

1600 Clifton Road, NE
MS: H21-9
Atlanta, GA 30329
Phone: 404-639-3855
Mobile: (b)(6)
rarthur@cdc.gov

From: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP)
Sent: Thu, 7 May 2020 21:52:03 +0000
To: Armstrong, Gregory (CDC/DDID/NCEZID/OD);Beach, Michael J. (CDC/DDID/NCEZID/DFWED);Ben Hamida, Amen (em-EN) (CDC/DDPHSIS/CGH/DGHP);Bennett, Sarah D. (CDC/DDPHSIS/CGH/GID);Bresee, Joseph (CDC/DDID/NCIRD/ID);Bunga, Sudhir (CDC state.gov);Clarke, Kevin R. (CDC/DDPHSIS/CGH/DGHP);Dahl, Benjamin A. (CDC/DDPHSIS/CGH/GID);Damon, Inger K. (CDC/DDID/NCEZID/DHCPP);Dawood, Fatimah S. (CDC/DDID/NCIRD/ID);EOC IM;Fitter, David L. (CDC/DDPHSIS/CGH/GID);Fox, LeAnne M. (CDC/DDID/NCIRD/DBD);GDD-OUTBREAK (CDC);Geissler, Aimee L. (CDC/DDID/NCEZID/DFWED);Greene, Carolyn M. (CDC/DDID/NCIRD/ID);Helfand, Rita (CDC/DDID/NCEZID/OD);Henao, Olga (CDC/DDPHSIS/CGH/DGHP);Hyde, Terri (CDC/DDPHSIS/CGH/GID);Kaiser, Reinhard (CDC/DDPHSIS/CGH/DGHP);Klena, John D. (CDC/DDID/NCEZID/DHCPP);Knight, Nancy (CDC/DDPHSIS/CGH/DGHP);Kolwaite, Amy R. (CDC/DDID/NCEZID/DHQP);Lessa, Fernanda (CDC/DDID/NCEZID/DHQP);Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM);McCarron, Margaret (Meg) (CDC/DDID/NCIRD/ID);McQuiston, Jennifer H. (CDC/DDID/NCEZID/DHCPP);Mirza, Sara (CDC/DDID/NCIRD/DBD);Montandon, Michele (CDC/DDPHSIS/CGH/DGHT);Moolenaar, Ronald L. (CDC/DDPHSIS/CGH/DGHP);Neatherlin, John C. (CDC/DDPHSIS/CGH/DGHP);Nelson, Lisa J. (CDC/DDPHSIS/CGH/DGHT);Nichol, Stuart T. (CDC/DDID/NCEZID/DHCPP);OConnor, John (CDC/DDID/NCEZID/OD);Park, Benjamin (CDC/DDID/NCEZID/DHQP);Patel, Anita (CDC/DDID/NCIRD/OD);Pesik, Nicki (CDC/DDID/NCEZID/OD);Prue, Christine (CDC/DDID/NCEZID/OD);Raghunathan, Pratima (CDC/DDPHSIS/CGH/OD);Roohi, Shahrokh (CDC/DDID/NCEZID/DGMQ);Rotz, Lisa (CDC/DDID/NCEZID/DGMQ);Rouse, Edward N. (CDC/DDPHSIS/CPR/DEO);Simonds, R. J. (CDC/DDPHSIS/CGH/OD);Smith, Rachel M. (CDC/DDID/NCEZID/DHQP);Soke, Gnakub (Norbert) (CDC/DDPHSIS/CGH/GID);Spath (CDC)
Subject: FW: 7 May GOARN Weekly Ops Call Notes/Slides
Attachments: GOARN Weekly Ops Call Notes 2020 05 07.docx, GOARN Weekly Ops Call Slides 2020 05 07.pptx, DRC EVD Data Pack 2020 05 07.pptx, Comorbidities and Factors related to Death 2020 05 07.pptx, GOARN RCCE Coordination Call 2020 05 05.pdf

Please see attached notes and slides from this morning's weekly GOARN Ops call.

Thanks Puneet.

Ray

From: Anantharam, Puneet (CDC/DDPHSIS/CGH/DGHP) <ogq2@cdc.gov>
Sent: Thursday, May 7, 2020 11:27 AM
To: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP) <rca8@cdc.gov>; GDD-OUTBREAK (CDC) <GDDOUTBREAK@cdc.gov>
Subject: 7 May GOARN Weekly Ops Call Notes/Slides

Hi Ray and team,

Attached are the 08:00 EDT/ 14:00 CET GOARN Ops call notes and slides (includes EVD/COVID), EVD Epi Data Pack, and presentations from today.

(b)(4); (b)(5)

Regards,
Puneet Anantharam



-
Please copy GDDOUTBREAK@CDC.GOV on all outbreak related e-mails.

Global Disease Detection Operations Center (GDDOC)
Division of Global Health Protection
Center for Global Health
Centers for Disease Control and Prevention
1600 Clifton Road NE, Mailstop D68
Atlanta, GA 30333

GOARN Weekly Ops Call Notes

Date: 7 May 2020

Time: 8:00 EDT/ 14:00 CET

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From: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP)
Sent: Sun, 27 Oct 2019 17:52:51 +0000
To: Walke, Henry (CDC/DDID/NCEZID/DPEI)
Cc: Neatherlin, John C. (CDC/DDPHSIS/CGH/DGHP);Beach, Michael J. (CDC/DDID/NCEZID/DFWED);Reynolds, Mary (CDC/DDID/NCEZID/DHCPP);Damon, Inger K. (CDC/DDID/NCEZID/DHCPP);Christie, Athalia (CDC/DDPHSIS/CGH/OD);PIPER, Tracey Greene;Piper, Tracey (CDC/DDPHSIS/CGH/DGHT)
Subject: RE: Goarn contract

Henry,

WHO HQ also approved and it moved to HR to get the contracts in place. I was warned HR does not move at the pace we would all like so Tracey and I have been following closely. We'll ping again tomorrow and if it appears that the contracts are not imminent, we'll elevate to the IM.

Ray

From: Walke, Henry (CDC/DDID/NCEZID/DPEI) <hfw3@cdc.gov>
Sent: Sunday, October 27, 2019 1:47 PM
To: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP) <rca8@cdc.gov>
Cc: Neatherlin, John C. (CDC/DDPHSIS/CGH/DGHP) <jjn6@cdc.gov>; Beach, Michael J. (CDC/DDID/NCEZID/DFWED) <mjb3@cdc.gov>; Reynolds, Mary (CDC/DDID/NCEZID/DHCPP) <nzr6@cdc.gov>; Damon, Inger K. (CDC/DDID/NCEZID/DHCPP) <iad7@cdc.gov>; Christie, Athalia (CDC/DDPHSIS/CGH/OD) <akc9@cdc.gov>
Subject: Goarn contract

Ray,

Seems like out two contractors (b)(6) still don't have their goarn contract. Thia is affecting (b)(6) movements as well as (b)(6) deployment with the polio stoppers. Talked to John today, doesn't seem to be a problem in Goma. Can you check on status please. Thanks, Henry

From: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP)
Sent: Wed, 10 Jun 2020 11:33:54 +0000
To: Armstrong, Gregory (CDC/DDID/NCEZID/OD);Beach, Michael J. (CDC/DDID/NCEZID/DFWED);Ben Hamida, Amen (em-EN) (CDC/DDPHSIS/CGH/DGHP);Bennett, Sarah D. (CDC/DDPHSIS/CGH/GID);Bresee, Joseph (CDC/DDID/NCIRD/ID);Bunga, Sudhir (CDC state.gov);Christie, Athalia (CDC/DDPHSIS/CGH/OD);Clarke, Kevin R. (CDC/DDPHSIS/CGH/DGHP);Dahl, Benjamin A. (CDC/DDPHSIS/CGH/GID);Damon, Inger K. (CDC/DDID/NCEZID/DHCPP);Dawood, Fatimah S. (CDC/DDID/NCIRD/ID);EOC IM;Farag, Noha (CDC/DDPHSIS/CGH/GID);Fitter, David L. (CDC/DDPHSIS/CGH/GID);Fox, LeAnne M. (CDC/DDID/NCIRD/DBD);GDD-OUTBREAK (CDC);Geissler, Aimee L. (CDC/DDID/NCEZID/DFWED);Ghiselli, Margherita (CDC/DDPHSIS/CGH/GID);Greene, Carolyn M. (CDC/DDID/NCIRD/ID);Greiner, Ashley L. (CDC/DDPHSIS/CGH/DGHP);Hagan, Jose Edward (CDC/DDPHSIS/CGH/GID);Hakim, Avi (CDC/DDPHSIS/CGH/DGHT);Helfand, Rita (CDC/DDID/NCEZID/OD);Henao, Olga (CDC/DDPHSIS/CGH/DGHP);Hyde, Terri (CDC/DDPHSIS/CGH/GID);Kaiser, Reinhard (CDC/DDPHSIS/CGH/DGHP);Klena, John D. (CDC/DDID/NCEZID/DHCPP);Knight, Nancy (CDC/DDPHSIS/CGH/DGHP);Kolwaite, Amy R. (CDC/DDID/NCEZID/DHQP);Lessa, Fernanda (CDC/DDID/NCEZID/DHQP);Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM);McCarron, Margaret (Meg) (CDC/DDID/NCIRD/ID);McQuiston, Jennifer H. (CDC/DDID/NCEZID/DHCPP);Mirza, Sara (CDC/DDID/NCIRD/DBD);Montandon, Michele (CDC/DDPHSIS/CGH/DGHT);Montgomery, Joel M. (CDC/DDID/NCEZID/DHCPP);Moolenaar, Ronald L. (CDC/DDPHSIS/CGH/DGHP);Mounts, Anthony (Tony) (CDC/DDPHSIS/CGH/GID);Neatherlin, John C. (CDC/DDPHSIS/CGH/DGHP);Nelson, Lisa J. (CDC/DDPHSIS/CGH/DGHT);Nichol, Stuart T. (CDC/DDID/NCEZID/DHCPP);OConnor, John (CDC/DDID/NCEZID/OD);Park, Benjamin (CDC/DDID/NCEZID/DHQP);Patel, Anita (CDC/DDID/NCIRD/OD);Pesik, Nicki (CDC/DDID/NCEZID/OD);Prue, Christine (CDC/DDID/NCEZID/OD);Raghunathan, Pratima (CDC/DDPHSIS/CGH/OD);Roohi, Shahrokh (CDC/DDID/NCEZID/DGMQ);Rotz, Lisa (CDC/DDID/NCEZID/DGMQ);Rouse, Edward N. (CDC/DDPHSIS/CPR/DEO);Simonds, R. J. (CDC/DDPHSIS/CGH/OD);Smith, Rachel M. (CDC/DDID/NCEZID/DHQP);Soeters, Heidi (CDC/DDPHSIS/CGH/GID);Soke, Gnakub (Norbert) (CDC/DDPHSIS/CGH/GID);Spath (CDC);Williams, Seymour (CDC/DDPHSIS/CGH/DGHP);Zhou, Weigong (CDC/DDID/NCIRD/ID)
Subject: GOARN Weekly Ops Call 11 June - CANCELLED

The Ops calls will resume next week.

Thanks.
Ray

Ray R. Arthur, PhD
Lead, Global Disease Detection Operations Center
Emergency Response and Recovery Branch

Division of Global Health Protection
Center for Global Health
Centers for Disease Control and Prevention

1600 Clifton Road, NE
MS: H21-9

Atlanta, GA 30329
Phone: 404-639-3855
Mobile (b)(6)
rarthur@cdc.gov

From: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP)
Sent: Sat, 20 Jun 2020 20:09:34 +0000
To: Armstrong, Gregory (CDC/DDID/NCEZID/OD);Beach, Michael J. (CDC/DDID/NCEZID/DFWED);Ben Hamida, Amen (em-EN) (CDC/DDPHSIS/CGH/DGHP);Bennett, Sarah D. (CDC/DDPHSIS/CGH/GID);Bresee, Joseph (CDC/DDID/NCIRD/ID);Bunga, Sudhir (CDC state.gov);Christie, Athalia (CDC/DDPHSIS/CGH/OD);Clarke, Kevin R. (CDC/DDPHSIS/CGH/DGHP);Dahl, Benjamin A. (CDC/DDPHSIS/CGH/GID);Damon, Inger K. (CDC/DDID/NCEZID/DHCPP);Dawood, Fatimah S. (CDC/DDID/NCIRD/ID);EOC IM;Farag, Noha (CDC/DDPHSIS/CGH/GID);Fitter, David L. (CDC/DDPHSIS/CGH/GID);Fox, LeAnne M. (CDC/DDID/NCIRD/DBD);GDD-OUTBREAK (CDC);Geissler, Aimee L. (CDC/DDID/NCEZID/DFWED);Ghiselli, Margherita (CDC/DDPHSIS/CGH/GID);Greene, Carolyn M. (CDC/DDID/NCIRD/ID);Greiner, Ashley L. (CDC/DDPHSIS/CGH/DGHP);Hagan, Jose Edward (CDC/DDPHSIS/CGH/GID);Hakim, Avi (CDC/DDPHSIS/CGH/DGHT);Helfand, Rita (CDC/DDID/NCEZID/OD);Henao, Olga (CDC/DDPHSIS/CGH/DGHP);Hyde, Terri (CDC/DDPHSIS/CGH/GID);Kaiser, Reinhard (CDC/DDPHSIS/CGH/DGHP);Klena, John D. (CDC/DDID/NCEZID/DHCPP);Knight, Nancy (CDC/DDPHSIS/CGH/DGHP);Kolwaite, Amy R. (CDC/DDID/NCEZID/DHQP);Lessa, Fernanda (CDC/DDID/NCEZID/DHQP);Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM);McCarron, Margaret (Meg) (CDC/DDID/NCIRD/ID);McQuiston, Jennifer H. (CDC/DDID/NCEZID/DHCPP);Mirza, Sara (CDC/DDID/NCIRD/DBD);Montandon, Michele (CDC/DDPHSIS/CGH/DGHT);Montgomery, Joel M. (CDC/DDID/NCEZID/DHCPP);Moolenaar, Ronald L. (CDC/DDPHSIS/CGH/DGHP);Mounts, Anthony (Tony) (CDC/DDPHSIS/CGH/GID);Neatherlin, John C. (CDC/DDPHSIS/CGH/DGHP);Nelson, Lisa J. (CDC/DDPHSIS/CGH/DGHT);Nichol, Stuart T. (CDC/DDID/NCEZID/DHCPP);OConnor, John (CDC/DDID/NCEZID/OD);Park, Benjamin (CDC/DDID/NCEZID/DHQP);Patel, Anita (CDC/DDID/NCIRD/OD);Pesik, Nicki (CDC/DDID/NCEZID/OD);Prue, Christine (CDC/DDID/NCEZID/OD);Raghunathan, Pratima (CDC/DDPHSIS/CGH/OD);Roohi, Shahrokh (CDC/DDID/NCEZID/DGMQ);Rotz, Lisa (CDC/DDID/NCEZID/DGMQ);Rouse, Edward N. (CDC/DDPHSIS/CPR/DEO);Simonds, R. J. (CDC/DDPHSIS/CGH/OD);Smith, Rachel M. (CDC/DDID/NCEZID/DHQP);Soeters, Heidi (CDC/DDPHSIS/CGH/GID);Soke, Gnakub (Norbert) (CDC/DDPHSIS/CGH/GID);Spath (CDC);Williams, Seymour (CDC/DDPHSIS/CGH/DGHP);Zhou, Weigong (CDC/DDID/NCIRD/ID)
Subject: 18 June GOARN Weekly Ops Call Notes/Slides
Attachments: GOARN Weekly Ops Call Notes 2020 06 18.docx, Ebola DRC Data Pack 2020 06 18.pptx, WHO COVID-19 Situation Update 2020 06 18.pdf, WHO COVID-19 Testing Indicators 2020 06 18.pptx, WHO IPC Mask Guidance 2020 06 18.pdf, WHO RCCE Update 2020 06 18.pdf

Attached are the 08:00 EDT/ 14:00 CET GOARN Ops call notes (includes all presentations), DRC EVD Data Pack, and other presentations. Thanks Puneet.

Ray

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Regards,
Puneet Anantharam



-
Please copy GDDOUTBREAK@CDC.GOV on all outbreak related e-mails.

Global Disease Detection Operations Center (GDDOC)
Division of Global Health Protection
Center for Global Health
Centers for Disease Control and Prevention
1600 Clifton Road NE, Mailstop D68
Atlanta, GA 30333

GOARN Weekly Ops Call Notes

Date: 18 June 2020

Time: 8:00 EDT/ 14:00 CET

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From: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP)
Sent: Tue, 5 Nov 2019 10:02:22 +0000
To: Walke, Henry (CDC/DDID/NCEZID/DPEI);Beach, Michael J. (CDC/DDID/NCEZID/DFWED);Fox, Kimberley (CDC/DDID/NCIRD/DBD);Damon, Inger K. (CDC/DDID/NCEZID/DHCPP);Baggett, Kip (CDC/DDPHSIS/CGH/DGHP);Bell, Elizabeth (Liz) (CDC/DDPHSIS/CGH/DGHP)
Subject: FW: WHO Consultant Contract 202429410 for your signature and return.

Anne signed and returned the contract so should have been able to travel to the field today as planned with the STOPers.

Ray

From: Griggs, Anne (CDC/DDPHSIS/CGH/DGHP) (CTR) <bfy7@cdc.gov>
Sent: Tuesday, November 5, 2019 7:26 AM
To: Benecke, Bernard (CDC/DDPHSIS/CGH/DGHP) <bxb4@cdc.gov>; NADZRIN, Natasya <nadzrinn@who.int>; NAMBOKA NALUBEGA, Renée <nambokar@who.int>; ARTHUR, Ray Richard <arthurr@who.int>; DRURY, Patrick Anthony <druryp@who.int>
Subject: Re: WHO Consultant Contract 202429410 for your signature and return.

Good morning, Bernard.

Yes! The contract arrived just after I left the Goma office and before my hotspot disconnected last night, which is why I did not acknowledge sooner. I will send the signed version shortly.

Many thanks again to you all for making this happen.

All the best,
Anne

From: Benecke, Bernard (CDC/DDPHSIS/CGH/DGHP) <bxb4@cdc.gov>
Sent: Monday, November 4, 2019 20:53
To: Griggs, Anne (CDC/DDPHSIS/CGH/DGHP) (CTR) <bfy7@cdc.gov>; NADZRIN, Natasya <nadzrinn@who.int>; NAMBOKA NALUBEGA, Renée <nambokar@who.int>; ARTHUR, Ray Richard <arthurr@who.int>; druryp@who.int <druryp@who.int>
Subject: Re: WHO Consultant Contract 202429410 for your signature and return.

All set now Anne?

Get Outlook for iOS

From: Griggs, Anne (CDC/DDPHSIS/CGH/DGHP) (CTR) <bfy7@cdc.gov>
Sent: Monday, November 4, 2019 10:00:31 AM

To: Benecke, Bernard (CDC/DDPHSIS/CGH/DGHP) <bxb4@cdc.gov>; NADZRIN, Natasya <nadzrinn@who.int>; NAMBOKA NALUBEGA, Renée <nambokar@who.int>; ARTHUR, Ray Richard <arthurr@who.int>; druryp@who.int <druryp@who.int>
Subject: Re: WHO Consultant Contract 202429410 for your signature and return.

Chers tous,
Many thanks to you all for your time and attention to this.
All the best,
Anne

From: Benecke, Bernard (CDC/DDPHSIS/CGH/DGHP) <bxb4@cdc.gov>
Sent: Monday, November 4, 2019 10:46
To: Griggs, Anne (CDC/DDPHSIS/CGH/DGHP) (CTR) <bfy7@cdc.gov>; NADZRIN, Natasya <nadzrinn@who.int>; NAMBOKA NALUBEGA, Renée <nambokar@who.int>; ARTHUR, Ray Richard <arthurr@who.int>; druryp@who.int <druryp@who.int>
Subject: FW: WHO Consultant Contract 202429410 for your signature and return.

FYI

From: PARRIS, Ingrid <parrisi@who.int>
Sent: Monday, November 4, 2019 3:40 AM
To: Benecke, Bernard (CDC/DDPHSIS/CGH/DGHP) <bxb4@cdc.gov>
Subject: RE: WHO Consultant Contract 202429410 for your signature and return.

Hi Bernard,

Thanks for this.

We are working on it right now.

There were a number of challenges over the weekend which resulted in the issue of the incorrect contract. It should be re-issued to Anne very shortly.

Kind regards.

Ingrid

From: Benecke, Bernard (CDC/DDPHSIS/CGH/DGHP) <bxb4@cdc.gov>
Sent: Monday, November 4, 2019 9:21 AM
To: PARRIS, Ingrid <parrisi@who.int>
Subject: FW: WHO Consultant Contract 202429410 for your signature and return.

From: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP) <rca8@cdc.gov>
Sent: Sunday, November 3, 2019 6:27 AM

To: Griggs, Anne (CDC/DDPHSIS/CGH/DGHP) (CTR) <bfy7@cdc.gov>; NADZRIN, Natasya <nadzrinn@who.int>; NAMBOKA NALUBEGA, Renée <nambokar@who.int>
Cc: PIPER, Tracey Greene <pipert@who.int>; Benecke, Bernard (CDC/DDPHSIS/CGH/DGHP) <bxb4@cdc.gov>; Pat Drury (druryp@who.int) <druryp@who.int>; ARTHUR, Ray Richard <arthurr@who.int>
Subject: RE: WHO Consultant Contract 202429410 for your signature and return.

Dear Natasya and Renee,

(b)(6)

(b)(6) She is (b)(6) and her field activities are being delayed.

(b)(6)

(b)(6) I am at HQ this week and can also provide any needed assistance.

Thank you.
Ray

Ray R. Arthur, PhD
Lead, Global Disease Detection Operations Center
Emergency Response and Recovery Branch

Division of Global Health Protection
Center for Global Health
Centers for Disease Control and Prevention

1600 Clifton Road, NE
MS: H21-9
Atlanta, GA 30329
Phone: 404-639-3855
Mobile: (b)(6)
rarthur@cdc.gov

From: Griggs, Anne (CDC/DDPHSIS/CGH/DGHP) (CTR) <bfy7@cdc.gov>
Sent: Sunday, November 3, 2019 6:11 AM
To: NADZRIN, Natasya <nadzrinn@who.int>
Cc: NAMBOKA NALUBEGA, Renée <nambokar@who.int>; PIPER, Tracey Greene <pipert@who.int>; Arthur, Ray (CDC/DDPHSIS/CGH/DGHP) <rca8@cdc.gov>
Subject: Re: WHO Consultant Contract 202429410 for your signature and return.

Dear Natasya and Renee.

Upon opening the PDF of the contract, there appears to have been an error. Currently, I am contracted with the CDC to assist with the DRC Ebola outbreak as a technical advisor. (b)(5)

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(b)(6) . As a reference, Anna Likos and I are working under the same agreement. (b)(6)

(b)(6)

All the best,
Anne

From: NADZRIN, Natasya <nadzrinn@who.int>
Sent: Sunday, November 3, 2019 11:53
To: Griggs, Anne (CDC/DDPHSIS/CGH/DGHP) (CTR) <bfy7@cdc.gov>
Cc: NAMBOKA NALUBEGA, Renée <nambokar@who.int>
Subject: WHO Consultant Contract 202429410 for your signature and return.

Dear Sir or Madam,

We have pleasure in enclosing our above mentioned Purchase Order for your further action.

1. We kindly request you to print out, sign and scan the Purchase Order (All Pages), and then return it by email to nadzrinn@who.int as soon as possible.

2. When returning the Purchase order by email, please maintain the same subject header and include the following sentence in your email by choosing either one of the captions to use.

   If you are an individual, please use the following caption:

   "I ,…… (Name), hereby confirm to accept the terms of the attached contract."

   If you are representing Company/Institution, please use the following caption:

   "I ,…… (Name and Title), duly authorized to represent ……..…. (Company Name), hereby confirm that ……..... (Company Name) accept the terms of the attached contract."

3. You are encouraged to copy all related correspondences with WHO to the above technical unit representative (refer email address in the cc: list) and the responsible technical officer indicated in the attached PO Covering Letter, whom should be liaised closely for delivery of the work.

4. For Contractors who are legal entities (Company Contractors), invoices must be sent via email to accountspayable@who.int and copied to the technical unit representative. Other than invoices,

please do not send any enquiry to this email address. You may contact the technical unit representative or the responsible technical officer for any enquiry.

We thank you for your cooperation.

Best Regards,

Natasya Nadzrin
Senior Procurement Assistant
Global Procurement and Logistics (GMG/GSC/GPL)

World Health Organization

World Health Organization-Global Service Centre
Prima 7 Bldg., Blok 3510, Jalan Teknokrat 6, 63000 Cyberjaya, Selangor, Malaysia
Tel. direct: +60 3 8871 7111 (ext: 17482)
Fax direct: +60 3 8871 7143
EMail: nadzrinn@who.int

From: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP)
Sent: Tue, 7 Jan 2020 17:45:04 +0000
To: Clark, Thomas A. (CDC/DDID/NCIRD/DVD);Arthur, Ray (CDC/DDPHSIS/CGH/DGHP);Bensyl, Diana M. (CDC/DDPHSIS/CGH/DGHP);Blanton, Jesse (CDC/DDID/NCEZID/DGMQ);Bunga, Sudhir (CDC state.gov);Clarke, Kevin R. (CDC/DDPHSIS/CGH/DGHP);Dahl, Benjamin A. (CDC/DDPHSIS/CGH/GID);Damon, Inger K. (CDC/DDID/NCEZID/DHCPP);EOC IM;Ewetola, Raimi (CDC/DDPHSIS/CGH/DGHT);GDD-OUTBREAK (CDC);Geissler, Aimee L. (CDC/DDID/NCEZID/DFWED);Helfand, Rita (CDC/DDID/NCEZID/OD);Hyde, Terri (CDC/DDPHSIS/CGH/GID);Klena, John D. (CDC/DDID/NCEZID/DHCPP);Kolwaite, Amy R. (CDC/DDID/NCEZID/DHQP);Macdonald, Gene (CDC/DDPHSIS/CGH/DGHT);McQuiston, Jennifer H. (CDC/DDID/NCEZID/DHCPP);Neatherlin, John C. (CDC/DDPHSIS/CGH/DGHP);Nelson, Lisa J. (CDC/DDPHSIS/CGH/DGHT);Nichol, Stuart T. (CDC/DDID/NCEZID/DHCPP);OConnor, John (CDC/DDID/NCEZID/OD);Park, Benjamin (CDC/DDID/NCEZID/DHQP);Pesik, Nicki (CDC/DDID/NCEZID/OD);Prue, Christine (CDC/DDID/NCEZID/OD);Raghunathan, Pratima (CDC/DDPHSIS/CGH/OD);Roohi, Shahrokh (CDC/DDID/NCEZID/DGMQ);Rotz, Lisa (CDC/DDID/NCEZID/DGMQ);Rouse, Edward N. (CDC/DDPHSIS/CPR/DEO);Smith, Rachel M. (CDC/DDID/NCEZID/DHQP);Spath (CDC);Thomas, Peter (CDC/DDPHSIS/CGH/DGHP);Walke, Henry (CDC/DDID/NCEZID/DPEI)
Subject: Weekly Ops call - Thurs. 9 Jan. 8 AM EST

This week's invitation for the weekly call. Please pass to others that may have interest in the events on the agenda. Ray

Dear colleagues,

You are kindly invited to the GOARN Weekly Operations Call on **Thursday, 9 January 2020** at **14:00 – 15:00 (Geneva time).**

Agenda:

- EVD, DRC
  - Find daily WHO Situation updates posted on the Knowledge Platform > Operations > Ebola Virus Disease, Democratic Republic of the Congo (North Kivu), 2018 > Updates (on the right side)
- Pneumonia of unknown etiology, China
- AoB

Please see below dial-in details:
IMPORTANT: All participants must enter full name and institution name when joining the WebEx call.

Click here to join the meeting by Webex
1. Enter your full name and institution.
2. Enter the meeting access code: (b)(6)

You have two options to connect to your audio within Webex:

- On the audio and video connection pop-up, select audio connection, choose either: *"I will call in"* or *"Call using computer"*.

- *Mute your microphone* unless *speaking.*

Click here to join the meeting by phone or if you have chosen "*I will call in*" above. WHO staff can use (b)(6)

GOARN Operational Support Team

Global Outbreak Alert and Response Network (GOARN)
Division of Emergency Response (WRE)
WHO Health Emergencies Programme (WHE)
World Health Organization
Avenue Appia 20
1211 Geneva 27, Switzerland

E-mail: goarn@who.int

NOTE: Please note that this WebEx service allows audio and other information sent during the session to be recorded. By joining this session, you automatically consent to such recordings. If you do not consent to being recorded, discuss your concerns with the host or do not join the session. The recording is used for the purpose of minutes.

Ray R. Arthur, PhD
Lead, Global Disease Detection Operations Center
Emergency Response and Recovery Branch

Division of Global Health Protection
Center for Global Health
Centers for Disease Control and Prevention

1600 Clifton Road, NE
MS: H21-9
Atlanta, GA 30329
Phone: 404-639-3855
Mobile (b)(6)
rarthur@cdc.gov

From: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP)
Sent: Wed, 8 Jan 2020 20:44:03 +0000
To: GREIN, Thomas;vankerkhovem@who.int
Subject: CDC IMS for Pneumonia Event

This is from an internal CDC document that is not to be distributed, (b)(5)s

(b)(5)

(b)(5) I'll keep you informed.

Best,
Ray

DRAFT- (b)(5)

(b)(5)

Ray R. Arthur, PhD
Lead, Global Disease Detection Operations Center
Emergency Response and Recovery Branch

Division of Global Health Protection
Center for Global Health
Centers for Disease Control and Prevention

1600 Clifton Road, NE
MS: H21-9
Atlanta, GA 30329
Phone: 404-639-3855

Mobile: (b)(6)
rarthur@cdc.gov

From: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP)
Sent: Thu, 9 Jan 2020 16:59:55 +0000
To: vankerkhovem@who.int;GREIN, Thomas
Subject: FW: [Pneumonia of unknown origin in Wuhan, China] GCM TC update, Friday 10 January, 8-9a Eastern (2pm-3pm GVA time)
Attachments: Teleconference of the R&D GCM Wuhan.docx

I don't recall that this was mentioned today, but assume you were aware.

Best,
Ray

From: Vinter, Serena (CDC/DDPHSIS/CGH/OD) <uvv3@cdc.gov>
Sent: Thursday, January 9, 2020 5:52 PM
To: OMara, Elizabeth A. (CDC/DDPHSIS/CGH/OD) <eco1@cdc.gov>; Williams, Seymour (CDC/DDPHSIS/CGH/DGHP) <sjw9@cdc.gov>; Arthur, Ray (CDC/DDPHSIS/CGH/DGHP) <rca8@cdc.gov>
Subject: FW: [Pneumonia of unknown origin in Wuhan, China] GCM TC update, Friday 10 January, 8-9a Eastern (2pm-3pm GVA time)

FYI

Serena Vinter
Center for Global Health (CGH)
o. (404) 639-0323 |m. (b)(6)
uvv3@cdc.gov

From: Weinberger, Collin (OS/OGA) (CTR) <Collin.Weinberger@hhs.gov>
Sent: Thursday, January 9, 2020 11:43 AM
To: Kerr, Lawrence (HHS/OS/OGA) <Lawrence.Kerr@hhs.gov>; Marston, Hilary (NIH/NIAID) [E] <hilary.marston@nih.gov>; Helfand, Rita (CDC/DDID/NCEZID/OD) <rzh7@cdc.gov>; Bright, Rick (OS/ASPR/BARDA) <Rick.Bright@hhs.gov>
Cc: Disbrow, Gary (OS/ASPR/BARDA) <Gary.Disbrow@hhs.gov>; Blatner, Gretta (OS/ASPR/BARDA) <Gretta.Blatner@hhs.gov>; Moudy, Robin (OS/ASPR/SPPR) <Robin.Moudy@hhs.gov>; Elvander, Erika (OS/OGA) <Erika.Elvander@hhs.gov>; Koo, Han (OS/OGA) (CTR) <Han.Koo@hhs.gov>; Vinter, Serena (CDC/DDPHSIS/CGH/OD) <uvv3@cdc.gov>
Subject: FW: [Pneumonia of unknown origin in Wuhan, China] GCM TC update, Friday 10 January, 8-9a Eastern (2pm-3pm GVA time)

Dear Larry, Hilary, Rita, and Rick,

In case you did not receive the below notice directly, the WHO R&D Blueprint team is just announced a one hour teleconference tomorrow morning at 8a Eastern (2p in Geneva) to provide an update on the clusters of "pneumonia of unknown origin" in Wuhan Province, China.

Please find the teleconference details below.

Best,
Collin

From: GSELL, Pierre <gsellp@who.int>
Sent: Thursday, January 9, 2020 10:27 AM
Subject: [Pneumonia of unknown origin in Wuhan, China] GCM TC update, Friday 10 January, 2pm-3pm GVA time

Dear GCM members,

We are very pleased to invite you to a 1 hour TC to provide you with an update on the clusters of "pneumonia of unknown origin" occurring in Wuhan Province, China.
The TC is planned tomorrow Friday 10 January at 2pm GVA time.

Draft agenda items

1. Overview of emerging data on disease epidemiology
2. Overview of research priorities and a collaborative process to offer support -if requested- to the national authorities in China and elsewhere.
   - Mechanisms for coordination/collaboration in terms of international research
3. Next steps including considerations of potential spread scenarios vis a vis research priorities

Dial in Details
Please dial-in (b)(6) / Participant code: (b)(6)

Kind regards,
Pierre *on behalf of the* WHO R&D Blueprint

Pierre-Stéphane Gsell
Technical Officer
Helath Emergencies Programme | R&D Blueprint | 1156
World Health Organization | Avenue Appia 20 | 1211 Geneva 27 | Switzerland
Desk: +41.22.791.50.74 | Mob: (b)(6) gsellp@who.int

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Powering research
to prevent epidemics

R&DBlueprint
Powering research
to prevent epidemics

Teleconference of the R&D Blueprint GCM
January 10, 2020
Friday 14:00-15:00 GVA time

Pneumonia of unknown etiology in Wuhan China

Draft agenda items

1. Overview of emerging data on disease epidemiology
2. Overview of research priorities and a collaborative process to offer support -if requested- to the national authorities in China and elsewhere.
   - Mechanisms for coordination/collaboration in terms of international research
3. Next steps including considerations of potential spread scenarios vis a vis research priorities

From: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP)
Sent: Thu, 9 Jan 2020 20:47:01 +0000
To: vankerkhovem@who.int;GREIN, Thomas
Subject: CDC Response to NCV
Attachments: Org Chart_20200108.pptx, 01092019_IM_Update- Final.pdf

VERY CLOSE HOLD - PLEASE DO NOT FORWARD.

The updated org chart is in the separate slide.

Best,
Ray

Ray R. Arthur, PhD
Lead, Global Disease Detection Operations Center
Emergency Response and Recovery Branch

Division of Global Health Protection
Center for Global Health
Centers for Disease Control and Prevention

1600 Clifton Road, NE
MS: H21-9
Atlanta, GA 30329
Phone: 404-639-3855
Mobile: (b)(6)
rarthur@cdc.gov

DRAFT-

(b)(5)

(b)(5)

National Center for Immunization & Respiratory Diseases

(b)(5)

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Page 3298

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Page 3299

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From: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP)
Sent: Tue, 12 May 2020 22:29:33 +0000
To: Armstrong, Gregory (CDC/DDID/NCEZID/OD);Beach, Michael J. (CDC/DDID/NCEZID/DFWED);Ben Hamida, Amen (em-EN) (CDC/DDPHSIS/CGH/DGHP);Bennett, Sarah D. (CDC/DDPHSIS/CGH/GID);Bresee, Joseph (CDC/DDID/NCIRD/ID);Bunga, Sudhir (CDC state.gov);Clarke, Kevin R. (CDC/DDPHSIS/CGH/DGHP);Dahl, Benjamin A. (CDC/DDPHSIS/CGH/GID);Damon, Inger K. (CDC/DDID/NCEZID/DHCPP);Dawood, Fatimah S. (CDC/DDID/NCIRD/ID);EOC IM;Fitter, David L. (CDC/DDPHSIS/CGH/GID);Fox, LeAnne M. (CDC/DDID/NCIRD/DBD);GDD-OUTBREAK (CDC);Geissler, Aimee L. (CDC/DDID/NCEZID/DFWED);Greene, Carolyn M. (CDC/DDID/NCIRD/ID);Helfand, Rita (CDC/DDID/NCEZID/OD);Henao, Olga (CDC/DDPHSIS/CGH/DGHP);Hyde, Terri (CDC/DDPHSIS/CGH/GID);Kaiser, Reinhard (CDC/DDPHSIS/CGH/DGHP);Klena, John D. (CDC/DDID/NCEZID/DHCPP);Knight, Nancy (CDC/DDPHSIS/CGH/DGHP);Kolwaite, Amy R. (CDC/DDID/NCEZID/DHQP);Lessa, Fernanda (CDC/DDID/NCEZID/DHQP);Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM);McCarron, Margaret (Meg) (CDC/DDID/NCIRD/ID);McQuiston, Jennifer H. (CDC/DDID/NCEZID/DHCPP);Mirza, Sara (CDC/DDID/NCIRD/DBD);Montandon, Michele (CDC/DDPHSIS/CGH/DGHT);Moolenaar, Ronald L. (CDC/DDPHSIS/CGH/DGHP);Neatherlin, John C. (CDC/DDPHSIS/CGH/DGHP);Nelson, Lisa J. (CDC/DDPHSIS/CGH/DGHT);Nichol, Stuart T. (CDC/DDID/NCEZID/DHCPP);OConnor, John (CDC/DDID/NCEZID/OD);Park, Benjamin (CDC/DDID/NCEZID/DHQP);Patel, Anita (CDC/DDID/NCIRD/OD);Pesik, Nicki (CDC/DDID/NCEZID/OD);Prue, Christine (CDC/DDID/NCEZID/OD);Raghunathan, Pratima (CDC/DDPHSIS/CGH/OD);Roohi, Shahrokh (CDC/DDID/NCEZID/DGMQ);Rotz, Lisa (CDC/DDID/NCEZID/DGMQ);Rouse, Edward N. (CDC/DDPHSIS/CPR/DEO);Simonds, R. J. (CDC/DDPHSIS/CGH/OD);Smith, Rachel M. (CDC/DDID/NCEZID/DHQP);Soke, Gnakub (Norbert) (CDC/DDPHSIS/CGH/GID);Spath (CDC)
Subject: GOARN Weekly Ops Call - 14 May at 08:00 EDT

Agenda: TBC
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Ray R. Arthur, PhD
Lead, Global Disease Detection Operations Center
Emergency Response and Recovery Branch

Division of Global Health Protection
Center for Global Health
Centers for Disease Control and Prevention

1600 Clifton Road, NE
MS: H21-9
Atlanta, GA 30329
Phone: 404-639-3855
Mobile: (b)(6)
rarthur@cdc.gov

From: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP)
Sent: Thu, 14 May 2020 12:13:12 +0000
To: Armstrong, Gregory (CDC/DDID/NCEZID/OD);Beach, Michael J. (CDC/DDID/NCEZID/DFWED);Ben Hamida, Amen (em-EN) (CDC/DDPHSIS/CGH/DGHP);Bennett, Sarah D. (CDC/DDPHSIS/CGH/GID);Bresee, Joseph (CDC/DDID/NCIRD/ID);Bunga, Sudhir (CDC state.gov);Clarke, Kevin R. (CDC/DDPHSIS/CGH/DGHP);Dahl, Benjamin A. (CDC/DDPHSIS/CGH/GID);Damon, Inger K. (CDC/DDID/NCEZID/DHCPP);Dawood, Fatimah S. (CDC/DDID/NCIRD/ID);EOC IM;Fitter, David L. (CDC/DDPHSIS/CGH/GID);Fox, LeAnne M. (CDC/DDID/NCIRD/DBD);GDD-OUTBREAK (CDC);Geissler, Aimee L. (CDC/DDID/NCEZID/DFWED);Greene, Carolyn M. (CDC/DDID/NCIRD/ID);Helfand, Rita (CDC/DDID/NCEZID/OD);Henao, Olga (CDC/DDPHSIS/CGH/DGHP);Hyde, Terri (CDC/DDPHSIS/CGH/GID);Kaiser, Reinhard (CDC/DDPHSIS/CGH/DGHP);Klena, John D. (CDC/DDID/NCEZID/DHCPP);Knight, Nancy (CDC/DDPHSIS/CGH/DGHP);Kolwaite, Amy R. (CDC/DDID/NCEZID/DHQP);Lessa, Fernanda (CDC/DDID/NCEZID/DHQP);Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM);McCarron, Margaret (Meg) (CDC/DDID/NCIRD/ID);McQuiston, Jennifer H. (CDC/DDID/NCEZID/DHCPP);Mirza, Sara (CDC/DDID/NCIRD/DBD);Montandon, Michele (CDC/DDPHSIS/CGH/DGHT);Moolenaar, Ronald L. (CDC/DDPHSIS/CGH/DGHP);Neatherlin, John C. (CDC/DDPHSIS/CGH/DGHP);Nelson, Lisa J. (CDC/DDPHSIS/CGH/DGHT);Nichol, Stuart T. (CDC/DDID/NCEZID/DHCPP);OConnor, John (CDC/DDID/NCEZID/OD);Park, Benjamin (CDC/DDID/NCEZID/DHQP);Patel, Anita (CDC/DDID/NCIRD/OD);Pesik, Nicki (CDC/DDID/NCEZID/OD);Prue, Christine (CDC/DDID/NCEZID/OD);Raghunathan, Pratima (CDC/DDPHSIS/CGH/OD);Roohi, Shahrokh (CDC/DDID/NCEZID/DGMQ);Rotz, Lisa (CDC/DDID/NCEZID/DGMQ);Rouse, Edward N. (CDC/DDPHSIS/CPR/DEO);Simonds, R. J. (CDC/DDPHSIS/CGH/OD);Smith, Rachel M. (CDC/DDID/NCEZID/DHQP);Soke, Gnakub (Norbert) (CDC/DDPHSIS/CGH/GID);Spath (CDC)
Subject: FW: [EXT] I'm told the link to the call is not working - Updated link

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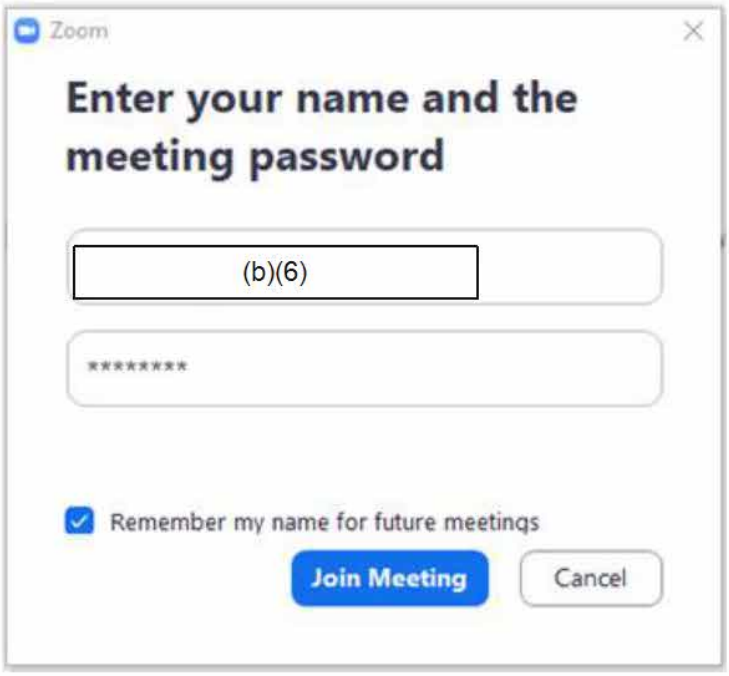
From: goarn <goarn@who.int>
Sent: Thursday, May 14, 2020 8:11 AM
To: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP) <rca8@cdc.gov>
Cc: goarn <goarn@who.int>
Subject: RE: [EXT] I'm told the link to the call is not working

Dear Ray,

Please try this:

IMPORTANT: All participants must enter full name and institution acronym when joining the zoom meeting.

If you don’t enter this information, we will keep you in the waiting room and ask you to identify yourself, and this might delay your entry into the meeting.



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US Toll-free

(b)(6) Canada Toll-free

From: goarn
Sent: Thursday, May 14, 2020 2:04 PM
To: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP) <rca8@cdc.gov>
Cc: goarn <goarn@who.int>
Subject: RE: [EXT] I'm told the link to the call is not working

Dear Ray – pls try and connect again.

Thanks,
Khris

From: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP) <rca8@cdc.gov>
Sent: Thursday, May 14, 2020 2:02 PM
To: DRURY, Patrick Anthony <druryp@who.int>; goarn <goarn@who.int>
Subject: [EXT] I'm told the link to the call is not working
Importance: High

Ray R. Arthur, PhD
Lead, Global Disease Detection Operations Center
Emergency Response and Recovery Branch

Division of Global Health Protection
Center for Global Health
Centers for Disease Control and Prevention

1600 Clifton Road, NE
MS: H21-9

Atlanta, GA 30329
Phone: 404-639-3855
Mobile: (b)(6)
rarthur@cdc.gov

Best,

Khris

From: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP)
Sent: Thu, 14 May 2020 16:43:16 +0000
To: Armstrong, Gregory (CDC/DDID/NCEZID/OD);Beach, Michael J. (CDC/DDID/NCEZID/DFWED);Ben Hamida, Amen (em-EN) (CDC/DDPHSIS/CGH/DGHP);Bennett, Sarah D. (CDC/DDPHSIS/CGH/GID);Bresee, Joseph (CDC/DDID/NCIRD/ID);Bunga, Sudhir (CDC state.gov);Clarke, Kevin R. (CDC/DDPHSIS/CGH/DGHP);Dahl, Benjamin A. (CDC/DDPHSIS/CGH/GID);Damon, Inger K. (CDC/DDID/NCEZID/DHCPP);Dawood, Fatimah S. (CDC/DDID/NCIRD/ID);EOC IM;Fitter, David L. (CDC/DDPHSIS/CGH/GID);Fox, LeAnne M. (CDC/DDID/NCIRD/DBD);GDD-OUTBREAK (CDC);Geissler, Aimee L. (CDC/DDID/NCEZID/DFWED);Greene, Carolyn M. (CDC/DDID/NCIRD/ID);Helfand, Rita (CDC/DDID/NCEZID/OD);Henao, Olga (CDC/DDPHSIS/CGH/DGHP);Hyde, Terri (CDC/DDPHSIS/CGH/GID);Kaiser, Reinhard (CDC/DDPHSIS/CGH/DGHP);Klena, John D. (CDC/DDID/NCEZID/DHCPP);Knight, Nancy (CDC/DDPHSIS/CGH/DGHP);Kolwaite, Amy R. (CDC/DDID/NCEZID/DHQP);Lessa, Fernanda (CDC/DDID/NCEZID/DHQP);Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM);McCarron, Margaret (Meg) (CDC/DDID/NCIRD/ID);McQuiston, Jennifer H. (CDC/DDID/NCEZID/DHCPP);Mirza, Sara (CDC/DDID/NCIRD/DBD);Montandon, Michele (CDC/DDPHSIS/CGH/DGHT);Moolenaar, Ronald L. (CDC/DDPHSIS/CGH/DGHP);Neatherlin, John C. (CDC/DDPHSIS/CGH/DGHP);Nelson, Lisa J. (CDC/DDPHSIS/CGH/DGHT);Nichol, Stuart T. (CDC/DDID/NCEZID/DHCPP);OConnor, John (CDC/DDID/NCEZID/OD);Park, Benjamin (CDC/DDID/NCEZID/DHQP);Patel, Anita (CDC/DDID/NCIRD/OD);Pesik, Nicki (CDC/DDID/NCEZID/OD);Prue, Christine (CDC/DDID/NCEZID/OD);Raghunathan, Pratima (CDC/DDPHSIS/CGH/OD);Roohi, Shahrokh (CDC/DDID/NCEZID/DGMQ);Rotz, Lisa (CDC/DDID/NCEZID/DGMQ);Rouse, Edward N. (CDC/DDPHSIS/CPR/DEO);Simonds, R. J. (CDC/DDPHSIS/CGH/OD);Smith, Rachel M. (CDC/DDID/NCEZID/DHQP);Soke, Gnakub (Norbert) (CDC/DDPHSIS/CGH/GID);Spath (CDC)
Subject: FW: 14 May GOARN Weekly Ops Call Notes/Presentations
Attachments: GOARN Weekly Ops Call Notes 2020 05 14.docx, DRC EVD Epi Data Pack 2020 05 14.pptx, GOARN Epi Deep Dive 2020 05 14.pdf, GOARN RCCE 2020 05 14.pdf

Hopefully the problems that occurred on today's call have been resolved and there will not be any issues next week.

Thanks Puneet for the notes and slides.

Ray

From: Anantharam, Puneet (CDC/DDPHSIS/CGH/DGHP) <ogq2@cdc.gov>
Sent: Thursday, May 14, 2020 12:15 PM
To: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP) <rca8@cdc.gov>; GDD-OUTBREAK (CDC) <GDDOUTBREAK@cdc.gov>
Subject: 14 May GOARN Weekly Ops Call Notes/Presentations

Hi Ray and team,

Attached are the 08:00 EDT/ 14:00 CET GOARN Ops call notes (includes EVD/COVID), EVD Epi Data Pack, and presentations from today.

(b)(4); (b)(5)

Regards,
Puneet Anantharam



-
Please copy GDDOUTBREAK@CDC.GOV on all outbreak related e-mails.

Global Disease Detection Operations Center (GDDOC)
Division of Global Health Protection
Center for Global Health
Centers for Disease Control and Prevention
1600 Clifton Road NE, Mailstop D68
Atlanta, GA 30333

GOARN Weekly Ops Call Notes

Date: 14 May 2020

Time: 8:00 EDT/ 14:00 CET

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From: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP)
Sent: Thu, 7 Nov 2019 20:49:58 +0000
To: Carter, Rosalind J. (CDC/DDPHSIS/CGH/GID);Weinberger, Collin (OS/OGA) (CTR);Hyde, Terri (CDC/DDPHSIS/CGH/GID);Damon, Inger K. (CDC/DDID/NCEZID/DHCPP);Helfand, Rita (CDC/DDID/NCEZID/OD)
Cc: Kerr, Lawrence (HHS/OS/OGA)
Subject: RE: (b)(5)

Thanks Colin and Rosalind. I was aware of WHO's current policy and the info you provides the info needed to advocate with Mike. Ray

---

From: Carter, Rosalind J. (CDC/DDPHSIS/CGH/GID) <rdc6@cdc.gov>
Sent: Thursday, November 7, 2019 12:39 PM
To: Weinberger, Collin (OS/OGA) (CTR) <Collin.Weinberger@hhs.gov>; Arthur, Ray (CDC/DDPHSIS/CGH/DGHP) <rca8@cdc.gov>; Hyde, Terri (CDC/DDPHSIS/CGH/GID) <tkh4@cdc.gov>; Damon, Inger K. (CDC/DDID/NCEZID/DHCPP) <iad7@cdc.gov>; Helfand, Rita (CDC/DDID/NCEZID/OD) <rzh7@cdc.gov>
Cc: Kerr, Lawrence (HHS/OS/OGA) <Lawrence.Kerr@hhs.gov>
Subject: Re: (b)(5)

You summarized the discussion well, Collin. I also send a copy of the Concept note CDC drafted for the MCM workgroup discussion.
As someone who spends a lot of time in the Tier I countries, (b)(5)

(b)(5)

Rosalind

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From: Weinberger, Collin (OS/OGA) (CTR) <Collin.Weinberger@hhs.gov>
Sent: Thursday, November 7, 2019 7:56:45 PM
To: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP) <rca8@cdc.gov>; Hyde, Terri (CDC/DDPHSIS/CGH/GID) <tkh4@cdc.gov>; Carter, Rosalind J. (CDC/DDPHSIS/CGH/GID) <rdc6@cdc.gov>; Damon, Inger K. (CDC/DDID/NCEZID/DHCPP) <iad7@cdc.gov>; Helfand, Rita (CDC/DDID/NCEZID/OD) <rzh7@cdc.gov>
Cc: Kerr, Lawrence (HHS/OS/OGA) <Lawrence.Kerr@hhs.gov>
Subject: RE: (b)(5)

Thanks very much Ray!

(b)(5)

(b)(5)

Rosalind or others, please add in any additional context or key points if I missed something.

Best,
Collin

From: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP) <rca8@cdc.gov>
Sent: Tuesday, November 5, 2019 11:42 PM
To: Weinberger, Collin (OS/OGA) (CTR) <Collin.Weinberger@hhs.gov>; Hyde, Terri (CDC/DDPHSIS/CGH/GID) <tkh4@cdc.gov>; Carter, Rosalind J. (CDC/DDPHSIS/CGH/GID) <rdc6@cdc.gov>; Damon, Inger K. (CDC/DDID/NCEZID/DHCPP) <iad7@cdc.gov>; Helfand, Rita (CDC/DDID/NCEZID/OD) <rzh7@cdc.gov>
Cc: Kerr, Lawrence (HHS/OS/OGA) <Lawrence.Kerr@hhs.gov>
Subject: RE: (b)(5)

Collin,
c
(b)(5) I did not participate on the MCM call you referenced and would appreciate a brief summary of the discussion.

Thanks.
Ray

From: Weinberger, Collin (OS/OGA) (CTR) <Collin.Weinberger@hhs.gov>
Sent: Tuesday, November 5, 2019 8:29 PM
To: Hyde, Terri (CDC/DDPHSIS/CGH/GID) <tkh4@cdc.gov>; Carter, Rosalind J. (CDC/DDPHSIS/CGH/GID) <rdc6@cdc.gov>; Damon, Inger K. (CDC/DDID/NCEZID/DHCPP) <iad7@cdc.gov>; Helfand, Rita (CDC/DDID/NCEZID/OD) <rzh7@cdc.gov>; Arthur, Ray (CDC/DDPHSIS/CGH/DGHP) <rca8@cdc.gov>
Cc: Kerr, Lawrence (HHS/OS/OGA) <Lawrence.Kerr@hhs.gov>
Subject (b)(5)

Hi Terri, Rosalind, Inger, Rita, and Ray,

Larry and I have been discussing the best approach for outreach to (b)(5)

(b)(5)

Best,
Collin

Collin Weinberger, MPH
Senior Global Health Officer, Office of Pandemics and Emerging Threats
Office of Global Affairs
U.S. Department of Health and Human Services
(O): (202) 260-6828 (M): (202) 480-4483
collin.weinberger@hhs.gov

From: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP)
Sent: Wed, 24 Jun 2020 16:16:36 +0000
To: Dale Fisher;SURI, Sameera
Cc: DRURY, Patrick Anthony;Gail Carson
Subject: RE: EIOS follow up for SCOM

Dale, You an only imagine! Ray

From: Dale Fisher <mdcfda@nus.edu.sg>
Sent: Wednesday, June 24, 2020 11:29 AM
To: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP) <rca8@cdc.gov>; SURI, Sameera <suris@who.int>; HUO, Xiang <xhuo@who.int>
Cc: DRURY, Patrick Anthony <druryp@who.int>; Gail Carson <gail.carson@ndm.ox.ac.uk>
Subject: RE: EIOS follow up for SCOM

Thanks Ray hope things are as good as they can be for you!

From: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP) <rca8@cdc.gov>
Sent: Wednesday, 24 June 2020 11:12 PM
To: SURI, Sameera <suris@who.int>; HUO, Xiang <xhuo@who.int>
Cc: dale_andrew_fisher@nuhs.edu.sg; DRURY, Patrick Anthony <druryp@who.int>; Gail Carson <gail.carson@ndm.ox.ac.uk>
Subject: RE: EIOS follow up for SCOM

- External Email -

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Do not click on links or open files if unsure of sender.

Dear Sam et al.,

While members of the GDD Ops team continue to work closely with the EIOS Coordination Team in Geneva, there has been no progress on the GOARN pilot since Philippe and Brian changed roles. I only learned last Friday on the EIOS Coordinating Group call that Xiang is now the GOARN rep. for EIOS. Just as an aside, I have working full-time in the CDC COVID Response on the International Task Force since returning from Geneva in mid-January.

I'll connect with Xiang to see how familiar he is with the proposed pilot.

Best,
Ray

From: SURI, Sameera <suris@who.int>
Sent: Wednesday, June 24, 2020 7:59 AM
To: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP) <rca8@cdc.gov>; HUO, Xiang <xhuo@who.int>
Cc: dale_andrew_fisher <dale_andrew_fisher@nuhs.edu.sg>; DRURY, Patrick Anthony <druryp@who.int>; Gail Carson <gail.carson@ndm.ox.ac.uk>
Subject: EIOS follow up for SCOM

Dear Ray,

As you are aware we are hosting the 27th session of the GOARN SCOM virtually next week over 2 days (2 hour sessions each) . To this end, I wanted to reach out to request a short one page update on the EIOS project fo the committee to get in advance of the meeting.

Last year in December we had intended to explore the following areas of development in the project. Our goal is to ensure the committee understand if these were achieved given the COVID 19 pandemic and how the EIOS development has been impacted as a result

> The EIOS project will continue in 2020 with:
>
> - A three-month pilot project for testing information sharing (Jan–Mar).
> - User accounts for all GOARN partners interested in using EIOS for event monitoring (as soon as training materials are available).
> - Expansion of the pilot to include partners from all regions (TBD).
> - Full activation of the EIOS system, with agreed information-sharing protocols, for all interested GOARN partners (2020).

Xiang (copied) in our team has picked up where Bryan left off on the Eios from the OST perspective. I was hoping you would create a short brief for the committee so they can be updated on the next steps. Many thanks for your support Ray, Xiang,
IF you could share this update by COB tomorrow Thursday 25 June, I can ensure it is sent to the partners in time.

Best
Sameera



Sameera Suri
Technical Officer, **Global Outbreak Alert and Response Network (GOARN)**
Division of Emergency Response (WRE)
WHO Health Emergencies Programme (WHE)
World Health Organization

20 Avenue Appia, Geneva 1211, Switzerland
Tel. direct: +41 22 7911058
Mobile: (b)(6)
Webex: + 41 22 791 8614
Twitter: @sameera_suri
https://extranet.who.int/goarn/

Important: This email is confidential and may be privileged. If you are not the intended recipient, please delete it and notify us immediately; you should not copy or use it for any purpose, nor disclose its contents to any other person. Thank you.

From: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP)
Sent: Thu, 25 Jun 2020 20:06:54 +0000
To: Armstrong, Gregory (CDC/DDID/NCEZID/OD);Beach, Michael J. (CDC/DDID/NCEZID/DFWED);Ben Hamida, Amen (em-EN) (CDC/DDPHSIS/CGH/DGHP);Bennett, Sarah D. (CDC/DDPHSIS/CGH/GID);Bresee, Joseph (CDC/DDID/NCIRD/ID);Bunga, Sudhir (CDC state.gov);Christie, Athalia (CDC/DDPHSIS/CGH/OD);Clarke, Kevin R. (CDC/DDPHSIS/CGH/DGHP);Dahl, Benjamin A. (CDC/DDPHSIS/CGH/GID);Damon, Inger K. (CDC/DDID/NCEZID/DHCPP);Dawood, Fatimah S. (CDC/DDID/NCIRD/ID);EOC IM;Farag, Noha (CDC/DDPHSIS/CGH/GID);Fitter, David L. (CDC/DDPHSIS/CGH/GID);Fox, LeAnne M. (CDC/DDID/NCIRD/DBD);GDD-OUTBREAK (CDC);Geissler, Aimee L. (CDC/DDID/NCEZID/DFWED);Ghiselli, Margherita (CDC/DDPHSIS/CGH/GID);Greene, Carolyn M. (CDC/DDID/NCIRD/ID);Greiner, Ashley L. (CDC/DDPHSIS/CGH/DGHP);Hagan, Jose Edward (CDC/DDPHSIS/CGH/GID);Hakim, Avi (CDC/DDPHSIS/CGH/DGHT);Helfand, Rita (CDC/DDID/NCEZID/OD);Henao, Olga (CDC/DDPHSIS/CGH/DGHP);Hyde, Terri (CDC/DDPHSIS/CGH/GID);Kaiser, Reinhard (CDC/DDPHSIS/CGH/DGHP);Klena, John D. (CDC/DDID/NCEZID/DHCPP);Knight, Nancy (CDC/DDPHSIS/CGH/DGHP);Kolwaite, Amy R. (CDC/DDID/NCEZID/DHQP);Lessa, Fernanda (CDC/DDID/NCEZID/DHQP);Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM);McCarron, Margaret (Meg) (CDC/DDID/NCIRD/ID);McQuiston, Jennifer H. (CDC/DDID/NCEZID/DHCPP);Mirza, Sara (CDC/DDID/NCIRD/DBD);Montandon, Michele (CDC/DDPHSIS/CGH/DGHT);Montgomery, Joel M. (CDC/DDID/NCEZID/DHCPP);Moolenaar, Ronald L. (CDC/DDPHSIS/CGH/DGHP);Mounts, Anthony (Tony) (CDC/DDPHSIS/CGH/GID);Neatherlin, John C. (CDC/DDPHSIS/CGH/DGHP);Nelson, Lisa J. (CDC/DDPHSIS/CGH/DGHT);Nichol, Stuart T. (CDC/DDID/NCEZID/DHCPP);OConnor, John (CDC/DDID/NCEZID/OD);Park, Benjamin (CDC/DDID/NCEZID/DHQP);Patel, Anita (CDC/DDID/NCIRD/OD);Pesik, Nicki (CDC/DDID/NCEZID/OD);Prue, Christine (CDC/DDID/NCEZID/OD);Raghunathan, Pratima (CDC/DDPHSIS/CGH/OD);Roohi, Shahrokh (CDC/DDID/NCEZID/DGMQ);Rotz, Lisa (CDC/DDID/NCEZID/DGMQ);Rouse, Edward N. (CDC/DDPHSIS/CPR/DEO);Simonds, R. J. (CDC/DDPHSIS/CGH/OD);Smith, Rachel M. (CDC/DDID/NCEZID/DHQP);Soeters, Heidi (CDC/DDPHSIS/CGH/GID);Soke, Gnakub (Norbert) (CDC/DDPHSIS/CGH/GID);Spath (CDC);Williams, Seymour (CDC/DDPHSIS/CGH/DGHP);Zhou, Weigong (CDC/DDID/NCIRD/ID)
Subject: 25 June GOARN Weekly Ops Call Notes/Slides
Attachments: DRC EVD Data Pack 2020 06 25.pptx, WHO AFRO Angola VHF SitRep 2020 06 23.pdf, WHO COVID-19 Situation Update 2020 06 25.pdf, WHO COVID-19 Testing Indicators 2020 06 25.pdf, WHO RCCE Update 2020 06 25.pdf, WHO InfodemiologyConference 2020 06 29.pdf, GOARN Weekly Ops Call Notes 2020 06 25.docx

Attached are the 08:00 EDT/ 14:00 CET GOARN Ops call notes (includes all presentations), DRC EVD Data Pack, and other presentations from today.

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Regards,
Puneet Anantharam



-
Please copy GDDOUTBREAK@CDC.GOV on all outbreak related e-mails.

Global Disease Detection Operations Center (GDDOC)
Division of Global Health Protection
Center for Global Health
Centers for Disease Control and Prevention
1600 Clifton Road NE, Mailstop D68
Atlanta, GA 30333

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GOARN Weekly Ops Call Notes

Date: 25 June 2020

Time: 8:00 EDT/ 14:00 CET

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From: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP)
Sent: Thu, 9 Jan 2020 11:54:33 +0000
To: Dr VAN KERKHOVE, Maria;DIAZ, Janet Victoria
Cc: GREIN, Thomas
Subject: FW: CDC Health Alert Network (HAN) Health Advisory: Outbreak of Pneumonia of Unknown Etiology (PUE) in Wuhan, China

Released yesterday if you haven't seen it.

Best,
Ray

From: Centers for Disease Control and Prevention <no-reply@emailupdates.cdc.gov>
Sent: Wednesday, January 8, 2020 11:48 PM
To: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP) <rca8@cdc.gov>
Subject: CDC Health Alert Network (HAN) Health Advisory: Outbreak of Pneumonia of Unknown Etiology (PUE) in Wuhan, China

Health Alert Network (HAN)

CDC Centers for Disease Control and Prevention
CDC 24/7: Saving Lives, Protecting People™

You are subscribed to the Health Alert Network (HAN) for Centers for Disease Control and Prevention (CDC). This information has recently been updated, and is now available.



Outbreak of

Pneumonia of Unknown Etiology (PUE) in Wuhan, China

The Centers for Disease Control and Prevention (CDC) is closely monitoring a reported cluster of pneumonia of unknown etiology (PUE) with possible epidemiologic links to a large wholesale fish and live animal market in Wuhan City, Hubei Province, China. An outbreak investigation by local officials is ongoing in China; the World Health Organization (WHO) is the lead international public health agency. Currently, there are no known U.S. cases nor have cases been reported in countries other than China. CDC has established an Incident Management Structure to optimize domestic and international coordination if additional public health actions are required.

Learn More »

Connect with emergency.cdc.gov:

Centers for Disease Control and Prevention

1600 Clifton Rd Atlanta, GA 30329 1-800-CDC-INFO (800-232-4636) TTY: 888-232-6348

Questions or Problems | Unsubscribe

From: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP)
Sent: Fri, 10 Jan 2020 08:59:53 +0000
To: Dr VAN KERKHOVE, Maria
Cc: AL-SHORBAJI, Farah;Ryan, Michael (CDC who.int)
Subject: RE: Request

Many thanks. I should have mentioned at the morning meeting that I am presently designated as the "WHO-Liaison" in the CDC IM structure. I will also inform Mike about any important developments through email or other means.

Ray

From: Dr VAN KERKHOVE, Maria <vankerkhovem@who.int>
Sent: Friday, January 10, 2020 9:55 AM
To: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP) <rca8@cdc.gov>
Cc: AL-SHORBAJI, Farah <alshorbajif@who.int>; Ryan, Michael (CDC who.int) <ryanm@who.int>
Subject: Re: Request

Thanks Ray for the heads up about this. Yes, of course. I'm copying in Farah who can help ensure that you are invited to meetings and can forward calendar invites.

On 10 Jan 2020, at 09:45, Arthur, Ray (CDC/DDPHSIS/CGH/DGHP) <rca8@cdc.gov> wrote:

> Maria,
>
> Could you arrange for me to be added to invitations to meetings that you deem appropriate for me to attend. I am getting some info about meetings, but very ad hoc and sometimes in hallway conversations. Presently I am aware of a 3LC call at 11:30 and Blueprint at 2 pm today, but don't know the location of either.
>
> I will continue to pass info from CDC to only you and Tom if is sensitive or restricted to CDC.
>
> Thanks,
> Ray
>
> Get Outlook for iOS

From: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP)
Sent: Sat, 11 Jan 2020 15:02:12 +0000
To: GREIN, Thomas;Dr VAN KERKHOVE, Maria;Pat Drury (druryp@who.int)
Cc: AL-SHORBAJI, Farah
Subject: Update from CDC's nCoV -2019 Response
Attachments: SITREP Novel Coronavirus. 20200110.pdf, Org Chart_20200108.pptx

CLOSE HOLD – Please do not forward this internal CDC document.

The CDC sitrep for 10 January is attached. There is little if any new information about the event, so the sections on "Mission China Actions (USG Staff in China)" and "US CDC HQ Actions" beginning at the bottom of page 2 may be of the greatest interest.

A new CDC Website for the response can be found at https://www.cdc.gov/coronavirus/novel-coronavirus-2019.html

I have also sent the org chart for CDC IMS for nCoV -2019 Response again since Pat had not seen it previously. IM calls will be held on Tues. and Thurs. and I expect the distribution of the SitRep will move to MWF.

Best,
Ray

Ray R. Arthur, PhD
Lead, Global Disease Detection Operations Center
Emergency Response and Recovery Branch

Division of Global Health Protection
Center for Global Health
Centers for Disease Control and Prevention

1600 Clifton Road, NE
MS: H21-9
Atlanta, GA 30329
Phone: 404-639-3855
Mobile: (b)(6)
rarthur@cdc.gov

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Novel Coronavirus 2019
Situational Report
January 10, 2020
Report Day 10 (new information in blue)

Topline Messages

- There is an outbreak of pneumonia possibly associated with a novel (new) coronavirus in Wuhan City, Hubei Province, China.
- On January 9, 2020, the World Health Organization reported health officials in China preliminarily identified a novel (new) coronavirus in a sample taken from one of the patients hospitalized in this outbreak.
- Chinese investigators were able to fully sequence the virus genome
- Some patients were linked to a large local seafood and animal market, suggesting a possible zoonotic origin to the outbreak.
- Official updates are being provided by Wuhan Municipal Health Commission. The last report was 1/5/2019.
    - As of January 5, 2020, there were 59 cases of unexplained pneumonia of suspected viral etiology, some of the cases have been severe.
    - Influenza, avian influenza, adenovirus, SARS-CoV, and MERS have reportedly been ruled out; etiologic investigation is in progress.
    - There is no confirmed human-to-human transmission
    - No deaths have been reported and no health care providers have been reported to be ill.
- On January 6, 2020, CDC issued a level 1 travel notice ("practice usual precautions") for this destination: https://wwwnc.cdc.gov/travel/notices/watch/pneumonia-china.
- On January 7, 2020, CDC's National Center for Immunization and Respiratory Diseases established an Incident Management Structure (2020 Pneumonia of Unknown Etiology Response). The main objectives of the IM are to optimize domestic and international coordination if additional public health actions are required.
- On January 8, 2020, CDC issued a HAN and partner notification to inform clinical providers and public health officials about the outbreak and related guidance.
- Updated guidance will be forthcoming in the coming days.

Outbreak and Response

Status of outbreak (Information source: official update from the Wuhan Municipal Health Commission, available at http://wjw.wuhan.gov.cn/ , a Chinese language site)

- Reports indicate that some of the patients were vendors at the Wuhan South China Seafood City (South China Seafood Wholesale Market) where, in addition to seafood, chickens, bats, marmots, and other wild animals are sold. The market is located next to Hankou train station which serves as a transportation hub at the center of China's domestic train routes and will soon be especially congested around Lunar New Year (January 24-29). The market was closed on January 1 and has not reopened as of January 10.
- The earliest case onset of illness reported was December 12, 2019, and the most recent was December 29, 2019.

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- Local, provincial, and national authorities continue to investigate. Per CDC's contacts in China, China FETP is playing an active role.
- All case patients are being treated at Wuhan medical facilities. 163 close contacts have been traced and are under medical observation. No fever or abnormal symptoms have been reported among contacts. Wuhan authorities have conveyed 7 priority prevention and control measures:
    1. Treat all patients
    2. Isolate patients
    3. Continue case finding and ascertainment and retrospective investigations of possible cases
    4. Contact investigations with active monitoring for symptoms
    5. Close the seafood market for environmental remediation
    6. Carry out epidemiologic investigation
    7. Collaborate with state and provincial authorities to conduct pathogen identification, including doing nucleic acid testing, virus isolation, and culture
- Health experts locally are recommending that citizens pay attention to maintaining indoor air circulation, avoid closed and airless public places and crowded places, and wear masks when necessary. Persons with symptoms are instructed to seek medical attention.

Laboratory testing

- Based on Wuhan official reports, influenza, avian influenza, adenovirus, SARS-CoV, and MERS-CoV have reportedly been ruled out.
- On January 9, 2020, the World Health Organization reported health officials in China preliminarily identified a novel (new) coronavirus in a sample taken from one of the patients hospitalized in this outbreak. Chinese investigators were able to fully sequence the virus genome

Communications and Policy Outreach

- The official update from the Wuhan Municipal Health Commission are available at http://wjw.wuhan.gov.cn/ (Chinese language site). Last update was 1.5.2020.
- WHO released a statement regarding the identification of the virus: https://www.who.int/china/news/detail/09-01-2020-who-statement-regarding-cluster-of-pneumonia-cases-in-wuhan-china
- Hong Kong Centre for Health Protection has included 'Severe Respiratory Disease associated with a Novel Infectious Agent' as a statutorily notifiable infectious disease. (https://www.info.gov.hk/gia/general/202001/07/P2020010700603.htm)

Travelers and travel industry

- Wuhan consulate officers reconfirmed that there is no exit screening at airport.
- Hong Kong, Taiwan, Singapore, the Amur Region of Russia, Thailand, and Vietnam have implemented entry border screening of people traveling from Wuhan.
- Despite some media reports of cases in other countries in travelers from Wuhan, there is no confirmed exposure to the implicated Seafood Market.

Mission China Actions (USG Staff in China)

- US Embassy Health Committee (including HHS, CDC, ESTH, APHIS, PAS, MED, CON) convened to share information and updates. Following posting of CDC's Travel Health Notice, CON posted link on embassy website to direct all inquiries to it (https://china.usembassy-china.org.cn/health-alert-pneumonia-of-unknown-cause-in-china/). CDC's Health Alert Notice was shared with US Embassy Medical Unit.
- Per US Embassy staff in Beijing, Wuhan consulate shared the following observations

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  - Clinics are screening ill patients with a checklist and referring symptomatic cases to the Infectious Disease Hospital (Jinyintan); staff and guards are wearing masks, hair nets and gloves.
  - Health care workers seeing affected patients are wearing gowns, gloves and surgical masks (not N95 respirators)
  - On Jan 9, consulate officers visited Hua Nan Market and three other similar markets in Wuhan. Hua Nan Market remained closed and officers saw nothing out of the ordinary in the other markets. Vendors were evasive on what they thought may have happened to the products for sale at Huanan.
- Per China CDC Weekly editors, a Notes from the Field report on the outbreak is being prepared.
- Reached out to China CDC Director and Director of International Cooperation to follow up on information sharing.

US CDC HQ Actions

- CDC has issued a level 1 travel notice ("practice usual precautions") on January 6, 2020: https://wwwnc.cdc.gov/travel/notices/watch/pneumonia-china.
- CDC/NCIRD established an Incident Management Structure (IMS) on January 7, 2020, (2020 Pneumonia of Unknown Etiology Response). The main objectives of the IMS is to prepare for potential domestic cases and to support the investigation in China or other countries if requested.
- Preparing a team of scientists and responders to deploy to China if requested.
- Completed air travel pattern analysis for passengers arriving in the United States from Wuhan, China.
- Disseminated Health Alert Notice for clinicians, state and local health departments, and other partners.
- Developing updated guidance related to testing and treatment.
- Developing questions and answers to field clinical and other inquiries.
- Sharing information with WHO, global partners, public health partners and PPE supply chain.
- PPE supply chain partners engaged to increase awareness on supply chain status.
  - So far limited reports from industry state no concerns with availability of N95s and KN95s in China and global supply (China approved FFR similar to the American N95).

Media Coverage

- Multiple international media outlets, including Wall Street Journal (https://www.wsj.com/articles/new-virus-discovered-by-chinese-scientists-investigating-pneumonia-outbreak-11578485668) Foreign Policy (https://foreignpolicy.com/2020/01/08/lunar-new-year-hong-kong-pnuemonia-sars-epidemic-wuhan/) and STAT (https://www.statnews.com/2020/01/08/who-says-mysterious-illness-in-china-likely-being-caused-by-new-virus/) have picked up the story.
- A Wikipedia article has been started on the outbreak: https://en.wikipedia.org/wiki/2019%E2%80%9320_China_pneumonia_outbreak

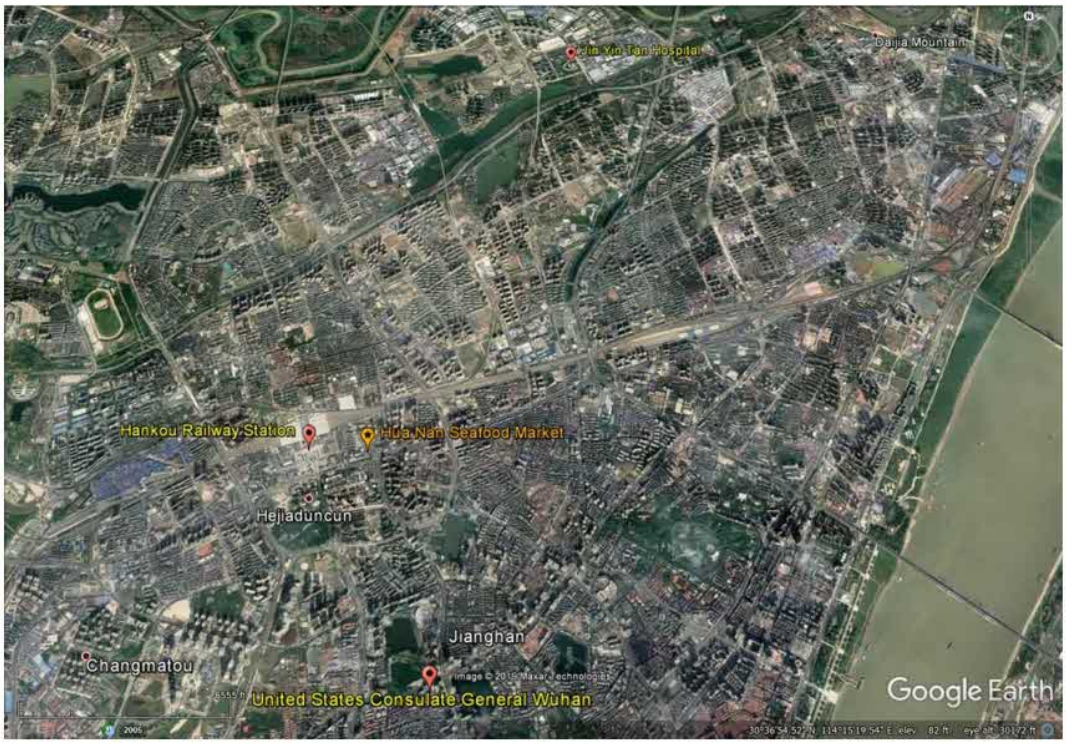
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Maps



- Location of the Hua Nan Seafood Market within Wuhan (武汉市华南海鲜批发市场)



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DRAFT-

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(b)(4)

From: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP)
Sent: Tue, 10 Dec 2019 13:54:26 +0000
To: Dale Fisher;KIM, Bryan
Subject: FW: preparation for SCOM alert and risk assessment working group
Attachments: 7.1 Areas of work - Ray Arthur - SCOM_25_ARA_v1.pptx

Dale, We are thinking along the same lines. I suggested to Bryan that he should start a Excel file to capture these data. See you Thurs. Best, Ray

---

From: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP)
Sent: Wednesday, December 4, 2019 2:18 PM
To: KIM, Bryan <kimbr@who.int>
Subject: RE: preparation for SCOM alert and risk assessment working group

Bryan,

This is indeed unwelcome news!

Please update the edited slide set and add several slides about the proposed EIOS pilot. Is it possible to go back and look at the previous data that is on slides 2-3 and show trends? I don't recall when this data was first captured so you may have to reach out to Alex if you cannot find the previous slide decks. I am not sure that slide 4 is still relevant.

I'll give some thought to other metrics in support of the work Beth Gooding from PHAC is leading and welcome any that you may have.

Thanks.
Ray

From: KIM, Bryan <kimbr@who.int>
Sent: Wednesday, December 4, 2019 5:44 AM
To: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP) <rca8@cdc.gov>
Subject: preparation for SCOM alert and risk assessment working group

Hi Ray,

I think it's time to talk about things we need to prepare for this coming SCOM meeting next week. Should we just start from updating previous SCOM presentation(attached)?

By the way, I'm afraid I have some bad news to share. I just got informed (b)(6) (b)(6) (b)(6) This is unexpected and I'm bit puzzled given recent initiative on GOARN EIOS pilot. (b)(6) (b)(6) We need to think about how to keep this momentum around GOARN EIOS pilot.

Thanks,

Bryan

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From: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP)
Sent: Thu, 21 May 2020 18:40:55 +0000
To: Armstrong, Gregory (CDC/DDID/NCEZID/OD);Beach, Michael J. (CDC/DDID/NCEZID/DFWED);Ben Hamida, Amen (em-EN) (CDC/DDPHSIS/CGH/DGHP);Bennett, Sarah D. (CDC/DDPHSIS/CGH/GID);Bresee, Joseph (CDC/DDID/NCIRD/ID);Bunga, Sudhir (CDC state.gov);Christie, Athalia (CDC/DDPHSIS/CGH/OD);Clarke, Kevin R. (CDC/DDPHSIS/CGH/DGHP);Dahl, Benjamin A. (CDC/DDPHSIS/CGH/GID);Damon, Inger K. (CDC/DDID/NCEZID/DHCPP);Dawood, Fatimah S. (CDC/DDID/NCIRD/ID);EOC IM;Farag, Noha (CDC/DDPHSIS/CGH/GID);Fitter, David L. (CDC/DDPHSIS/CGH/GID);Fox, LeAnne M. (CDC/DDID/NCIRD/DBD);GDD-OUTBREAK (CDC);Geissler, Aimee L. (CDC/DDID/NCEZID/DFWED);Ghiselli, Margherita (CDC/DDPHSIS/CGH/GID);Greene, Carolyn M. (CDC/DDID/NCIRD/ID);Greiner, Ashley L. (CDC/DDPHSIS/CGH/DGHP);Hagan, Jose Edward (CDC/DDPHSIS/CGH/GID);Hakim, Avi (CDC/DDPHSIS/CGH/DGHT);Helfand, Rita (CDC/DDID/NCEZID/OD);Henao, Olga (CDC/DDPHSIS/CGH/DGHP);Hyde, Terri (CDC/DDPHSIS/CGH/GID);Kaiser, Reinhard (CDC/DDPHSIS/CGH/DGHP);Klena, John D. (CDC/DDID/NCEZID/DHCPP);Knight, Nancy (CDC/DDPHSIS/CGH/DGHP);Kolwaite, Amy R. (CDC/DDID/NCEZID/DHQP);Lessa, Fernanda (CDC/DDID/NCEZID/DHQP);Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM);McCarron, Margaret (Meg) (CDC/DDID/NCIRD/ID);McQuiston, Jennifer H. (CDC/DDID/NCEZID/DHCPP);Mirza, Sara (CDC/DDID/NCIRD/DBD);Montandon, Michele (CDC/DDPHSIS/CGH/DGHT);Montgomery, Joel M. (CDC/DDID/NCEZID/DHCPP);Moolenaar, Ronald L. (CDC/DDPHSIS/CGH/DGHP);Mounts, Anthony (Tony) (CDC/DDPHSIS/CGH/GID);Neatherlin, John C. (CDC/DDPHSIS/CGH/DGHP);Nelson, Lisa J. (CDC/DDPHSIS/CGH/DGHT);Nichol, Stuart T. (CDC/DDID/NCEZID/DHCPP);OConnor, John (CDC/DDID/NCEZID/OD);Park, Benjamin (CDC/DDID/NCEZID/DHQP);Patel, Anita (CDC/DDID/NCIRD/OD);Pesik, Nicki (CDC/DDID/NCEZID/OD);Prue, Christine (CDC/DDID/NCEZID/OD);Raghunathan, Pratima (CDC/DDPHSIS/CGH/OD);Roohi, Shahrokh (CDC/DDID/NCEZID/DGMQ);Rotz, Lisa (CDC/DDID/NCEZID/DGMQ);Rouse, Edward N. (CDC/DDPHSIS/CPR/DEO);Simonds, R. J. (CDC/DDPHSIS/CGH/OD);Smith, Rachel M. (CDC/DDID/NCEZID/DHQP);Soeters, Heidi (CDC/DDPHSIS/CGH/GID);Soke, Gnakub (Norbert) (CDC/DDPHSIS/CGH/GID);Spath (CDC);Williams, Seymour (CDC/DDPHSIS/CGH/DGHP);Zhou, Weigong (CDC/DDID/NCIRD/ID)
Subject: FW: 21 May GOARN Weekly Ops Call Notes/Slides
Attachments: GOARN Weekly Ops Call Slides 2020 05 21.pptx, VHF Angola 2020 05 21.pdf, DRC EVD Epi Data Pack 2020 05 21.pptx, Pediatric Analysis 2020 05 19.pdf, RCCE UPDATES 2020 05 21.pdf, GOARN Weekly Ops Call Notes 2020 05 21.docx

Many thanks Puneet.

Ray

From: Anantharam, Puneet (CDC/DDPHSIS/CGH/DGHP) <ogq2@cdc.gov>
Sent: Thursday, May 21, 2020 1:05 PM
To: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP) <rca8@cdc.gov>; GDD-OUTBREAK (CDC) <GDDOUTBREAK@cdc.gov>
Subject: 21 May GOARN Weekly Ops Call Notes/Slides

Hi Ray and team,

Attached are the 08:00 EDT/ 14:00 CET GOARN Ops call notes/slides (includes all presentations), DRC EVD Epi Data Pack, and other presentations from today.

(b)(4); (b)(5)

Regards,
Puneet Anantharam



Please copy GDDOUTBREAK@CDC.GOV on all outbreak related e-mails.

Global Disease Detection Operations Center (GDDOC)
Division of Global Health Protection
Center for Global Health
Centers for Disease Control and Prevention
1600 Clifton Road NE, Mailstop D68
Atlanta, GA 30333

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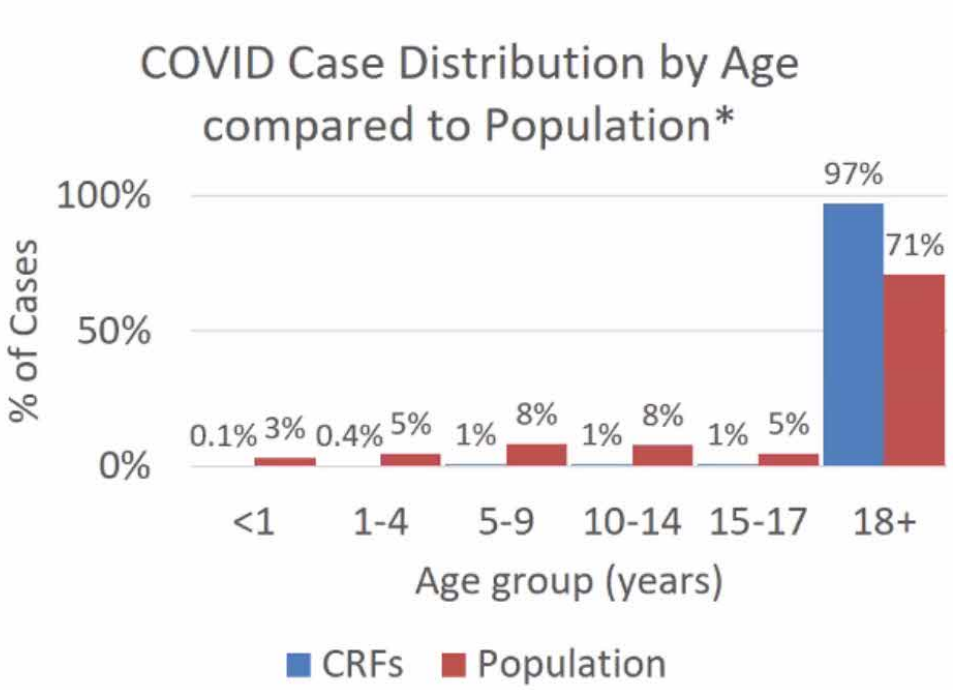
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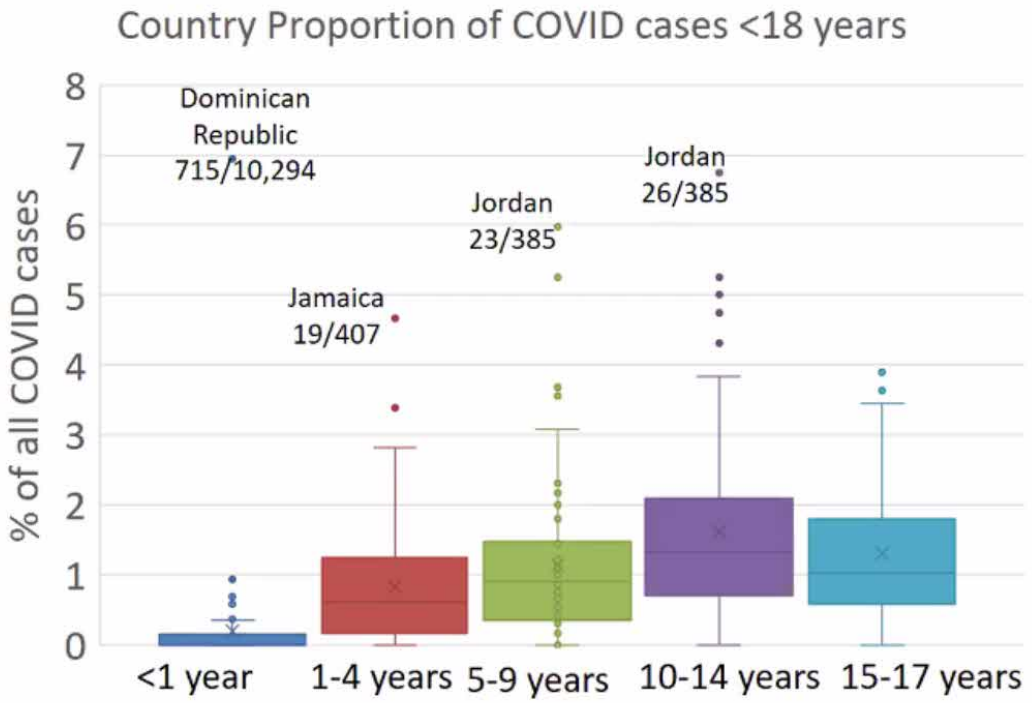
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Children (n=42,252, 3%)) versus Adults (n=1,499,868, 97%)





*Population is the sum of countries reporting at least one pediatric case into the CRF database as of May 15, 2020.
Population data comes from UN population division 2019 revision .

World Health Organization

HEALTH EMERGENCIES programme

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GOARN Weekly Ops Call Notes

Date: 21 May 2020

Time: 8:00 EDT/ 14:00 CET

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From: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP)
Sent: Sun, 12 Jan 2020 08:28:07 +0000
To: GREIN, Thomas;Pat Drury (druryp@who.int);Dr VAN KERKHOVE, Maria
Cc: AL-SHORBAJI, Farah
Subject: CDC SitRep - 11 January 2020
Attachments: SITREP Novel Coronavirus. 20200111.pdf

There is not much new information. The travel advisory was updated to report the nCoV, but there was no change in the level of the advisory.

Please note that these SitReps and marked "For Internal Use Only/Not For Distribution."

Best,
Ray

Ray R. Arthur, PhD
Lead, Global Disease Detection Operations Center
Emergency Response and Recovery Branch

Division of Global Health Protection
Center for Global Health
Centers for Disease Control and Prevention

1600 Clifton Road, NE
MS: H21-9
Atlanta, GA 30329
Phone: 404-639-3855
Mobile: (b)(6)
rarthur@cdc.gov

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Novel Coronavirus (nCoV) 2019
Situational Report
January 11, 2020
Report Day 11 (new information in blue)

Topline Messages

- Chinese health authorities have preliminarily identified a novel (new) coronavirus as the cause of an outbreak of pneumonia in Wuhan City, Hubei Province, China.
- On January 10, 2020, Chinese health officials reported 41 confirmed infections with the new coronavirus; 7 patients had severe illness; and one had died. Cases in the outbreak were identified between December 8, 2019 and January 2, 2020. There have been no new cases since January 3, 2020.
- The one reported death occurred in 61 year-old man with stomach cancer and chronic liver disease who came into the hospital with respiratory failure and severe pneumonia.
- Most patients had some link to a large local seafood and animal market, suggesting a possible zoonotic origin to the outbreak.
    - Influenza, avian influenza, adenovirus, SARS-CoV, and MERS had previously been ruled out.
    - Chinese health authorities have reported no confirmed human-to-human transmission.
- Chinese investigators were sequence the full virus genome. Genome sequence was made available on January 10, 2020.
- On January 7, 2020, CDC's National Center for Immunization and Respiratory Diseases established an Incident Management Structure (2020 Pneumonia of Unknown Etiology Response). The main objectives of the IM are to optimize domestic and international coordination if additional public health actions are required.
- On January 8, 2020, CDC issued a HAN and partner notification to inform clinical providers and public health officials about the outbreak and related guidance.
- Updated guidance will be forthcoming in the coming days.
- On January 10, CDC launched a dedicated webpage for this outbreak where updates and information will be posted as the situation evolves: https://www.cdc.gov/coronavirus/novel-coronavirus-2019.html
- On January 11, 2020, CDC updated its level 1 travel notice ("practice usual precautions") for this destination: https://wwwnc.cdc.gov/travel/notices/watch/novel-coronavirus-china.

Outbreak and Response

Status of outbreak (Information source: official update from the Wuhan Municipal Health Commission, available at http://wjw.wuhan.gov.cn/ , a Chinese language site)

- Reports indicate that most of the patients were linked somehow to the Wuhan South China Seafood City (South China Seafood Wholesale Market) where, in addition to seafood, chickens, bats, marmots, cats and other wild animals are sold. The market was closed on January 1 and has not reopened as of this report date.
- On January 10, 2020, Chinese health officials reported 41 cases of confirmed infection with novel coronavirus 2019; 7 patients had severe illness; and one death. Cases in the outbreak were identified between December 8, 2019 and January 2, 2020. There have been no new cases since January 3, 2020.

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- The one reported death occurred in a 61 year old man with stomach cancer and chronic liver disease who came into the hospital with respiratory failure and severe pneumonia.
- All case patients are being treated at Wuhan medical facilities.
- The earliest case onset of illness reported was December 8, 2019, and the most recent was January 2, 2020.
- Local, provincial, and national authorities continue to investigate. Per CDC's contacts in China, China FETP is playing an active role.
- More than 700 close contacts have been traced and are under medical observation. This includes over 400 medical staff.
- Chinese health authorities have reported no confirmed person-to-person transmission.
- Wuhan authorities have conveyed 7 priority prevention and control measures:
    1. Treat all patients
    2. Isolate patients
    3. Continue case finding and ascertainment and retrospective investigations of possible cases
    4. Contact investigations with active monitoring for symptoms
    5. Close the seafood market for environmental remediation
    6. Carry out epidemiologic investigation
    7. Collaborate with state and provincial authorities to conduct pathogen identification, including doing nucleic acid testing, virus isolation, and culture
- Health experts locally are recommending that citizens pay attention to maintaining indoor air circulation, avoid closed and airless public places and crowded places, and wear masks when necessary. Persons with symptoms are instructed to seek medical attention.

Laboratory testing

- On January 9, 2020, the World Health Organization reported health officials in China preliminarily identified a novel (new) coronavirus in a sample taken from one of the patients hospitalized in this outbreak. Chinese investigators were able to fully sequence the virus genome.
- On of January 10, 2020 sequence data was officially released.
- Based on Wuhan official reports, influenza, avian influenza, adenovirus, SARS-CoV, and MERS-CoV had reportedly been ruled out for all patients.

Communications and Policy Outreach

- The official update from the Wuhan Municipal Health Commission are available at http://wjw.wuhan.gov.cn/ (Chinese language site). Last update was 01/10/2020.
- WHO released a statement regarding the identification of the virus: https://www.who.int/china/news/detail/09-01-2020-who-statement-regarding-cluster-of-pneumonia-cases-in-wuhan-china
- Hong Kong Centre for Health Protection has included 'Severe Respiratory Disease associated with a Novel Infectious Agent' as a statutorily notifiable infectious disease. (https://www.info.gov.hk/gia/general/202001/07/P2020010700603.htm)

Travelers and travel industry

- Wuhan consulate officers reconfirmed that there is no exit screening at airport (Jan 9).
- Hong Kong, Taiwan, Singapore, the Amur Region of Russia, Thailand, and Vietnam have implemented entry border screening of people traveling from Wuhan.
- Despite some media reports of cases in other countries in travelers from Wuhan, there is no confirmed exposure to the implicated Seafood Market.

Mission China Actions (USG Staff in China)

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- US Embassy Health Committee (including HHS, CDC, ESTH, APHIS, PAS, MED, CON) convened to share information and updates. Following posting of CDC's Travel Health Notice, CON posted link on embassy website to direct all inquiries to it (https://china.usembassy-china.org.cn/health-alert-pneumonia-of-unknown-cause-in-china/). CDC's Health Alert Notice was shared with US Embassy Medical Unit.
- Per US Embassy staff in Beijing, Wuhan consulate shared the following observations
    - Clinics are screening ill patients with a checklist and referring symptomatic cases to the Infectious Disease Hospital (Jinyintan); staff and guards are wearing masks, hair nets and gloves.
    - Health care workers seeing affected patients are wearing gowns, gloves and surgical masks (not N95 respirators)
    - On Jan 9, consulate officers visited Hua Nan Market and three other similar markets in Wuhan. Hua Nan Market remained closed and officers saw nothing out of the ordinary in the other markets. Vendors were evasive on what they thought may have happened to the products for sale at Huanan.
- Per China CDC Weekly editors, a Notes from the Field report on the outbreak is being prepared.
- Reached out to China CDC Director and Director of International Cooperation to follow up on information sharing.

US CDC HQ Actions

- CDC/NCIRD established an Incident Management Structure (IMS) on January 7, 2020, (Novel Coronavirus 2019 Response). The main objectives of the IMS is to prepare for potential domestic cases and to support the investigation in China or other countries if requested.
- Preparing a team of scientists and responders to deploy to China if requested.
- Completed air travel pattern analysis for passengers arriving in the United States from Wuhan, China.
- Disseminated Health Alert Notice for clinicians, state and local health departments, and other partners.
- Developing updated guidance related to case identification, infection control, testing, and treatment.
- Developing questions and answers to field clinical and other inquiries.
- Sharing information with WHO, global partners, public health partners and PPE supply chain.
- PPE supply chain partners engaged to increase awareness on supply chain status.
    - So far limited reports from industry state no concerns with availability of N95s and KN95s in China and global supply (China approved FFR similar to the American N95).
- On January 10, CDC launched a dedicated webpage for this outbreak where updates and information will be posted as the situation evolves: https://www.cdc.gov/coronavirus/novel-coronavirus-2019.html
- On January 11, CDC updated its a level 1 travel notice ("practice usual precautions") previously released on January 6, 2020: https://wwwnc.cdc.gov/travel/notices/watch/novel-coronavirus-china. Social media messaging to promote the notice will be shared at CDC Travelers' Health on Facebook and @CDCTravel on Twitter.
- On January 11, information about the outbreak was added to an online feature on Lunar New Year: https://wwwnc.cdc.gov/travel/page/lunar-new-year-2020
- On January 11, CDC shared a "muster" (situational awareness briefing) on the outbreak with Customs and Border Protection (CBP) to inform CBP officers at US ports of entry and provide recommendations for detecting and responding to sick travelers from Wuhan.
- CDC developed messaging for posting on CDC monitors at US airports with the highest volumes of travelers from Wuhan.

Media Coverage

- Multiple international media outlets, including Wall Street Journal (https://www.wsj.com/articles/new-virus-discovered-by-chinese-scientists-investigating-pneumonia-outbreak-11578485668) Foreign Policy

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(https://foreignpolicy.com/2020/01/08/lunar-new-year-hong-kong-pnuemonia-sars-epidemic-wuhan/) and STAT (https://www.statnews.com/2020/01/08/who-says-mysterious-illness-in-china-likely-being-caused-by-new-virus/) have picked up the story.

- A Wikipedia article has been started on the outbreak: https://en.wikipedia.org/wiki/2019%E2%80%9320_China_pneumonia_outbreak

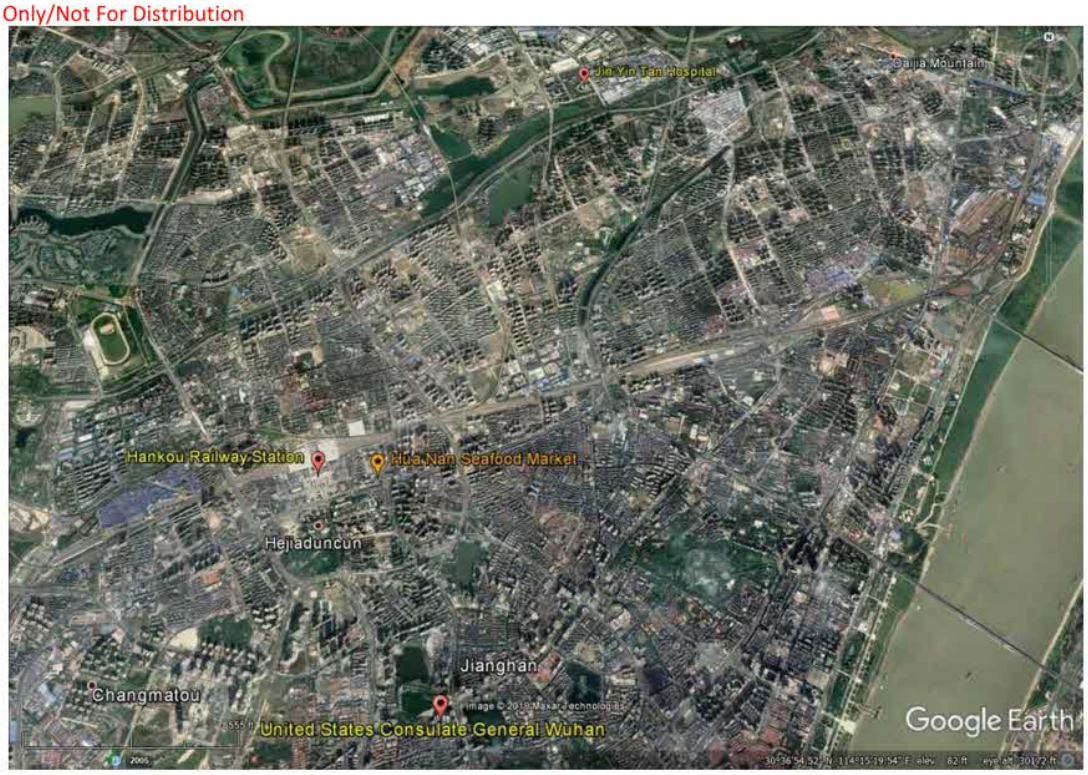
Maps



- Location of the Hua Nan Seafood Market within Wuhan (武汉市华南海鲜批发市场)

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From: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP)
Sent: Thu, 13 Feb 2020 13:44:38 +0000
To: Pat Drury (druryp@who.int);Dale Fisher
Subject: Slides on GOARN deployments

Excellent idea to highlight! This should be part of the weekly updates and can be condensed a bit after this introductory overview.

Ray

Ray R. Arthur, PhD
Lead, Global Disease Detection Operations Center
Emergency Response and Recovery Branch

Division of Global Health Protection
Center for Global Health
Centers for Disease Control and Prevention

1600 Clifton Road, NE
MS: H21-9
Atlanta, GA 30329
Phone: 404-639-3855
Mobile: (b)(6)
rarthur@cdc.gov

From: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP)
Sent: Wed, 19 Feb 2020 12:06:46 +0000
To: Beach, Michael J. (CDC/DDID/NCEZID/DFWED);Bresee, Joseph (CDC/DDID/NCIRD/ID);Bunga, Sudhir (CDC state.gov);Clarke, Kevin R. (CDC/DDPHSIS/CGH/DGHP);Dahl, Benjamin A. (CDC/DDPHSIS/CGH/GID);Damon, Inger K. (CDC/DDID/NCEZID/DHCPP);EOC IM;Fox, LeAnne M. (CDC/DDID/NCIRD/DBD);GDD-OUTBREAK (CDC);Geissler, Aimee L. (CDC/DDID/NCEZID/DFWED);Greene, Carolyn M. (CDC/DDID/NCIRD/ID);Helfand, Rita (CDC/DDID/NCEZID/OD);Henao, Olga (CDC/DDPHSIS/CGH/DGHP);Hyde, Terri (CDC/DDPHSIS/CGH/GID);Kaiser, Reinhard (CDC/DDPHSIS/CGH/DGHP);Klena, John D. (CDC/DDID/NCEZID/DHCPP);Knight, Nancy (CDC/DDPHSIS/CGH/DGHP);Kolwaite, Amy R. (CDC/DDID/NCEZID/DHQP);Lessa, Fernanda (CDC/DDID/NCEZID/DHQP);Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM);McQuiston, Jennifer H. (CDC/DDID/NCEZID/DHCPP);Moolenaar, Ronald L. (CDC/DDPHSIS/CGH/DGHP);Neatherlin, John C. (CDC/DDPHSIS/CGH/DGHP);Nelson, Lisa J. (CDC/DDPHSIS/CGH/DGHT);Nichol, Stuart T. (CDC/DDID/NCEZID/DHCPP);OConnor, John (CDC/DDID/NCEZID/OD);Park, Benjamin (CDC/DDID/NCEZID/DHQP);Patel, Anita (CDC/DDID/NCIRD/OD);Pesik, Nicki (CDC/DDID/NCEZID/OD);Prue, Christine (CDC/DDID/NCEZID/OD);Raghunathan, Pratima (CDC/DDPHSIS/CGH/OD);Roohi, Shahrokh (CDC/DDID/NCEZID/DGMQ);Rotz, Lisa (CDC/DDID/NCEZID/DGMQ);Rouse, Edward N. (CDC/DDPHSIS/CPR/DEO);Simonds, R. J. (CDC/DDPHSIS/CGH/OD);Smith, Rachel M. (CDC/DDID/NCEZID/DHQP);Soke, Gnakub (Norbert) (CDC/DDPHSIS/CGH/GID);Spath (CDC)
Subject: GOARN Weekly Operations Call on Thursday, 20 February 2020 at 08:00 – 09:00 EST

Dear colleagues,

You are kindly invited to the GOARN Weekly Operations Call on **Thursday, 20 February 2020** at **14:00 – 15:00 (Geneva time).**

Agenda:

- EVD, DRC
    - Find daily WHO Situation updates posted on the Knowledge Platform > Operations > Ebola Virus Disease, Democratic Republic of the Congo (North Kivu), 2018 > Updates (on the right side)
- COVID-19
- Other business

Please see below dial-in details:
IMPORTANT: All participants must enter full name and institution name when joining the WebEx call.

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- *Mute your microphone* unless *speaking.*
- *press the hand button in webex if you want to speak.*

GOARN Operational Support Team

Global Outbreak Alert and Response Network (GOARN)
Division of Emergency Response (WRE)
WHO Health Emergencies Programme (WHE)
World Health Organization
Avenue Appia 20
1211 Geneva 27, Switzerland

E-mail: goarn@who.int

NOTE: Please note that this WebEx service allows audio and other information sent during the session to be recorded. By joining this session, you automatically consent to such recordings. If you do not consent to being recorded, discuss your concerns with the host or do not join the session. The recording is used for the purpose of minutes.

Ray R. Arthur, PhD
Lead, Global Disease Detection Operations Center
Emergency Response and Recovery Branch

Division of Global Health Protection
Center for Global Health
Centers for Disease Control and Prevention

1600 Clifton Road, NE
MS: H21-9
Atlanta, GA 30329
Phone: 404-639-3855
Mobile: (b)(6)
rarthur@cdc.gov

From: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP)
Sent: Thu, 20 Feb 2020 19:37:43 +0000
To: Beach, Michael J. (CDC/DDID/NCEZID/DFWED);Bennett, Sarah D. (CDC/DDPHSIS/CGH/GID);Bresee, Joseph (CDC/DDID/NCIRD/ID);Bunga, Sudhir (CDC state.gov);Clarke, Kevin R. (CDC/DDPHSIS/CGH/DGHP);Dahl, Benjamin A. (CDC/DDPHSIS/CGH/GID);Damon, Inger K. (CDC/DDID/NCEZID/DHCPP);EOC IM;Fox, LeAnne M. (CDC/DDID/NCIRD/DBD);GDD-OUTBREAK (CDC);Geissler, Aimee L. (CDC/DDID/NCEZID/DFWED);Greene, Carolyn M. (CDC/DDID/NCIRD/ID);Helfand, Rita (CDC/DDID/NCEZID/OD);Henao, Olga (CDC/DDPHSIS/CGH/DGHP);Hyde, Terri (CDC/DDPHSIS/CGH/GID);Kaiser, Reinhard (CDC/DDPHSIS/CGH/DGHP);Klena, John D. (CDC/DDID/NCEZID/DHCPP);Knight, Nancy (CDC/DDPHSIS/CGH/DGHP);Kolwaite, Amy R. (CDC/DDID/NCEZID/DHQP);Lessa, Fernanda (CDC/DDID/NCEZID/DHQP);Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM);McQuiston, Jennifer H. (CDC/DDID/NCEZID/DHCPP);Moolenaar, Ronald L. (CDC/DDPHSIS/CGH/DGHP);Neatherlin, John C. (CDC/DDPHSIS/CGH/DGHP);Nelson, Lisa J. (CDC/DDPHSIS/CGH/DGHT);Nichol, Stuart T. (CDC/DDID/NCEZID/DHCPP);OConnor, John (CDC/DDID/NCEZID/OD);Park, Benjamin (CDC/DDID/NCEZID/DHQP);Patel, Anita (CDC/DDID/NCIRD/OD);Pesik, Nicki (CDC/DDID/NCEZID/OD);Prue, Christine (CDC/DDID/NCEZID/OD);Raghunathan, Pratima (CDC/DDPHSIS/CGH/OD);Roohi, Shahrokh (CDC/DDID/NCEZID/DGMQ);Rotz, Lisa (CDC/DDID/NCEZID/DGMQ);Rouse, Edward N. (CDC/DDPHSIS/CPR/DEO);Simonds, R. J. (CDC/DDPHSIS/CGH/OD);Smith, Rachel M. (CDC/DDID/NCEZID/DHQP);Soke, Gnakub (Norbert) (CDC/DDPHSIS/CGH/GID);Spath (CDC)
Subject: 20 Feb. GOARN call notes and slides
Attachments: 20Feb_GOARN_MeetingSlides_PA.pptx, 20Feb_GOARN_MeetingNotes_PA.docx

Ray R. Arthur, PhD
Lead, Global Disease Detection Operations Center
Emergency Response and Recovery Branch

Division of Global Health Protection
Center for Global Health
Centers for Disease Control and Prevention

1600 Clifton Road, NE
MS: H21-9
Atlanta, GA 30329
Phone: 404-639-3855
Mobile: (b)(6)
rarthur@cdc.gov

(b)(4)

(b)(4)

(b)(4)

(b)(4)

(b)(4)

GOARN CALL

Date: 20 February 2020
Time: 8:00 EST (14:00 Geneva)

EVD, DRC

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From: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP)
Sent: Wed, 26 Feb 2020 13:37:46 +0000
To: Montandon, Michele (CDC/DDPHSIS/CGH/DGHT);Dawood, Fatimah S. (CDC/DDID/NCIRD/ID);McCarron, Margaret (Meg) (CDC/DDID/NCIRD/ID);Beach, Michael J. (CDC/DDID/NCEZID/DFWED);Bennett, Sarah D. (CDC/DDPHSIS/CGH/GID);Bresee, Joseph (CDC/DDID/NCIRD/ID);Bunga, Sudhir (CDC state.gov);Clarke, Kevin R. (CDC/DDPHSIS/CGH/DGHP);Dahl, Benjamin A. (CDC/DDPHSIS/CGH/GID);Damon, Inger K. (CDC/DDID/NCEZID/DHCPP);EOC IM;Fox, LeAnne M. (CDC/DDID/NCIRD/DBD);GDD-OUTBREAK (CDC);Geissler, Aimee L. (CDC/DDID/NCEZID/DFWED);Greene, Carolyn M. (CDC/DDID/NCIRD/ID);Helfand, Rita (CDC/DDID/NCEZID/OD);Henao, Olga (CDC/DDPHSIS/CGH/DGHP);Hyde, Terri (CDC/DDPHSIS/CGH/GID);Kaiser, Reinhard (CDC/DDPHSIS/CGH/DGHP);Klena, John D. (CDC/DDID/NCEZID/DHCPP);Knight, Nancy (CDC/DDPHSIS/CGH/DGHP);Kolwaite, Amy R. (CDC/DDID/NCEZID/DHQP);Lessa, Fernanda (CDC/DDID/NCEZID/DHQP);Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM);McQuiston, Jennifer H. (CDC/DDID/NCEZID/DHCPP);Moolenaar, Ronald L. (CDC/DDPHSIS/CGH/DGHP);Neatherlin, John C. (CDC/DDPHSIS/CGH/DGHP);Nelson, Lisa J. (CDC/DDPHSIS/CGH/DGHT);Nichol, Stuart T. (CDC/DDID/NCEZID/DHCPP);OConnor, John (CDC/DDID/NCEZID/OD);Park, Benjamin (CDC/DDID/NCEZID/DHQP);Patel, Anita (CDC/DDID/NCIRD/OD);Pesik, Nicki (CDC/DDID/NCEZID/OD);Prue, Christine (CDC/DDID/NCEZID/OD);Raghunathan, Pratima (CDC/DDPHSIS/CGH/OD);Roohi, Shahrokh (CDC/DDID/NCEZID/DGMQ);Rotz, Lisa (CDC/DDID/NCEZID/DGMQ);Rouse, Edward N. (CDC/DDPHSIS/CPR/DEO);Simonds, R. J. (CDC/DDPHSIS/CGH/OD);Smith, Rachel M. (CDC/DDID/NCEZID/DHQP);Soke, Gnakub (Norbert) (CDC/DDPHSIS/CGH/GID);Spath (CDC)
Subject: Weekly GOARN Ops Call - Thurs. 27 Feb. 08:00 EST

Dear colleagues,

You are kindly invited to the GOARN Weekly Operations Call on **Thursday, 27 February 2020** at **14:00 – 15:00 (Geneva time).**

Agenda:

- EVD, DRC
    - Find daily WHO Situation updates posted on the Knowledge Platform > Operations > Ebola Virus Disease, Democratic Republic of the Congo (North Kivu), 2018 > Updates (on the right side)
- COVID-19
- Other business

Please see below dial-in details:
IMPORTANT: All participants must enter full name and institution name when joining the WebEx call.

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- On the audio and video connection pop-up, select audio connection, choose either: *"I will call in"* or *"Call using computer"*.
- *Mute your microphone* unless *speaking.*
- *press the hand button in webex if you want to speak.*

GOARN Operational Support Team

Global Outbreak Alert and Response Network (GOARN)
Division of Emergency Response (WRE)
WHO Health Emergencies Programme (WHE)
World Health Organization
Avenue Appia 20
1211 Geneva 27, Switzerland

E-mail: goarn@who.int

NOTE: Please note that this WebEx service allows audio and other information sent during the session to be recorded. By joining this session, you automatically consent to such recordings. If you do not consent to being recorded, discuss your concerns with the host or do not join the session. The recording is used for the purpose of minutes.

Ray R. Arthur, PhD
Lead, Global Disease Detection Operations Center
Emergency Response and Recovery Branch

Division of Global Health Protection
Center for Global Health
Centers for Disease Control and Prevention

1600 Clifton Road, NE
MS: H21-9
Atlanta, GA 30329
Phone: 404-639-3855
Mobile: (b)(6)
rarthur@cdc.gov

From: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP)
Sent: Thu, 27 Feb 2020 22:36:53 +0000
To: Zhou, Weigong (CDC/DDID/NCIRD/ID);Beach, Michael J. (CDC/DDID/NCEZID/DFWED);Bennett, Sarah D. (CDC/DDPHSIS/CGH/GID);Bresee, Joseph (CDC/DDID/NCIRD/ID);Bunga, Sudhir (CDC state.gov);Clarke, Kevin R. (CDC/DDPHSIS/CGH/DGHP);Dahl, Benjamin A. (CDC/DDPHSIS/CGH/GID);Damon, Inger K. (CDC/DDID/NCEZID/DHCPP);Dawood, Fatimah S. (CDC/DDID/NCIRD/ID);EOC IM;Fox, LeAnne M. (CDC/DDID/NCIRD/DBD);GDD-OUTBREAK (CDC);Geissler, Aimee L. (CDC/DDID/NCEZID/DFWED);Greene, Carolyn M. (CDC/DDID/NCIRD/ID);Helfand, Rita (CDC/DDID/NCEZID/OD);Henao, Olga (CDC/DDPHSIS/CGH/DGHP);Hyde, Terri (CDC/DDPHSIS/CGH/GID);Kaiser, Reinhard (CDC/DDPHSIS/CGH/DGHP);Klena, John D. (CDC/DDID/NCEZID/DHCPP);Knight, Nancy (CDC/DDPHSIS/CGH/DGHP);Kolwaite, Amy R. (CDC/DDID/NCEZID/DHQP);Lessa, Fernanda (CDC/DDID/NCEZID/DHQP);Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM);McCarron, Margaret (Meg) (CDC/DDID/NCIRD/ID);McQuiston, Jennifer H. (CDC/DDID/NCEZID/DHCPP);Montandon, Michele (CDC/DDPHSIS/CGH/DGHT);Moolenaar, Ronald L. (CDC/DDPHSIS/CGH/DGHP);Neatherlin, John C. (CDC/DDPHSIS/CGH/DGHP);Nelson, Lisa J. (CDC/DDPHSIS/CGH/DGHT);Nichol, Stuart T. (CDC/DDID/NCEZID/DHCPP);OConnor, John (CDC/DDID/NCEZID/OD);Park, Benjamin (CDC/DDID/NCEZID/DHQP);Patel, Anita (CDC/DDID/NCIRD/OD);Pesik, Nicki (CDC/DDID/NCEZID/OD);Prue, Christine (CDC/DDID/NCEZID/OD);Raghunathan, Pratima (CDC/DDPHSIS/CGH/OD);Roohi, Shahrokh (CDC/DDID/NCEZID/DGMQ);Rotz, Lisa (CDC/DDID/NCEZID/DGMQ);Rouse, Edward N. (CDC/DDPHSIS/CPR/DEO);Simonds, R. J. (CDC/DDPHSIS/CGH/OD);Smith, Rachel M. (CDC/DDID/NCEZID/DHQP);Soke, Gnakub (Norbert) (CDC/DDPHSIS/CGH/GID);Spath (CDC)
Subject: RE: Notes and Slides from GOARN Ops Call 27 Feb.
Attachments: GOARN Call COVID-19 Epi Slides 2020 02 27.pptx, GOARN Call Meeting Notes 2020 02 27.docx

This the additional COVID-19 slide set and detailed call notes.

Ray

From: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP)
Sent: Thursday, February 27, 2020 9:16 AM
To: Zhou, Weigong (CDC/DDID/NCIRD/ID) <waz6@cdc.gov>; Beach, Michael J. (CDC/DDID/NCEZID/DFWED) <mjb3@cdc.gov>; Bennett, Sarah D. (CDC/DDPHSIS/CGH/GID) <iyk3@cdc.gov>; Bresee, Joseph (CDC/DDID/NCIRD/ID) <jsb6@cdc.gov>; Bunga, Sudhir (CDC state.gov) <BungaS@state.gov>; Clarke, Kevin R. (CDC/DDPHSIS/CGH/DGHP) <kvc6@cdc.gov>; Dahl, Benjamin A. (CDC/DDPHSIS/CGH/GID) <bid5@cdc.gov>; Damon, Inger K. (CDC/DDID/NCEZID/DHCPP) <iad7@cdc.gov>; Dawood, Fatimah S. (CDC/DDID/NCIRD/ID) <hgj0@cdc.gov>; EOC IM <eocim2@cdc.gov>; Fox, LeAnne M. (CDC/DDID/NCIRD/DBD) <lff4@cdc.gov>; GDD-OUTBREAK (CDC) <GDDOUTBREAK@cdc.gov>; Geissler, Aimee L. (CDC/DDID/NCEZID/DFWED) <ihq5@cdc.gov>; Greene, Carolyn M. (CDC/DDID/NCIRD/ID) <cqg4@cdc.gov>; Helfand, Rita (CDC/DDID/NCEZID/OD) <rzh7@cdc.gov>; Henao, Olga (CDC/DDPHSIS/CGH/DGHP) <dot8@cdc.gov>; Hyde, Terri (CDC/DDPHSIS/CGH/GID) <tkh4@cdc.gov>; Kaiser, Reinhard (CDC/DDPHSIS/CGH/DGHP) <rik9@cdc.gov>; Klena, John D. (CDC/DDID/NCEZID/DHCPP) <irc4@cdc.gov>; Knight, Nancy (CDC/DDPHSIS/CGH/DGHP) <fma2@cdc.gov>; Kolwaite, Amy R. (CDC/DDID/NCEZID/DHQP) <izj9@cdc.gov>; Lessa, Fernanda (CDC/DDID/NCEZID/DHQP) <dta3@cdc.gov>; Marston, Barbara J.

(CDC/DDPHSIS/CGH/DPDM) <bxm5@cdc.gov>; McCarron, Margaret (Meg) (CDC/DDID/NCIRD/ID) <dme8@cdc.gov>; McQuiston, Jennifer H. (CDC/DDID/NCEZID/DHCPP) <fzh7@cdc.gov>; Montandon, Michele (CDC/DDPHSIS/CGH/DGHT) <nkf3@cdc.gov>; Moolenaar, Ronald L. (CDC/DDPHSIS/CGH/DGHP) <rlm8@cdc.gov>; Neatherlin, John C. (CDC/DDPHSIS/CGH/DGHP) <jjn6@cdc.gov>; Nelson, Lisa J. (CDC/DDPHSIS/CGH/DGHT) <lbn9@cdc.gov>; Nichol, Stuart T. (CDC/DDID/NCEZID/DHCPP) <stn1@cdc.gov>; OConnor, John (CDC/DDID/NCEZID/OD) <jpo2@cdc.gov>; Park, Benjamin (CDC/DDID/NCEZID/DHQP) <bip5@cdc.gov>; Patel, Anita (CDC/DDID/NCIRD/OD) <bop1@cdc.gov>; Pesik, Nicki (CDC/DDID/NCEZID/OD) <ndp9@cdc.gov>; Prue, Christine (CDC/DDID/NCEZID/OD) <cep9@cdc.gov>; Raghunathan, Pratima (CDC/DDPHSIS/CGH/OD) <pgr4@cdc.gov>; Roohi, Shahrokh (CDC/DDID/NCEZID/DGMQ) <snr2@cdc.gov>; Rotz, Lisa (CDC/DDID/NCEZID/DGMQ) <ler8@cdc.gov>; Rouse, Edward N. (CDC/DDPHSIS/CPR/DEO) <dmz0@cdc.gov>; Simonds, R. J. (CDC/DDPHSIS/CGH/OD) <rxs5@cdc.gov>; Smith, Rachel M. (CDC/DDID/NCEZID/DHQP) <vih9@cdc.gov>; Soke, Gnakub (Norbert) (CDC/DDPHSIS/CGH/GID) <yxo2@cdc.gov>; Spath (CDC) <Spath@cdc.gov>
Subject: Slides from debrief of GOARN mission to China

Overall, Bruce Alyward and Dale Fisher (Natl Univ of Singapore and team member) highly complementary of the China response and did not question the data coming from China.

When asked what concerned them, they listed the following:

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The full mission report should be posted within the next 24-48 hrs.

Ray

Ray R. Arthur, PhD
Lead, Global Disease Detection Operations Center
Emergency Response and Recovery Branch

Division of Global Health Protection
Center for Global Health
Centers for Disease Control and Prevention

1600 Clifton Road, NE
MS: H21-9
Atlanta, GA 30329
Phone: 404-639-3855
Mobile: (b)(6)
rarthur@cdc.gov

(b)(4)

(b)(4)

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GOARN CALL Meeting Notes

Date: 27 February 2020

Time: 8:00 EST (14:00 Geneva)

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From: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP)
Sent: Fri, 1 Nov 2019 10:49:36 +0000
To: Anderson, Mark (CDC/DDPHSIS/CGH/DGHP);Arthur, Ray (CDC/DDPHSIS/CGH/DGHP);Baggett, Kip (CDC/DDPHSIS/CGH/DGHP);Beach, Michael J. (CDC/DDID/NCEZID/DFWED);Blaney, David (CDC/DDID/NCEZID/DHCPP);Brown, Vance R. (CDC/DDPHSIS/CGH/DGHP);Christie, Athalia (CDC/DDPHSIS/CGH/OD);Damon, Inger K. (CDC/DDID/NCEZID/DHCPP);Dietz, Patty (CDC/DDNID/NCBDDD/DHDD);Fitter, David L. (CDC/DDPHSIS/CGH/GID);Fox, Kimberley (CDC/DDID/NCIRD/DBD);GDD-OUTBREAK (CDC);Gilbert, Sherry (CDC/DDNID/NCCDPHP/DPH);Helfand, Rita (CDC/DDID/NCEZID/OD);Hyde, Terri (CDC/DDPHSIS/CGH/GID);Knicely, Kimberly (CDC/DDPHSS/CSELS/OD);Merrill, Rebecca D. (CDC/DDID/NCEZID/DGMQ);Montgomery, Joel M. (CDC/DDID/NCEZID/DHCPP);Neatherlin, John C. (CDC/DDPHSIS/CGH/DGHP);Nichol, Stuart T. (CDC/DDID/NCEZID/DHCPP);OConnor, John (CDC/DDID/NCEZID/OD);Prue, Christine (CDC/DDID/NCEZID/OD);Reynolds, Mary (CDC/DDID/NCEZID/DHCPP);Roohi, Shahrokh (CDC/DDID/NCEZID/DGMQ);Walke, Henry (CDC/DDID/NCEZID/DPEI);Wilson, Katie (CDC/DDID/NCEZID/DHQP);Young, Cathy (CDC/DDID/NCEZID/OD)
Subject: Notes from MM

From the morning meeting…

- Request to CDC to review WHO plan "Getting to Zero." This request has been sent to CDC IM leadership.
- Rob Holden has returned as IM

Ray

Ray R. Arthur, PhD
Team Lead, Global Disease Detection Operations Center
Emergency Response and Recovery Branch

Division of Global Health Protection
Center for Global Health
Centers for Disease Control and Prevention

1600 Clifton Road, NE
Atlanta, GA 30329
Phone: 404-639-3855
Mobile (b)(6)
rarthur@cdc.gov

-

From: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP)
Sent: Tue, 14 Jan 2020 11:18:10 +0000
To: Dr VAN KERKHOVE, Maria;GREIN, Thomas;Pat Drury (druryp@who.int)
Cc: AL-SHORBAJI, Farah
Subject: CDC SitReps - 13 January
Attachments: Thailand NCoV 2019 SITREP 1 -- 1-13-2020_1847.docx, SITREP Novel Coronavirus. 20200113.pdf

The attached CDC sitreps are marked "**For Internal CDC Use Only/Not For Distribution**" so please handle accordingly.

Thanks.
Ray

Ray R. Arthur, PhD
Team Lead, Global Disease Detection Operations Center
Emergency Response and Recovery Branch

Division of Global Health Protection
Center for Global Health
Centers for Disease Control and Prevention

1600 Clifton Road, NE
Atlanta, GA 30329
Phone: 404-639-3855
Mobile (b)(6)
rarthur@cdc.gov

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Wuhan Novel Coronavirus
First reported case in Thailand
Situational Report
January 13, 2020

Current Situation in Thailand

On 13 January 2020 at 1100 ICT, The Ministry of Public Health - Thailand announced its first imported case of reported "laboratory-confirmed" Novel Coronavirus 2019 from Wuhan City, Hubei Province, China. The case was identified by a thermal surveillance scanner and interviewed by port health officers at Suvarnabhumi Airport (BKK) on 8 January. Suvarnabhumi airport is one of four international airports in Thailand screening travelers on direct flights from Wuhan City, China since 3 January 2020 (the other airports are Don Mueang (Bangkok), Phuket and Chiang Mai).

Case detection and clinical presentation: The patient is a 61 year-old female from Wuhan City, Hubei Province, China. On 5 January 2020, she developed fever with chills, sore throat and headache. She went to a local health facility in China and received some medication. On 8 January 2020, she took a direct flight to Thailand from Wuhan, with five family members as part of a tour group of 16. Her measured temperature at the arrival gate was 38.6 degrees. After being interviewed by Quarantine Officers, she was transferred to Bamrasnaradura Infectious Disease Institute (BIDI) for isolation, laboratory investigations, and treatment. The patient complained of a runny nose and sore throat but did not report dyspnea or diarrhea. Her vital signs were normal except for elevated blood pressure. Her physical examination as unremarkable including normal lung sounds. Her complete blood count suggested a viral infection. The chest X-ray results was compatible with pneumonia. The patient is currently still symptomatic and it is reported she will not be transported home until signs/symptoms resolve, and she tests negative.

Exposure History known at this time: The patient reported a history of buying foods from local fresh markets every day, but did not go to the Huanan Seafood Market. Further inquiries about possible exposures and timing have been made (see below under CDC-Thailand activities) and updates will be provided if/when more information becomes available.

Laboratory evaluations: Upper respiratory tract secretions and sputum specimens tested positive for the coronavirus family by conventional nested RT-PCR. Specimens are currently held by the Thailand National Institute of Health (Thai NIH); Chulalongkorn University; and BIDI laboratory. Dr John Barnes of CDC Atlanta was on TDY in Thailand today and assisted the Thai MOPH with interpretation of the reported sequence data, including a suggested re-assembling process. The sequence does not have high coverage. As a result, he applied a consensus threshold of four. When applied, the top GenBank hit was MG772944 with consensus coverage at 29%, and a percent identity of 89.83%. When aligned to the Wuhan virus genome (MN908947), 30% is covered, and the sequence that is present is identical to that genome. The laboratory partners have requested Dr. Barnes to return and look at the sequence in more detail tomorrow.

Contact tracing: A total of 40 high-risk contacts were identified and are being monitored. The contacts include 16 fellow passengers (within two airline rows of the case patient, and flight crew) as well as members of the same tour group. Only one high-risk contact developed respiratory signs/symptoms, and the PCR test of a throat swab yielded a RSV positive result. "Most" others reportedly tested positive for seasonal influenza, as indicated at the press conference

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today.

Incident Management: Dr. Sopon Iamsirithaworn, Director Department of Communicable Diseases, Thailand MOPH (and former CDC-Thailand Co-Director) is currently the Incident Manager. The EOC also receives daily support from CDC staff. The EOC is at level 2 now (3 is the highest level), and if it moves to level 3 the Permanent Secretary would become the Incident Manager.

- The following roles were assigned within the CDC Thailand Office.
    a. John MacArthur (Country Director), response lead and POC
    b. Joshua Mott, Epi lead
    c. Barbara Knust, POE lead
    d. Beth Skaggs, Laboratory lead
    e. Todd Mercer, Sharon Daves, US Embassy and communications leads
    f. Vichan Pawun (CDC Thailand Co-Director) liaison to MOPH

- The following activities were undertaken taken
    a. The US Embassy leadership team including Regional Medical Officer, Public Affairs and Consular (American Citizen Services) was made aware of the case to prepare for any questioning from the Royal Thai Government, press, or American Citizen
    b. CDC Thailand suggested to the MOPH that additional information related to exposure histories and timing should be acquired prior to discharge. The MOPH agreed; however, language barriers are a problem. CDC Thailand is exploring ways to assist including looking for Chinese speaking CDC or US Embassy staff, telephones assistance from CDC China, or utilization of translated questions. Additional questions include, but are not limited to:

        i. Had she been to Hua Nan Market? If not, had she been to any of the other following markets in Wuhan? Qi Yi Men Market, Bai Sha Zhou Market, Hua Zhong Chang Feng Market, or any other market not listed?
        ii. When was she at these markets?
        iii. Had she purchased any live animals or been to any stalls that had live animals when she was at the market? If so, which types of animals?
        iv. Had she been to Jinyintan Hospital (this is the infectious disease hospital where the patients are being treated)? If so, when? Does she have any other contacts such as family members who work there?
        v. Has she been to any other hospitals in Wuhan? If so, which ones and when?
        vi. Has she had any other sick contacts? Had any of those been to Hua Nan Market or any other market in Wuhan?

    c. Prior to the identification of this patient, the MOPH requested assistance from CDC regarding building the diagnostic capability to confirm a Wuhan novel Coronavirus. Given that request, CDC Thailand has now entered a dialogue with the ministry about sharing of clinical specimens and/or virus isolates with CDC which would assist in the development of primers and probes. The ministry was receptive and indicated that CDC send a letter requesting shared specimen to the Department of Disease Control.
        i. A formal letter of request has been drafted, and will be sent from Dr. John MacArthur, Country Director, CDC Thailand to the Director General of the Department of Disease Control.
        ii. CDC Thailand has recommended collecting additional respiratory specimens from the patient until the virus is no longer detectable.
    d. Dr. John Barnes has been providing technical support on sequence data interpretation to the Thai laboratory partners.
    e. CDC Thailand assisted in the development and cleared on an Overnight-Informal (OI) cable to inform Washington of the events
    f. CDC remains in daily contact with the WHO WR for Thailand

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Thailand MOPH Activities

- EOC activated as above
- Preparations are under way for the Chinese New year. Since 3 January, 58 flights and 9,022 passengers were screened, yielding 12 persons under investigation. The number of travelers from China is anticipated to double in the coming weeks.
- The Thai MOPH has also increased surveillance efforts at both public and private hospitals. Anyone with fever and respiratory signs/symptoms within 14 days of travel to Wuhan City are to recommended be isolated and tested. Patient alert posters were seen by CDC staff at an international private hospital today).
- The Thai MOPH has recommended precautions to cover coughs and to avoid contact with persons with respiratory signs and symptoms. They have also recommended against consuming raw foods.
- Hospitals were requested to test and make ready isolation and treatment facilities
- Public risk communications are occurring, the Thai MOPH and the WHO Country Office, have emphasized this to be what they feel is a "low risk" event and that people should continue normal activities without panic.
- A 24 hour hotline to report cases has been established
- To the extent possible, the Thailand response team would like to know more about disease severity and spectrum of illness from Chinese investigations

- Case definition in Thai. (English translated version is in the table below.)

https://ddc.moph.go.th/viralpneumonia/file/pui/pui-e5.pdf

Case definition for Patient under investigation, PUI, for pneumonia from unknown cause		Epidemic areas	Isolation/Quarantine locations	Laboratory tests
Signs and Symptoms	Risk, history			
Scenario 1 At International Points of Entry Fever 38°C or over with one of the following: cough, runny nose, sore throat, shortness of breath, difficulty breathing **Scenario 2 At hospital/clinic** Fever 38°C or over with one of the following: cough,	**Together with at least one of the following** (within 14 days prior to date of onset) 1. Travels from epidemic area 2. Lives in epidemic area 3. Being a close contact to cases 4. Being a close contact with sick animals	Wuhan city in Hubei, China	-Negative pressure room in hospital (government, university, private, local). If there is no capacity on site, refer patient to government hospital via referral system.	**Methods** 1. Respiratory pathogens (33 types) at Bamrasnaradura Infectious Diseases Institute (BIDI) 2. Coronavirus family PCR at National Institute of Health of Thailand, Department of Medical Science And Thai Red Cross Emerging Infectious Disease Health Science Centre **Specimen collection**

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runny nose, sore throat, shortness of breath, difficulty breathing **Scenario 3** Death from acute respiratory infection of unknown etiology.				1. Nasopharyngeal swab and throat swab/ oropharyngeal swab in universal transport media (UTM) 2 tubes, 3 ml each. 2. From lower respiratory tract a. Without intubation sputum in sterile container b. With intubation 2-3 ml of Tracheal suction secretion in sterile container. If no secretion, cut suction tube and keep in UTM. **Remark** Collect plasma or serum (each) on day one and discharged date, at least 3 days apart, to test for other pathogen, in case of no growth result from method 1 and 2.

Media Coverage

- https://www.bloomberg.com/news/articles/2020-01-13/china-pneumonia-outbreak-scaled-back-as-sars-like-virus-found

  https://forum.thaivisa.com/topic/1143046-first-coronavirus-2019-patient-found-in-thailand/
- https://www.nationthailand.com/news/30380478?utm_source=category&utm_medium=internal_referral

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Novel Coronavirus (nCoV) 2019
Situational Report
January 13, 2020
Report Day 13 (new information in blue)

Topline Messages

- On January 10, 2020, Chinese health authorities have preliminarily identified a novel (new) coronavirus as the cause of an outbreak of pneumonia in Wuhan City, Hubei Province, China. To date, a 41 cases of novel coronavirus (nCoV) 2019 have officially been reported; 7 patients had severe illness; one death in a patient with serious underlying medical conditions, and 6 patients had been discharged.
- Cases in this outbreak were identified between December 8, 2019 and January 2, 2020.
- Most patient cases in China had some link to a large local seafood and animal market, suggesting a possible zoonotic origin to the outbreak.
    - Influenza, avian influenza, adenovirus, SARS-CoV, and MERS have been ruled out for all cases.
    - There is no confirmed human-to-human transmission and no reported transmission to health care providers.
- Chinese investigators were able to fully sequence the virus genome. China publicly posted the genetic sequence of the novel coronavirus 2019 (nCoV-2019) on January 12. This will facilitate further diagnosis and development of specific diagnostic tests for this virus in other countries.
- With the release of the sequence, CDC laboratories now have the capacity to detect nCoV-2019 by sequencing virus isolates and comparing the sequences against the genetic sequence released by China.
- CDC has begun work on a diagnostic test that will allow laboratory detection.
- On January 13, 2020 Thailand reported a confirmed case of nCoV in a traveler from Wuhan City to Thailand. This is the first infection with novel coronavirus 2019 detected outside of China.
- On January 6, 2020, CDC released a level 1 travel health notice ("practice usual precautions") for this destination. Updates to this notice were posted on January 11, 2020. https://wwwnc.cdc.gov/travel/notices/watch/novel-coronavirus-china .
- On January 8, 2020, CDC issued a HAN and partner notification to inform clinical providers and public health officials about the outbreak and related guidance. Guidance is being updated this week to inform this evolving outbreak.
- On January 10, CDC launched a dedicated webpage for this outbreak where updates and information will be posted as the situation evolves: https://www.cdc.gov/coronavirus/novel-coronavirus-2019.html. The website was updated on January 11 and subsequently on January 13, 2020.
- On January 11, information about the outbreak was added to an online feature on Lunar New Year: https://wwwnc.cdc.gov/travel/page/lunar-new-year-2020
- On January 11, CDC shared a "muster" (situational awareness briefing) on the outbreak with Customs and Border Protection (CBP) to inform CBP officers at US ports of entry and provide recommendations for detecting and responding to sick travelers from Wuhan.
- CDC developed messaging for posting on CDC monitors at US airports with the highest volumes of travelers from Wuhan.

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- WHO has issued guidance to countries about this new virus. https://www.who.int/health-topics/coronavirus
- CDC airport monitor message has posted at San Francisco (SFO) and New York (JFK) airports.
- DGMQ organized a border health situation update call with California and New York to explore traveler health and response coordination issues. Participants included New York City, and from California, Los Angeles County, San Francisco Department of Public Health, Almeda County and San Mateo County attended.

International Outbreak and Response
Includes USG International Actions

Status of outbreak (Information source: official update from the Wuhan Municipal Health Commission, available at http://wjw.wuhan.gov.cn/ , a Chinese language site)

- Reports indicate that some of the patients were vendors at the Wuhan South China Seafood City (South China Seafood Wholesale Market) where, in addition to seafood, chickens, cats, bats, marmots, and other wild animals are sold. The market was closed on January 1 and has not reopened as of this report date.
- On January 10, 2020, Chinese health authorities have preliminarily identified a novel (new) coronavirus as the cause of an outbreak of pneumonia in Wuhan City, Hubei Province, China. To date, a 41 cases of novel coronavirus (nCoV) 2019 have officially been reported; 7 patients had severe illness; one death in a patient with serious underlying medical conditions, and 6 patients had been discharged.
- Cases in this outbreak were identified between December 8, 2019 and January 2, 2020.
- Over 700 close contacts have been traced and are under medical observation. This includes over 400 medical staff.
- No confirmed person-to-person transmission has been reported. No spread to or among health care workers has been detected.
- Health experts locally are recommending that citizens pay attention to maintaining indoor air circulation, avoid closed and airless public places and crowded places, and wear masks when necessary. Persons with symptoms are instructed to seek medical attention.
- On January 13, 2020, Thailand reported a confirmed case of nCoV in a traveler from Wuhan City to Thailand. This is the first infection with novel coronavirus 2019 detected outside of China. She was identified by Thai officials through traveler screening efforts in the airport on January 8 and hospitalized that day. The person is still in the hospital recovering from this illness.

Laboratory testing

- Chinese investigators were able to fully sequence the virus genome. China publicly posted the genetic sequence of the novel coronavirus 2019 (nCoV-2019) on January 12. This will facilitate further diagnosis and development of specific diagnostic tests for this virus in other countries.
- Based on Wuhan official reports, influenza, avian influenza, adenovirus, SARS-CoV, and MERS-CoV have reportedly been ruled out for all patients.

Communications and Policy Outreach

- WHO latest statement can be found here: https://www.who.int/news-room/detail/13-01-2020-who-statement-on-novel-coronavirus-in-thailand
- US Embassy Health Committee (including HHS, CDC, ESTH, APHIS, PAS, MED, CON) are collaborating to share information and updates.
- Per US Embassy staff in Beijing, Wuhan consulate shared the following observations
    - Clinics are screening ill patients with a checklist and referring symptomatic cases to the Infectious Disease Hospital (Jinyintan); staff and guards are wearing masks, hair nets and gloves.

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- Health care workers seeing affected patients are wearing gowns, gloves and surgical masks (not N95 respirators)
- On Jan 9, consulate officers visited Hua Nan Market and three other similar markets in Wuhan. Hua Nan Market remained closed and officers saw nothing out of the ordinary in the other markets. Vendors were evasive on what they thought may have happened to the products for sale at Huanan.

Travelers and travel industry

- Wuhan consulate officers reconfirmed that there is no exit screening at airport.
- Hong Kong, Taiwan, Singapore, the Amur Region of Russia, Thailand, and Vietnam have implemented entry border screening of people traveling from Wuhan. Given the case in Thailand, other countries are assessing the need for additional screening.
- Through these screening efforts, countries have reported cases of respiratory illness however no cases to-date for nCoV have been detected.

US CDC HQ Actions

- CDC has established an Incident Management Structure (IMS) on January 7, 2020, (Novel Coronavirus 2019 Response). The main objectives of the IMS is to prepare for potential domestic cases and to support the investigation in China, Thailand, or other countries if requested.
- CDC continues monitoring the international situation through CDC country offices, China, Thailand in-country teams, and WHO.
- Preparing a team of scientists and responders to deploy to China if requested.
- Completed air travel pattern analysis for passengers arriving in the United States from Wuhan, China.
- On January 8, 2020, CDC issued a HAN and partner notification to inform clinical providers and public health officials about the outbreak and related guidance. Guidance is being updated this week to inform this evolving outbreak.
- Developing questions and answers to field clinical and other inquiries.
- Sharing information with WHO, global partners, and public health partners.
- CDC initiated partners calls to engage public health partners including APHL, CSTE, ASTHO, NACCHO, and state and local health departments. Over 300 lines attended this week's call.
- PPE supply chain partners engaged to increase awareness on supply chain status.
  - So far limited reports from industry state no concerns with availability of N95s and KN95s (China approved FFR similar to the American N95) in China and global supply.
- On January 6, 2020, CDC released a level 1 travel health notice ("practice usual precautions") for this destination. Updates to this notice were posted on January 11, 2020. https://wwwnc.cdc.gov/travel/notices/watch/novel-coronavirus-china .
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- On January 11, CDC shared a "muster" (situational awareness briefing) on the outbreak with Customs and Border Protection (CBP) to inform CBP officers at US ports of entry and provide recommendations for detecting and responding to sick travelers from Wuhan.
- CDC developed messaging for posting on CDC monitors at US airports with the highest volumes of travelers from Wuhan.
- CDC laboratories currently have the capacity to detect nCoV-2019 by sequencing virus isolates and comparing the sequences against the genetic sequence posted in GenBank. CDC also is using the genetic sequence data

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provided by China to begin work on a test to detect this virus more easily. Currently, testing for this virus must take place at CDC.

Media Coverage

- Multiple international media outlets, including Wall Street Journal (https://www.wsj.com/articles/new-virus-discovered-by-chinese-scientists-investigating-pneumonia-outbreak-11578485668) Foreign Policy (https://foreignpolicy.com/2020/01/08/lunar-new-year-hong-kong-pnuemonia-sars-epidemic-wuhan/) and STAT (https://www.statnews.com/2020/01/08/who-says-mysterious-illness-in-china-likely-being-caused-by-new-virus/) have picked up the story.
- A Wikipedia article has been started on the outbreak: https://en.wikipedia.org/wiki/2019%E2%80%9320_China_pneumonia_outbreak

Maps



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From: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP)
Sent: Wed, 15 Jan 2020 10:16:08 +0000
To: Cohn, Amanda (CDC/DDID/NCIRD/OD);Williams, Seymour (CDC/DDPHSIS/CGH/DGHP);Fox, LeAnne M. (CDC/DDID/NCIRD/DBD);Gregory, Christopher (CDC/DDID/NCEZID/DVBD);Arthur, Ray (CDC/DDPHSIS/CGH/DGHP);Bensyl, Diana M. (CDC/DDPHSIS/CGH/DGHP);Blanton, Jesse (CDC/DDID/NCEZID/DGMQ);Bunga, Sudhir (CDC state.gov);Clarke, Kevin R. (CDC/DDPHSIS/CGH/DGHP);Dahl, Benjamin A. (CDC/DDPHSIS/CGH/GID);Damon, Inger K. (CDC/DDID/NCEZID/DHCPP);EOC IM;Ewetola, Raimi (CDC/DDPHSIS/CGH/DGHT);GDD-OUTBREAK (CDC);Geissler, Aimee L. (CDC/DDID/NCEZID/DFWED);Helfand, Rita (CDC/DDID/NCEZID/OD);Hyde, Terri (CDC/DDPHSIS/CGH/GID);Klena, John D. (CDC/DDID/NCEZID/DHCPP);Kolwaite, Amy R. (CDC/DDID/NCEZID/DHQP);Macdonald, Gene (CDC/CGH/DGHT);McQuiston, Jennifer H. (CDC/DDID/NCEZID/DHCPP);Neatherlin, John C. (CDC/DDPHSIS/CGH/DGHP);Nelson, Lisa J. (CDC/DDPHSIS/CGH/DGHT);Nichol, Stuart T. (CDC/DDID/NCEZID/DHCPP);OConnor, John (CDC/DDID/NCEZID/OD);Park, Benjamin (CDC/DDID/NCEZID/DHQP);Pesik, Nicki (CDC/DDID/NCEZID/OD);Prue, Christine (CDC/DDID/NCEZID/OD);Raghunathan, Pratima (CDC/DDPHSIS/CGH/OD);Roohi, Shahrokh (CDC/DDID/NCEZID/DGMQ);Rotz, Lisa (CDC/DDID/NCEZID/DGMQ);Rouse, Edward N. (CDC/DDPHSIS/CPR/DEO);Smith, Rachel M. (CDC/DDID/NCEZID/DHQP);Spath (CDC);Thomas, Peter (CDC/DDPHSIS/CGH/DGHP);Walke, Henry (CDC/DDID/NCEZID/DPEI)
Subject: FW: GOARN weekly ops call 2020-01-16 at 8 AM EST
Attachments: GOARN weekly ops call 2020-01-16

Dear colleagues,

You are kindly invited to the GOARN Weekly Operations Call on **Thursday, 16 January 2020** at **14:00 – 15:00 (Geneva time).**

Agenda:

- EVD, DRC
    - Find daily WHO Situation updates posted on the Knowledge Platform > Operations > Ebola Virus Disease, Democratic Republic of the Congo (North Kivu), 2018 > Updates (on the right side)
- Novel Coronavirus, China
- Arboviral diseases, Republic of Sudan
- Other business

Please see below dial-in details:
IMPORTANT: All participants must enter full name and institution name when joining the WebEx call.

Click here to join the meeting by Webex
1. Enter your full name and institution.
2. Enter the meeting access code: (b)(6)

You have two options to connect to your audio within Webex:

- On the audio and video connection pop-up, select audio connection, choose either: *"I will call in"* or *"Call using computer"*.
- *Mute your microphone* unless *speaking.*

Click here to join the meeting by phone or if you have chosen "*I will call in*" above. WHO staff can use (b)(6)

GOARN Operational Support Team

Global Outbreak Alert and Response Network (GOARN)
Division of Emergency Response (WRE)
WHO Health Emergencies Programme (WHE)
World Health Organization
Avenue Appia 20
1211 Geneva 27, Switzerland

E-mail: goarn@who.int

NOTE: Please note that this WebEx service allows audio and other information sent during the session to be recorded. By joining this session, you automatically consent to such recordings. If you do not consent to being recorded, discuss your concerns with the host or do not join the session. The recording is used for the purpose of minutes.

From: goarn
Sent: Wed, 15 Jan 2020 10:00:19 +0000
To: SHOC
Cc: ??
Subject: GOARN weekly ops call 2020-01-16

Dear colleagues,

You are kindly invited to the GOARN Weekly Operations Call on **Thursday, 16 January 2020** at **14:00 – 15:00 (Geneva time).**

Agenda:

- EVD, DRC
  - Find daily WHO Situation updates posted on the Knowledge Platform > Operations > Ebola Virus Disease, Democratic Republic of the Congo (North Kivu), 2018 > Updates (on the right side)
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E-mail: goarn@who.int

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From: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP)
Sent: Thu, 16 Jan 2020 23:04:49 +0000
To: GREIN, Thomas;Pat Drury (druryp@who.int);Dr VAN KERKHOVE, Maria
Cc: AL-SHORBAJI, Farah
Subject: Updates from CDC
Attachments: SITREP Novel Coronavirus. 20200115.pdf, 01162019_IM_Update-Final.pptx

The attached documents are **Close Hold Please.** An updated CDC IMS Org Chart is in the slide deck.

Other: The Thai Ministry of Public Health will announce a second case tomorrow AM at 0830 BKK time.

Finally, as you may expect there is considerable interest from Atlanta about the line list. Please let me know if it is possible to share with a few trusted individuals in CDC.

Thanks. As always it's a pleasure to work with friends and colleagues at WHO. I will see you in April.

Best,
Ray

Ray R. Arthur, PhD
Lead, Global Disease Detection Operations Center
Emergency Response and Recovery Branch

Division of Global Health Protection
Center for Global Health
Centers for Disease Control and Prevention

1600 Clifton Road, NE
MS: H21-9
Atlanta, GA 30329
Phone: 404-639-3855
Mobile: (b)(6)
rarthur@cdc.gov

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2019 Novel Coronavirus (2019-nCoV)
Situational Report
January 15, 2020
Report Day 15 (new information in blue)

Topline Messages

- On January 10, Chinese health authorities have preliminarily identified a novel (new) coronavirus (2019-nCoV) as the cause of an outbreak of pneumonia in Wuhan City, Hubei Province, China. Most patient cases in China had some link to a large local seafood and animal market, suggesting a possible zoonotic origin to the outbreak.
    - Most patients have reportedly had exposure to a large seafood and animal market, but some limited human-to-human spread may have occurred. The existing investigation results indicate no clear evidence of human-to-human or nosocomial transmission. The possibility of limited human-to-human transmission cannot be ruled out, but the risk of sustained human-to-human transmission is low.
    - On January 13, Thailand reported a confirmed case of 2019-nCoV in a traveler from Wuhan City to Thailand. This is the first infection with 2019-nCoV detected outside of China.
    - Environmental specimens were collected and tested in the South China Seafood Wholesale Market. As of January 14, the test results found that some samples were positive for 2019-nCoV.
- Chinese investigators were able to fully sequence the virus genome. China publicly posted the genetic sequence of the 2019-nCoV on January 12. CDC is rapidly developing specific diagnostic tests for domestic and global use.
- At this time, the CDC laboratory has the capacity to detect 2019-nCoV by sequencing virus isolates and comparing the sequences against the genetic sequence released by China.
- CDC's Division of Global Migration and Quarantine (DGMQ) continues planning for standup of traveler entry screening in San Francisco, Los Angeles and John F Kennedy airports.
- CDC has been coordinating with other USG partners in laboratory diagnostics, vaccines development, and potential therapeutics
- CDC is providing guidance to CDC Country Offices in South East Asia which are expecting increased travel related to the upcoming Chinese Lunar New Year
- Key communications from CDC include:
    - Level 1 travel notice was updated Jan 14: https://wwwnc.cdc.gov/travel/notices/watch/novel-coronavirus-china
    - Health Alert Network (HAN) on January 8 (updated version will be released on 1/16): https://emergency.cdc.gov/han/han00424.asp
    - Dedicated webpage with regular updates: https://www.cdc.gov/coronavirus/novel-coronavirus-2019.html.

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International Outbreak and Response
Includes USG International Actions

Status of outbreak

(Information source: official update from the Wuhan Municipal Health Commission, available at http://wjw.wuhan.gov.cn/ , a Chinese language site)

- Reports indicate that some of the patients were vendors at the Wuhan South China Seafood City (South China Seafood Wholesale Market) where, in addition to seafood, chickens, cats, bats, marmots, and other wild animals are sold. The market was closed on January 1 and has not reopened as of this report date.
- On January 10, 2020, Chinese health authorities have preliminarily identified a novel (new) coronavirus (2019-nCoV) as the cause of an outbreak of pneumonia in Wuhan City, Hubei Province, China.
- To date, 41 cases of 2019-nCoV have officially been reported; 6 patients had severe illness; one death in a patient with serious underlying medical conditions, and 7 patients had been discharged.
- Cases in this outbreak were identified between December 8, 2019 and January 2, 2020.
- Over 700 close contacts have been traced and are under medical observation. This includes over 400 medical staff.
- The existing investigation results indicate that no clear evidence of human-to-human transmission has been found and the possibility of limited human-to-human transmission cannot be ruled out, but the risk of sustained human-to-human transmission is low.
- Health experts locally are recommending that citizens pay attention to maintaining indoor air circulation, avoid closed and airless public places and crowded places, and wear masks when necessary. Persons with symptoms are instructed to seek medical attention.
- Environmental specimens were collected and tested in the South China Seafood Wholesale Market. As of January 14, the test results found that some samples were positive for 2019-nCoV.
- On January 13, Thailand reported a confirmed case of nCoV in a traveler from Wuhan City to Thailand. This is the first infection with 2019-nCoV detected outside of China. She was identified by Thai officials through traveler screening efforts in the airport on January 8 and hospitalized that day. The patient is reportedly recovered but remains in isolation until testing negative for the coronavirus family by PCR and remains negative for 48 hours.
- CDC China office assisted CDC Thailand office in developing interview questions for the patient with 2019-nCoV infection to identify possible exposures and shared interview responses related to markets with Wuhan consulate officers for further investigation.
- CDC China office met with DHS/CBP at Mission China to discuss CDC and DHS/CBP plans for enhancing screening of passengers with Wuhan travel history at three US airports that is scheduled to start this week. Mission China CBP Attaché informed China's National Immigration Authorities about the plans to start entry screening procedures in the US.

Laboratory testing

- Chinese investigators were able to fully sequence the virus genome. China publicly posted the genetic sequence of the 2019-nCoV on January 12. This will facilitate further diagnosis and development of specific diagnostic tests for this virus in other countries.
- Based on Wuhan official reports, influenza, avian influenza, adenovirus, SARS-CoV, and MERS-CoV have reportedly been ruled out for all patients.

Communications and Policy Outreach

- WHO latest statement can be found here: https://www.who.int/news-room/detail/13-01-2020-who-statement-on-novel-coronavirus-in-thailand

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- US Embassy Health Committee (including HHS, CDC, ESTH, APHIS, PAS, MED, CON) are collaborating to share information and updates.

Travelers and travel industry

- Wuhan consulate officers reconfirmed that there is no exit screening at airport.
- Hong Kong, Taiwan, Singapore, the Amur Region of Russia, Thailand, and Vietnam have implemented entry border screening of people traveling from Wuhan. Given the case in Thailand, other countries are assessing the need for additional screening.

US CDC HQ Actions

- CDC has established an Incident Management Structure (IMS) on January 7, 2020, (2019 Novel Coronavirus Response). The main objectives of the IMS is to prepare for potential domestic cases and to support the investigation in China, Thailand, or other countries if requested.
- CDC continues monitoring the international situation through CDC country offices, China, Thailand in-country teams, and WHO.
- Preparing a team of scientists and responders to deploy to China if requested.
- Completed air travel pattern analysis for passengers arriving in the United States from Wuhan, China.
- On January 8, CDC issued a HAN and partner notification to inform clinical providers and public health officials about the outbreak and related guidance. Guidance is being updated this week to inform this evolving outbreak.
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- Sharing information with WHO, global partners, and public health partners.
- CDC initiated partners calls to engage public health partners including APHL, CSTE, ASTHO, NACCHO, and state and local health departments. Over 300 lines attended this week's call.
- PPE supply chain partners engaged to increase awareness on supply chain status.
    - So far limited reports from industry state no concerns with availability of N95s and KN95s (China approved FFR similar to the American N95) in China and global supply.
- On January 6, CDC released a level 1 travel health notice ("practice usual precautions") for this destination. Updates to this notice were posted on January 11, 2020. https://wwwnc.cdc.gov/travel/notices/watch/novel-coronavirus-china .
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- CDC developed messaging for posting on CDC monitors at US airports with the highest volumes of travelers from Wuhan.
- CDC laboratories currently have the capacity to detect 2019-nCoV by sequencing virus isolates and comparing the sequences against the genetic sequence posted in GenBank. CDC also is using the genetic sequence data provided by China to begin work on a test to detect this virus more easily. Currently, testing for this virus must take place at CDC.
- On January 13, CDC held an update call with ASTHO, NACCHO, CSTE, and APHL constituents to update partners on the current outbreak situation.

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- Health messages posted on the CDC airport monitors for inbound travelers at the following airports: Atlanta, San Francisco, New York, Chicago, Dallas, Newark, Boston, Detroit, Washington D.C. Seattle, Honolulu, Houston and Las Vegas.

Maps



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2019 Novel Coronavirus (nCoV) Response

IM Update

NCIRD Center Level Response- Day 10

January 16, 2020

Building 24, Room 8130 and Skype (b)(6)

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Surveillance Update

- Update from Wuhan PH commission, Jan. 14:No cases among contacts of traveler to ThailandLimited person-person not ruled outWife of market employee case tested positive without reported market exposure No community transmission documentedAmong cases, older patients with comorbidities more likely to progress to severe diseaseEnvironmental specimens collected from market, “some” positive

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Global Migration Taskforce (GMTF) Update

- Information cards for distribution to travelers from Wuhan are cleared and will be printed and shipped within 24 hoursHealth declaration form has been translated to MandarinInbound traveler health message is displayed in English and Mandarin at airports with passengers arriving from WuhanContinuing entry screening planning and engagement with DHS partners Deploying surge staff to SFO, LAX, JFK17 staff on 1/15, 2 native Mandarin speakers on 1/16; and 17 more staff currently in process

Global Migration Taskforce (GMTF) Update
Airport Monitor Message

G





Global Migration Taskforce (GMTF) Update
Traveler Information Card

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Policy Update

- Congressional Phone briefingsAppropriations Staff (4 Corners)Senate HELP Committee StaffHouse Energy and Commerce Committee Staff

Source:

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From: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP)
Sent: Mon, 7 Oct 2019 19:36:12 +0000
To: Dahl, Benjamin A. (CDC/DDPHSIS/CGH/GID);Walke, Henry (CDC/DDID/NCEZID/DPEI);Damon, Inger K. (CDC/DDID/NCEZID/DHCPP)
Subject: RE: Update

Ben, This is great news about (b)(6) Best, Ray

From: Dahl, Benjamin A. (CDC/DDPHSIS/CGH/GID) <bid5@cdc.gov>
Sent: Monday, October 7, 2019 3:29 PM
To: Walke, Henry (CDC/DDID/NCEZID/DPEI) <hfw3@cdc.gov>; Damon, Inger K. (CDC/DDID/NCEZID/DHCPP) <iad7@cdc.gov>; Arthur, Ray (CDC/DDPHSIS/CGH/DGHP) <rca8@cdc.gov>
Subject: Update

Hi all,

Just letting you know that (b)(6). Thanks for caring and being patient.

I have a few work things going on right now but don't have the really big issue looming so am again open to future deployments.

Ben

Please excuse any autocorrect awkwardness

From: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP)
Sent: Tue, 31 Dec 2019 15:04:18 +0000
To: Kerr, Lawrence (HHS/OS/OGA);Damon, Inger K. (CDC/DDID/NCEZID/DHCPP)
Cc: GDD-OUTBREAK (CDC)
Subject: FW: Reports of Pneumonia/SARS in Wuhan China

Still working through email now. GDD Ops Cntr already aware and investigating. Ray

---

From: Gogstad, Eric (CDC/DDID/NCIRD/ID)
Sent: Tuesday, December 31, 2019 10:01:23 AM (UTC-05:00) Eastern Time (US & Canada)
To: Ricks, Philip M. (CDC/DDPHSIS/CGH/DGHP); Parashar, Umesh (CDC/DDID/NCIRD/DVD); Gerber, Susan I. (CDC/DDID/NCIRD/DVD); Jernigan, Daniel B. (CDC/DDID/NCIRD/ID); Fry, Alicia (CDC/DDID/NCIRD/ID); Greene, Carolyn M. (CDC/DDID/NCIRD/ID); Millman, Alexander J. (CDC/DDID/NCIRD/ID)
Cc: GDD-OUTBREAK (CDC)
Subject: RE: Reports of Pneumonia/SARS in Wuhan China

Thanks, Philip. We received a similar report from Alex today. He's enroute back to China and may be able to provide additional info upon arrival. I've added Dan, Alicia, Carolyn, and Alex to the conversation so that they can provide any other info and see any responses from DVD.
Eric

From: Ricks, Philip M. (CDC/DDPHSIS/CGH/DGHP) <hgp4@cdc.gov>
Sent: Tuesday, December 31, 2019 9:37 AM
To: Parashar, Umesh (CDC/DDID/NCIRD/DVD) <uap2@cdc.gov>; Gogstad, Eric (CDC/DDID/NCIRD/ID) <elg5@cdc.gov>; Gerber, Susan I. (CDC/DDID/NCIRD/DVD) <bhx1@cdc.gov>
Cc: GDD-OUTBREAK (CDC) <GDDOUTBREAK@cdc.gov>
Subject: Reports of Pneumonia/SARS in Wuhan China

Dear Colleagues:

There are reports of seven cases of suspected SARS in Wuhan. I'll do some more checking when I get into the office.

Regards,
Philip

Net transmission of China 7 people infected with SARS CDC to verify the authenticity of the information

(Central News Agency reporter Chen Weiwei Taipei 31) online transmission of 7 people in Wuhan, China confirmed SARS; the CDC Deputy Director Luo Yixuan said that this morning has been confirmed by the China Cdc, pending the other side to provide the results of verification. Internet messages are true and false, China has influenza, avian flu epidemic, the people should do a good job of personal hygiene. According to media reports, according to PTT netizens broke the chinese Wuhan University internal

dialogue screenshots, there is news that Wuhan City, South China Fruit seafood market confirmed 7 cases of patients infected with severe acute respiratory syndrome (SARS), is in the emergency department isolation, test reports were tested positive for coronavirus nucleic acid. In addition, Concord Red Cross Hospital confirmed a case of atypical pneumonia combined coronavirus infection, but has not yet seen the Chinese official explanation.
The Deputy Director of the Disease Control Department of the Ministry of Health and Welfare, Luo Yixuan, told the Central News Agency in an interview this morning that he had noticed that PTT had transferred related remarks, that is, please send an e-mail to the Chinese Center for Disease Control. But because the counterpart is only the sending and receiving unit, can not confirm the authenticity of the message, but also need to wait for the Chinese official to verify the results.
Luo Yixuan said that the Wuhan Municipal Health And Health Commission's official website did not find the announcement of the online transmission. If the CDC receives the results of the china's verification, it will issue a message.
Luo also said that the authenticity of the Internet message is mixed, with the current outofta screenshots showing that it appears to mention that the hospital has unexplained pneumonia patients, but the test report is not a standard test method, and SARS is still to be confirmed.
At present, China has influenza and avian flu epidemic, Luo said, advised people to pay attention to personal hygiene in China, wear masks, wash their hands frequently, avoid the crowded places and medical institutions. (Edited: Ye Weiwei) 1081231

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RED: UNDIAGNOSED PNEUMONIA - CHINA (HUBEI), REQUEST FOR INFORMATION
****

A ProMED-mail post
<http://www.promedmail.org>
ProMED-mail is a program of the
International Society for Infectious Diseases <http://www.isid.org>

[1]
[1]
Date: 30 Dec 2019
Source: Finance Sina [machine translation] <https://finance.sina.cn/2019-12-31/detail-iihnzahk1074832.d.html?from=wap>

Wuhan unexplained pneumonia has been isolated test results will be announced [as soon as available]

On the evening of [30 Dec 2019], an "urgent notice on the treatment of pneumonia of unknown cause" was issued, which was widely distributed on the Internet by the red-headed document of the Medical Administration and Medical Administration of Wuhan Municipal Health Committee.
On the morning of [31 Dec 2019], China Business News reporter called the official hotline of Wuhan Municipal Health and Health Committee
12320 and learned that the content of the document is true.
12320 hotline staff said that what type of pneumonia of unknown cause appeared in Wuhan this time remains to be determined.
According to the above documents, according to the urgent notice from the superior, some medical institutions in Wuhan have successively appeared patients with pneumonia of unknown cause. All

medical institutions should strengthen the management of outpatient and emergency departments, strictly implement the first-in-patient responsibility system, and find that patients with unknown cause of pneumonia actively adjust the power to treat them on the spot, and there should be no refusal to be pushed or pushed.
he document emphasizes that medical institutions need to strengthen multidisciplinary professional forces such as respiratory, infectious diseases, and intensive medicine in a targeted manner, open green channels, make effective connections between outpatient and emergency departments, and improve emergency plans for medical treatment.
Another piece of emergency notification, entitled "City Health and Health Commission's Report on Reporting the Treatment of Unknown Cause of Pneumonia" is also true. According to this document, according to the urgent notice from the superior, the South China Seafood Market in our city has seen patients with pneumonia of unknown cause one after another.
The so-called unexplained pneumonia cases refer to the following 4 cases of pneumonia that cannot be diagnosed at the same time: fever (greater than or equal to 38C); imaging characteristics of pneumonia or acute respiratory distress syndrome; reduced or normal white blood cells in the early stages of onset The number of lymphocytes was reduced. After treatment with antibiotics for 3 to 5 days, the condition did not improve significantly.

It is understood that the 1st patient with unexplained pneumonia that appeared in Wuhan this time came from Wuhan South China Seafood Market.
12320 hotline staff said that the Wuhan CDC went to the treatment hospital to collect patient samples as soon as possible, specifically what kind of virus is still waiting for the final test results.
Patients with unexplained pneumonia have done a good job of isolation and treatment, which does not prevent other patients from going to the medical institution for medical treatment. Wuhan has the best virus research institution in the country, and the virus detection results will be released to the public as soon as they are found.
--
Communicated by:
ProMED-mail
<promed@promedmail.org>

Wuhan Pneumonia Involved Seafood Market Is Not Isolated Officials Say No One Is Passing On

There have been several cases of unexplained pneumonia in Wuhan, Hubei Province. The National Health and Reform Commission said the group of experts arrived in Wuhan on the morning of the 31st (Tuesday) and is carrying out relevant testing and verification work.
According to official sources, the majority of cases of pneumonia in Wuhan Jianghan District, South China Seafood Wholesale Market (also known as "South China Seafood City") operators. Domestic media reported that the seafood market is still operating normally, not isolated.
Wuhan Health and Health Commission reported that so far the investigation has not found a clear human-to-human phenomenon, no medical personnel infected. At present, the cause of the pathogen detection and the cause of infection is under investigation.
As of this morning, the wholesale seafood market in South China was still open and not quarantined, the local media reported. A shop staff member said that in the morning saw people dressed in white disinfection work outside the shop, "I think it should not be SARS, sars," we have long since closed." 」

The report also quoted the manager of another shop in the South China seafood wholesale market as saying that the market is divided into two areas, most of which are now open normal. He didn't get notice of the closure.

Municipal Health and Health Commission: All cases have been treated in isolation

Wuhan Municipal Health and Health Commission issued a briefing at noon today, said that they received the report, has immediately carried out the city's medical and health institutions associated with the South China Seafood City case search and retrospective investigation. At present, all cases have been isolated treatment, close contact tracing and medical observation is under way, the South China Seafood City hygiene investigation and environmental health treatment is under way.

The report refers to the Wuhan City organization Tongji Hospital, provincial CDC, Chinese Academy of Sciences Wuhan Virus Institute, Wuhan Infectious DiseaseS Hospital and Wuhan CDC and other units of clinical medicine, epidemiology, virology experts to consult, experts from the disease, treatment, epidemiological investigation, Laboratory preliminary testing and other aspects of the situation analysis that the above case is viral pneumonia. So far, the investigation has not found significant human-to-human transmission, no medical personnel infected. At present, the cause of the pathogen detection and the cause of infection is under investigation.

Wuhan hospital people urge citizens not to panic

Earlier reported that official sources said that since December, Wuhan City continued to carry out influenza and related diseasesurveing, found 27 cases of viral pneumonia, all diagnosed as viral pneumonia / lung infection. Of the 27 cases, 7 are in critical condition, the rest are manageable, and 2 cases are expected to be discharged from the hospital in the near future. The investigation found that the majority of the cases of pneumonia in South China Seafood City operators.

Wuhan, a number of hospital sources said that the cause is not yet clear, can not be determined is the Internet rumors of the "sands" virus, other severe pneumonia is more likely. And even the "Shas" virus, before there is a mature system of prevention and treatment, the public do not need to panic.

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From: eios-info@who.int <eios-info@who.int>
Sent: Tuesday, December 31, 2019 8:30 AM
To: eios-info@who.int
Subject: New Comment on Article on EIOS

EIOS
Epidemic Intelligence from Open Source

Walsh, Mandy at 13:29 UTC **New Comment on Article for Wuhan is now a number of unexplained pneumonia, people worry about SARS re-emergence Of the National Health and Health Commission experts arrived in Wuhan test verification (EIOS)**

Lots of media pick up, no aetiology as yet

From: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP)
Sent: Thu, 27 Feb 2020 14:15:50 +0000
To: Zhou, Weigong (CDC/DDID/NCIRD/ID);Beach, Michael J. (CDC/DDID/NCEZID/DFWED);Bennett, Sarah D. (CDC/DDPHSIS/CGH/GID);Bresee, Joseph (CDC/DDID/NCIRD/ID);Bunga, Sudhir (CDC state.gov);Clarke, Kevin R. (CDC/DDPHSIS/CGH/DGHP);Dahl, Benjamin A. (CDC/DDPHSIS/CGH/GID);Damon, Inger K. (CDC/DDID/NCEZID/DHCPP);Dawood, Fatimah S. (CDC/DDID/NCIRD/ID);EOC IM;Fox, LeAnne M. (CDC/DDID/NCIRD/DBD);GDD-OUTBREAK (CDC);Geissler, Aimee L. (CDC/DDID/NCEZID/DFWED);Greene, Carolyn M. (CDC/DDID/NCIRD/ID);Helfand, Rita (CDC/DDID/NCEZID/OD);Henao, Olga (CDC/DDPHSIS/CGH/DGHP);Hyde, Terri (CDC/DDPHSIS/CGH/GID);Kaiser, Reinhard (CDC/DDPHSIS/CGH/DGHP);Klena, John D. (CDC/DDID/NCEZID/DHCPP);Knight, Nancy (CDC/DDPHSIS/CGH/DGHP);Kolwaite, Amy R. (CDC/DDID/NCEZID/DHQP);Lessa, Fernanda (CDC/DDID/NCEZID/DHQP);Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM);McCarron, Margaret (Meg) (CDC/DDID/NCIRD/ID);McQuiston, Jennifer H. (CDC/DDID/NCEZID/DHCPP);Montandon, Michele (CDC/DDPHSIS/CGH/DGHT);Moolenaar, Ronald L. (CDC/DDPHSIS/CGH/DGHP);Neatherlin, John C. (CDC/DDPHSIS/CGH/DGHP);Nelson, Lisa J. (CDC/DDPHSIS/CGH/DGHT);Nichol, Stuart T. (CDC/DDID/NCEZID/DHCPP);OConnor, John (CDC/DDID/NCEZID/OD);Park, Benjamin (CDC/DDID/NCEZID/DHQP);Patel, Anita (CDC/DDID/NCIRD/OD);Pesik, Nicki (CDC/DDID/NCEZID/OD);Prue, Christine (CDC/DDID/NCEZID/OD);Raghunathan, Pratima (CDC/DDPHSIS/CGH/OD);Roohi, Shahrokh (CDC/DDID/NCEZID/DGMQ);Rotz, Lisa (CDC/DDID/NCEZID/DGMQ);Rouse, Edward N. (CDC/DDPHSIS/CPR/DEO);Simonds, R. J. (CDC/DDPHSIS/CGH/OD);Smith, Rachel M. (CDC/DDID/NCEZID/DHQP);Soke, Gnakub (Norbert) (CDC/DDPHSIS/CGH/GID);Spath (CDC)
Subject: Slides from debrief of GOARN mission to China
Attachments: Alyward debrief of GOARN mission to China .docx

Overall, Bruce Alyward and Dale Fisher (Natl Univ of Singapore and team member) highly complementary of the China response and did not question the data coming from China.

When asked what concerned them, they listed the following:

(b)(5)

The full mission report should be posted within the next 24-48 hrs.

Ray

Ray R. Arthur, PhD
Lead, Global Disease Detection Operations Center
Emergency Response and Recovery Branch

Division of Global Health Protection
Center for Global Health

Centers for Disease Control and Prevention

1600 Clifton Road, NE
MS: H21-9
Atlanta, GA 30329
Phone: 404-639-3855
Mobile: (b)(6)
rarthur@cdc.gov

(b)(4)

(b)(4)

(b)(4)

(b)(4)

(b)(4)

(b)(4)

From: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP)
Sent: Sun, 1 Mar 2020 22:51:15 +0000
To: Dale Fisher
Cc: Bennett, Sarah D. (CDC/DDPHSIS/CGH/GID)
Subject: Singapore DORSCON
Attachments: Singapore DORSCON.docx

Dale,

Is this system used widely? If I recall, Singapore is at orange.

As you may have seen, the number of affected US States is now increasing and the most recent ones are associated with travel from Europe, but that are also unlinked chains of transmission on the west coast in California and Washington.

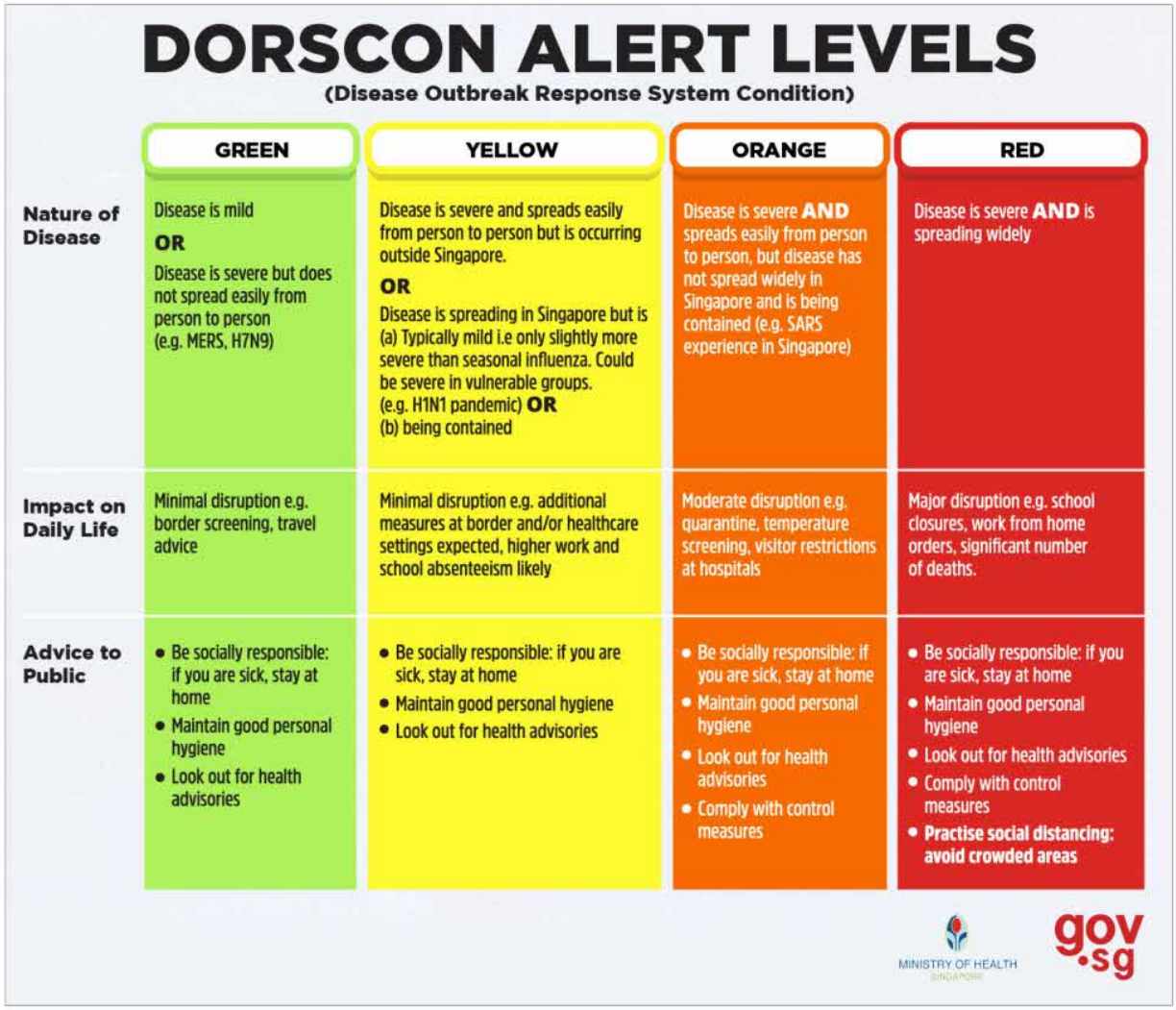
Best,
Ray

Ray R. Arthur, PhD
Lead, Global Disease Detection Operations Center
Emergency Response and Recovery Branch

Division of Global Health Protection
Center for Global Health
Centers for Disease Control and Prevention

1600 Clifton Road, NE
MS: H21-9
Atlanta, GA 30329
Phone: 404-639-3855
Mobile: (b)(6)
rarthur@cdc.gov

Singapore Disease Outbreak Reporting System Condition (DORSCON)



From: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP)
Sent: Mon, 2 Mar 2020 18:00:46 +0000
To: Dale Fisher
Cc: Bennett, Sarah D. (CDC/DDPHSIS/CGH/GID)
Subject: RE: Singapore DORSCON

Thanks Dale. The International Task Force in the CDC COVID-19 IMS has been monitoring the global situation and reporting to leadership. Knowing the current assessment by Singapore on this scale provides insight into the level of concern about transmission and disease impact, something the US cannot accurately gauge solely from case counts.

Best,
Ray

From: Dale Fisher <mdcfda@nus.edu.sg>
Sent: Sunday, March 1, 2020 8:19 PM
To: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP) <rca8@cdc.gov>
Cc: Bennett, Sarah D. (CDC/DDPHSIS/CGH/GID) <iyk3@cdc.gov>
Subject: RE: Singapore DORSCON

Yes but its more of a spectrum…..they now call us light orange…..personally I don't love it but it helps communicate the efforts.

I think it would be less useful in a big country which would be at different stages

Why do you ask?

From: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP) <rca8@cdc.gov>
Sent: Monday, 2 March 2020 6:51 AM
To: Dale Fisher <mdcfda@nus.edu.sg>
Cc: Bennett, Sarah D. (CDC/DDPHSIS/CGH/GID) <iyk3@cdc.gov>
Subject: Singapore DORSCON

- External Email -

Dale,

Is this system used widely? If I recall, Singapore is at orange.

As you may have seen, the number of affected US States is now increasing and the most recent ones are associated with travel from Europe, but that are also unlinked chains of transmission on the west coast in California and Washington.

Best,
Ray

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Lead, Global Disease Detection Operations Center
Emergency Response and Recovery Branch

Division of Global Health Protection
Center for Global Health
Centers for Disease Control and Prevention

1600 Clifton Road, NE
MS: H21-9
Atlanta, GA 30329
Phone: 404-639-3855
Mobile: (b)(6)
rarthur@cdc.gov

Important: This email is confidential and may be privileged. If you are not the intended recipient, please delete it and notify us immediately; you should not copy or use it for any purpose, nor disclose its contents to any other person. Thank you.

From: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP)
Sent: Wed, 4 Mar 2020 13:54:37 +0000
To: Beach, Michael J. (CDC/DDID/NCEZID/DFWED);Bennett, Sarah D. (CDC/DDPHSIS/CGH/GID);Bresee, Joseph (CDC/DDID/NCIRD/ID);Bunga, Sudhir (CDC state.gov);Clarke, Kevin R. (CDC/DDPHSIS/CGH/DGHP);Dahl, Benjamin A. (CDC/DDPHSIS/CGH/GID);Damon, Inger K. (CDC/DDID/NCEZID/DHCPP);Dawood, Fatimah S. (CDC/DDID/NCIRD/ID);EOC IM;Fox, LeAnne M. (CDC/DDID/NCIRD/DBD);GDD-OUTBREAK (CDC);Geissler, Aimee L. (CDC/DDID/NCEZID/DFWED);Greene, Carolyn M. (CDC/DDID/NCIRD/ID);Helfand, Rita (CDC/DDID/NCEZID/OD);Henao, Olga (CDC/DDPHSIS/CGH/DGHP);Hyde, Terri (CDC/DDPHSIS/CGH/GID);Kaiser, Reinhard (CDC/DDPHSIS/CGH/DGHP);Klena, John D. (CDC/DDID/NCEZID/DHCPP);Knight, Nancy (CDC/DDPHSIS/CGH/DGHP);Kolwaite, Amy R. (CDC/DDID/NCEZID/DHQP);Lessa, Fernanda (CDC/DDID/NCEZID/DHQP);Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM);McCarron, Margaret (Meg) (CDC/DDID/NCIRD/ID);McQuiston, Jennifer H. (CDC/DDID/NCEZID/DHCPP);Montandon, Michele (CDC/DDPHSIS/CGH/DGHT);Moolenaar, Ronald L. (CDC/DDPHSIS/CGH/DGHP);Neatherlin, John C. (CDC/DDPHSIS/CGH/DGHP);Nelson, Lisa J. (CDC/DDPHSIS/CGH/DGHT);Nichol, Stuart T. (CDC/DDID/NCEZID/DHCPP);OConnor, John (CDC/DDID/NCEZID/OD);Park, Benjamin (CDC/DDID/NCEZID/DHQP);Patel, Anita (CDC/DDID/NCIRD/OD);Pesik, Nicki (CDC/DDID/NCEZID/OD);Prue, Christine (CDC/DDID/NCEZID/OD);Raghunathan, Pratima (CDC/DDPHSIS/CGH/OD);Roohi, Shahrokh (CDC/DDID/NCEZID/DGMQ);Rotz, Lisa (CDC/DDID/NCEZID/DGMQ);Rouse, Edward N. (CDC/DDPHSIS/CPR/DEO);Simonds, R. J. (CDC/DDPHSIS/CGH/OD);Smith, Rachel M. (CDC/DDID/NCEZID/DHQP);Soke, Gnakub (Norbert) (CDC/DDPHSIS/CGH/GID);Spath (CDC);Armstrong, Gregory (CDC/DDID/NCEZID/OD)
Subject: GOARN Ops call Thurs. 5 March 08:00 EST

Dear colleagues,

You are kindly invited to the GOARN Weekly Operations Call on **Thursday, 05 March 2020** at **14:00 – 15:00 (Geneva time).**

Agenda:

- EVD, DRC
    - Find daily WHO Situation updates posted on the Knowledge Platform > Operations > Ebola Virus Disease, Democratic Republic of the Congo (North Kivu), 2018 > Updates (on the right side)
- COVID-19 (agenda points within to be confirmed)
- Other business

Please see below dial-in details:
IMPORTANT: All participants must enter full name and institution name when joining the WebEx call.

Click here to join the meeting by Webex
1. Enter your full name and institution.
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IMPORTANT:
You have two options to connect to your audio within Webex:

- On the audio and video connection pop-up, select audio connection, choose either: *"I will call in"* or *"Call using computer"*.
- *Mute your microphone* unless *speaking.*
- *press the hand button in webex if you want to speak.*

GOARN Operational Support Team

Global Outbreak Alert and Response Network (GOARN)
Division of Emergency Response (WRE)
WHO Health Emergencies Programme (WHE)
World Health Organization
Avenue Appia 20
1211 Geneva 27, Switzerland

E-mail: goarn@who.int

NOTE: Please note that this WebEx service allows audio and other information sent during the session to be recorded. By joining this session, you automatically consent to such recordings. If you do not consent to being recorded, discuss your concerns with the host or do not join the session. The recording is used for the purpose of minutes.

Ray R. Arthur, PhD
Lead, Global Disease Detection Operations Center
Emergency Response and Recovery Branch

Division of Global Health Protection
Center for Global Health
Centers for Disease Control and Prevention

1600 Clifton Road, NE
MS: H21-9
Atlanta, GA 30329
Phone: 404-639-3855
Mobile: (b)(6)
rarthur@cdc.gov

From: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP)
Sent: Thu, 12 Mar 2020 21:21:10 +0000
To: Armstrong, Gregory (CDC/DDID/NCEZID/OD);Beach, Michael J. (CDC/DDID/NCEZID/DFWED);Bennett, Sarah D. (CDC/DDPHSIS/CGH/GID);Bresee, Joseph (CDC/DDID/NCIRD/ID);Bunga, Sudhir (CDC state.gov);Clarke, Kevin R. (CDC/DDPHSIS/CGH/DGHP);Dahl, Benjamin A. (CDC/DDPHSIS/CGH/GID);Damon, Inger K. (CDC/DDID/NCEZID/DHCPP);Dawood, Fatimah S. (CDC/DDID/NCIRD/ID);EOC IM;Fox, LeAnne M. (CDC/DDID/NCIRD/DBD);GDD-OUTBREAK (CDC);Geissler, Aimee L. (CDC/DDID/NCEZID/DFWED);Greene, Carolyn M. (CDC/DDID/NCIRD/ID);Helfand, Rita (CDC/DDID/NCEZID/OD);Henao, Olga (CDC/DDPHSIS/CGH/DGHP);Hyde, Terri (CDC/DDPHSIS/CGH/GID);Kaiser, Reinhard (CDC/DDPHSIS/CGH/DGHP);Klena, John D. (CDC/DDID/NCEZID/DHCPP);Knight, Nancy (CDC/DDPHSIS/CGH/DGHP);Kolwaite, Amy R. (CDC/DDID/NCEZID/DHQP);Lessa, Fernanda (CDC/DDID/NCEZID/DHQP);Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM);McCarron, Margaret (Meg) (CDC/DDID/NCIRD/ID);McQuiston, Jennifer H. (CDC/DDID/NCEZID/DHCPP);Montandon, Michele (CDC/DDPHSIS/CGH/DGHT);Moolenaar, Ronald L. (CDC/DDPHSIS/CGH/DGHP);Neatherlin, John C. (CDC/DDPHSIS/CGH/DGHP);Nelson, Lisa J. (CDC/DDPHSIS/CGH/DGHT);Nichol, Stuart T. (CDC/DDID/NCEZID/DHCPP);OConnor, John (CDC/DDID/NCEZID/OD);Park, Benjamin (CDC/DDID/NCEZID/DHQP);Patel, Anita (CDC/DDID/NCIRD/OD);Pesik, Nicki (CDC/DDID/NCEZID/OD);Prue, Christine (CDC/DDID/NCEZID/OD);Raghunathan, Pratima (CDC/DDPHSIS/CGH/OD);Roohi, Shahrokh (CDC/DDID/NCEZID/DGMQ);Rotz, Lisa (CDC/DDID/NCEZID/DGMQ);Rouse, Edward N. (CDC/DDPHSIS/CPR/DEO);Simonds, R. J. (CDC/DDPHSIS/CGH/OD);Smith, Rachel M. (CDC/DDID/NCEZID/DHQP);Soke, Gnakub (Norbert) (CDC/DDPHSIS/CGH/GID);Spath (CDC)
Cc: Anantharam, Puneet (CDC/DDPHSIS/CGH/DGHP)
Subject: RE: GOARN Ops Call Thurs. - 12 March 2020 at 09:00 AM EDT - Note new time this week due to change to EDT.
Attachments: GOARN Call Meeting Notes 2020 03 12.docx, GOARN Call Meeting Slides 2020 03 12.pptx

Notes and slides from today's call.

Thanks Puneet.
Ray

From: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP)
Sent: Wednesday, March 11, 2020 9:36 AM
To: Armstrong, Gregory (CDC/DDID/NCEZID/OD) <gca3@cdc.gov>; Beach, Michael J. (CDC/DDID/NCEZID/DFWED) <mjb3@cdc.gov>; Bennett, Sarah D. (CDC/DDPHSIS/CGH/GID) <iyk3@cdc.gov>; Bresee, Joseph (CDC/DDID/NCIRD/ID) <jsb6@cdc.gov>; Bunga, Sudhir (CDC state.gov) <BungaS@state.gov>; Clarke, Kevin R. (CDC/DDPHSIS/CGH/DGHP) <kvc6@cdc.gov>; Dahl, Benjamin A. (CDC/DDPHSIS/CGH/GID) <bid5@cdc.gov>; Damon, Inger K. (CDC/DDID/NCEZID/DHCPP) <iad7@cdc.gov>; Dawood, Fatimah S. (CDC/DDID/NCIRD/ID) <hgj0@cdc.gov>; EOC IM <eocim2@cdc.gov>; Fox, LeAnne M. (CDC/DDID/NCIRD/DBD) <lff4@cdc.gov>; GDD-OUTBREAK (CDC) <GDDOUTBREAK@cdc.gov>; Geissler, Aimee L. (CDC/DDID/NCEZID/DFWED) <ihq5@cdc.gov>; Greene, Carolyn M. (CDC/DDID/NCIRD/ID) <cqg4@cdc.gov>; Helfand, Rita (CDC/DDID/NCEZID/OD) <rzh7@cdc.gov>; Henao, Olga (CDC/DDPHSIS/CGH/DGHP) <dot8@cdc.gov>; Hyde, Terri (CDC/DDPHSIS/CGH/GID) <tkh4@cdc.gov>; Kaiser, Reinhard (CDC/DDPHSIS/CGH/DGHP)

<rik9@cdc.gov>; Klena, John D. (CDC/DDID/NCEZID/DHCPP) <irc4@cdc.gov>; Knight, Nancy (CDC/DDPHSIS/CGH/DGHP) <fma2@cdc.gov>; Kolwaite, Amy R. (CDC/DDID/NCEZID/DHQP) <izj9@cdc.gov>; Lessa, Fernanda (CDC/DDID/NCEZID/DHQP) <dta3@cdc.gov>; Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM) <bxm5@cdc.gov>; McCarron, Margaret (Meg) (CDC/DDID/NCIRD/ID) <dme8@cdc.gov>; McQuiston, Jennifer H. (CDC/DDID/NCEZID/DHCPP) <fzh7@cdc.gov>; Montandon, Michele (CDC/DDPHSIS/CGH/DGHT) <nkf3@cdc.gov>; Moolenaar, Ronald L. (CDC/DDPHSIS/CGH/DGHP) <rlm8@cdc.gov>; Neatherlin, John C. (CDC/DDPHSIS/CGH/DGHP) <jjn6@cdc.gov>; Nelson, Lisa J. (CDC/DDPHSIS/CGH/DGHT) <lbn9@cdc.gov>; Nichol, Stuart T. (CDC/DDID/NCEZID/DHCPP) <stn1@cdc.gov>; OConnor, John (CDC/DDID/NCEZID/OD) <jpo2@cdc.gov>; Park, Benjamin (CDC/DDID/NCEZID/DHQP) <bip5@cdc.gov>; Patel, Anita (CDC/DDID/NCIRD/OD) <bop1@cdc.gov>; Pesik, Nicki (CDC/DDID/NCEZID/OD) <ndp9@cdc.gov>; Prue, Christine (CDC/DDID/NCEZID/OD) <cep9@cdc.gov>; Raghunathan, Pratima (CDC/DDPHSIS/CGH/OD) <pgr4@cdc.gov>; Roohi, Shahrokh (CDC/DDID/NCEZID/DGMQ) <snr2@cdc.gov>; Rotz, Lisa (CDC/DDID/NCEZID/DGMQ) <ler8@cdc.gov>; Rouse, Edward N. (CDC/DDPHSIS/CPR/DEO) <dmz0@cdc.gov>; Simonds, R. J. (CDC/DDPHSIS/CGH/OD) <rxs5@cdc.gov>; Smith, Rachel M. (CDC/DDID/NCEZID/DHQP) <vih9@cdc.gov>; Soke, Gnakub (Norbert) (CDC/DDPHSIS/CGH/GID) <yxo2@cdc.gov>; Spath (CDC) <Spath@cdc.gov>
Subject: GOARN Ops Call Thurs. - 12 March 2020 at 09:00 AM EDT - Note new time this week due to change to EDT.

Dear colleagues,

You are kindly invited to the GOARN Weekly Operations Call on **Thursday, 12 March 2020** at **14:00 – 15:00 (Geneva time).**

Agenda:

- EVD, DRC
- COVID-19
- Other business

Please see below dial-in details:
IMPORTANT: All participants must enter full name and institution name when joining the WebEx call.

Click here to join the meeting by Webex
1. Enter your full name and institution.
2. Enter the meeting access code: (b)(6)

IMPORTANT:
You have two options to connect to your audio within Webex:

- On the audio and video connection pop-up, select audio connection, choose either: *"I will call in"* or *"Call using computer"*.
- *Mute your microphone* unless *speaking.*
- *press the hand button in webex if you want to speak.*

GOARN Operational Support Team

Global Outbreak Alert and Response Network (GOARN)
Division of Emergency Response (WRE)
WHO Health Emergencies Programme (WHE)

World Health Organization
Avenue Appia 20
1211 Geneva 27, Switzerland

E-mail: goarn@who.int

NOTE: Please note that this WebEx service allows audio and other information sent during the session to be recorded. By joining this session, you automatically consent to such recordings. If you do not consent to being recorded, discuss your concerns with the host or do not join the session. The recording is used for the purpose of minutes.

Ray R. Arthur, PhD
Lead, Global Disease Detection Operations Center
Emergency Response and Recovery Branch

Division of Global Health Protection
Center for Global Health
Centers for Disease Control and Prevention

1600 Clifton Road, NE
MS: H21-9
Atlanta, GA 30329
Phone: 404-639-3855
Mobile: (b)(6)
rarthur@cdc.gov

GOARN CALL Meeting Notes

Date: 12 March 2020

Time: 9:00 EDT (14:00 Geneva)

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(b)(4) ; (b)(5)

Page 4035

(b)(4) ; (b)(5)

(b)(4) ; (b)(5)

From: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP)
Sent: Thu, 16 Jan 2020 19:10:11 +0000
To: GREIN, Thomas;Pat Drury (druryp@who.int);Dr VAN KERKHOVE, Maria;'DOLEA, Carmen Mihaela'
Cc: AL-SHORBAJI, Farah
Subject: FW: Deployment for 2019 Novel Coronavirus Outbreak

Screening is not yet in place.

Best,
Ray

From: Dr. Robert R. Redfield (CDC) <ftdh@cdc.gov>
Sent: Thursday, January 16, 2020 1:07 PM
To: Dr. Robert R. Redfield (CDC) <ftdh@cdc.gov>
Subject: Deployment for 2019 Novel Coronavirus Outbreak

Dear Colleagues,

There is currently an outbreak that was caused by a novel (new) coronavirus in Wuhan City, Hubei Province, China. CDC is closely monitoring this situation and is working with the World Health Organization.

People around the world have come to rely on CDC staff and their expertise in outbreak responses—this outbreak will be no different. We have identified an urgent need for volunteers who can deploy in the next few days to one of three US airports to help with enhanced screening for about 2 weeks.

Volunteers will be helping to screen passengers to support the response. This is a rapidly evolving situation, requests are being made to CDC staff in other programs, and details may change with little notice. Here are some additional specifics:

Eligibility: Candidates must be FTEs who have supervisors' approval for this deployment.
Location: JFK in New York City, Los Angeles International Airport, or San Francisco International Airport (cannot guarantee choice of location).
Dates: Jan 17 through Jan 31 (2 weeks), shorter deployments may be accommodated
Hours: Must be flexible and will be put on day and night schedules
Duties: Entry screening
Need: Medical clearance from CDC clinic

If you are interested in this deployment opportunity, please get supervisor approval and send an email with your name, position and title, supervisor's name, and your contact information to **eocdgmqsrldaid@cdc.gov**.

To learn more about the outbreak, please visit the 2019 Novel Coronavirus website. There will also be more information upcoming on CDC Connects.

Sincerely,

Robert R. Redfield, MD
Director, CDC, and
Administrator, ATSDR

From: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP)
Sent: Thu, 16 Jan 2020 21:52:55 +0000
To: Lindstrom, Stephen (CDC/DDID/NCIRD/DVD);PERKINS, Mark;Dr VAN KERKHOVE, Maria
Subject: FW: Summary of Outcomes - Wuhan, China
Attachments: v3 IHR nCoV JPNWHO20200116 _cleaned.docx, Method_NIID_20200114_s.docx, seq_2019-nCoV_JAPAN_01_2020.txt

Forwarding in the event you have not already seen this message from Japan.

Ray

-----Original Message-----
From: 杉原 淳(sugihara-jun) <sugihara-jun@mhlw.go.jp>
Sent: Thursday, January 16, 2020 6:56 AM
To: Menard4, Philippe (PHAC/ASPC) <philippe.menard4@canada.ca>; Gibbons, Tracy (PHAC/ASPC) <tracy.gibbons@canada.ca>; Bikinas, Mallory (PHAC/ASPC) <Mallory.Bikinas@canada.ca>; wolfgang.philipp@ec.europa.eu; agnes-marta.molnar@ec.europa.eu; coralie.giese@sante.gouv.fr; Schwoerer, Antione (CDC sante.gouv.fr) <antoine.schwoerer@sante.gouv.fr>; juliane.knop@bmg.bund.de; f.maraglino@sanita.it; Ricardo.Cortes@salud.gob.mx; Alejandro.Svarch@salud.gob.mx; Dafne.ruiz@salud.gob.mx; kevin.dodds@dhsc.gov.uk; rosa.manning@dhsc.gov.uk; Moudy, Robin (OS/ASPR/SPPR) <Robin.Moudy@hhs.gov>; Fernandez, Jose (OS/OGA) <Jose.Fernandez@hhs.gov>; Weinberger, Collin (OS/OGA) (CTR) <Collin.Weinberger@hhs.gov>; Ayala, Ana (OS/ASPR/SPPR) <Ana.Ayala@hhs.gov>; DOLEA, Carmen Mihaela <doleac@who.int>; david.russell@hpa.org.uk; Sokolowski, Danny (HC/SC) <danny.sokolowski@canada.ca>; HerzogC@rki.de; saito.t.aa@niph.go.jp; Chandrasekera, Ruvani (OS/ASPR/SPPR) <Ruvani.Chandrasekera@hhs.gov>; Gilmour, Matthew (PHAC/ASPC) <matthew.gilmour@canada.ca>; antonino.dicaro@inmi.it; Kuschak, Theodore (PHAC/ASPC) <theodore.kuschak@canada.ca>; Coleman, Norman (NIH/NCI) [E] <ccoleman@mail.nih.gov>; Tewell, Adam (OS/ASPR/SPPR) <Adam.Tewell@hhs.gov>; Jonathan.VanTam@dhsc.gov.uk; Greene, Carolyn M. (CDC/DDID/NCIRD/ID) <cqg4@cdc.gov>; Smith, Sharon E (PHAC/ASPC) <sharone.smith@canada.ca>; Paddle, Lisa (PHAC/ASPC) <lisa.paddle@canada.ca>; Kotowski, Laura (PHAC/ASPC) <laura.kotowski@canada.ca>; Henry, Erin (PHAC/ASPC) <erine.henry@canada.ca>; Newland, Matthew (OS/ASPR/BARDA) <Matthew.Newland@hhs.gov>; Davis, Anika L <DavisAL1@state.gov>; Costello, Kelly E <CostelloKE@state.gov>; Pennock, Jennifer (PHAC/ASPC) <jennifer.pennock@canada.ca>; Seedorff, Jennifer E <SeedorffJE@state.gov>; Stroud, Crystal (PHAC/ASPC) <crystal.stroud@canada.ca>; Rizzo Caterina <caterina1.rizzo@opbg.net>; Cavanagh, Cheryl <cheryl.cavanagh@dhsc.gov.uk>; Stirling, Rob (PHAC/ASPC) <rob.stirling@canada.ca>; Charos, Gina (PHAC/ASPC) <gina.charos@canada.ca>; Donis, Ruben (OS/ASPR/BARDA) <Ruben.Donis@hhs.gov>; Cohn, Amanda (CDC/DDID/NCIRD/OD) <anc0@cdc.gov>; 上戸賢(kamido-satoshi.g30) <kamido-satoshi.g30@mhlw.go.jp>; Bancej, Christina (PHAC/ASPC) <christina.bancej@canada.ca>; Meyer, Heidi <Heidi.Meyer@pei.de>; Haas, Walter <HaasW@rki.de>; Hennigar, David (PHAC/ASPC) <david.hennigar@canada.ca>; Arthur, Ray (CDC/DDPHSIS/CGH/DGHP) <rca8@cdc.gov>; Hercik, Christine (CDC/DDPHSIS/CGH/DGHP) <ocg5@cdc.gov>; Schulz-Weidhaas, Claudia <Schulz-WeidhaasC@rki.de>; Laura Woodward <Laura.Woodward@phe.gov.uk>; John Simpson <John.Simpson@phe.gov.uk>; Carty, Paula (PHAC/ASPC) <paula.carty@canada.ca>; Dr VAN KERKHOVE, Maria <vankerkhovem@who.int>; Pasi Penttinen <Pasi.Penttinen@ecdc.europa.eu>; Gregg, William (Joe) (CDC/DDID/NCIRD/OD) <hie6@cdc.gov>; Cetron, Marty (CDC/DDID/NCEZID/DGMQ) <mzc4@cdc.gov>; Coggeshall, Kira (CDC/DDPHSIS/CGH/DGHP) <dot9@cdc.gov>; DRURY, Patrick Anthony <druryp@who.int>; Jernigan, Daniel B. (CDC/DDID/NCIRD/ID) <dbj0@cdc.gov>; Hellam, Rebecca (PHAC/ASPC) <rebecca.hellam@canada.ca>; Roohi, Shahrokh (CDC/DDID/NCEZID/DGMQ) <snr2@cdc.gov>; Cornelia Adlhoch <Cornelia.Adlhoch@ecdc.europa.eu>; Irma L ? pez Mart ? nez <irma.lopez@salud.gob.mx>; Rita Flores Le ? n (b)(6) Hiram Olivera Diaz <hiram.olivera@salud.gob.mx>
Subject: RE: Summary of Outcomes - Wuhan, China

Dear colleagues,

Currently, we are currently working on IHR EIS posting with WHO and I assume it would take some time to complete posting.
Meanwhile, we will share our draft EIS posting, methodology we used to detect nCoV and sequence data.
We request you to use these information CONFIDENTIAL, as usual.

Best regards,

Jun

Jun Sugihara, MD, MPH, DTM&H
Lead, IHR National Focal Point of Japan
Coordinator for International Health Emergency Management Office of Public Health Emergency Preparedness and Response Health Science Division, Minister's Secretariat Ministry of Health, Labour and Welfare Government of Japan
1-2-2 Kasumigaseki, Chiyoda-ku, Tokyo 100-8916 Japan
TEL +81-3-5253-1111 (Ext 3821)
DIRECT +81-3-3595-2171
FAX +81-3-3503-0183
EMAIL sugihara-jun@mhlw.go.jp

-----Original Message-----
From: 杉原 淳(sugihara-jun)
Sent: Thursday, January 16, 2020 12:54 PM
Subject: RE: Summary of Outcomes - Wuhan, China

Dear colleagues,

As you may know, we've detected a case of pneumonia traveled to Wuhan, China, and identified 2019-nCoV by sequencing of the PCR product.

We will post the details on the IHR EIS website soon, but here are the preliminary information:

The case is a resident of Kanagawa Prefecture, Japan.
He traveled to Wuhan, China during western new year holidays and developed fever on January 6th.

We've detected the case by our Unidentified Serious Infectious Illness surveillance on January 14th and the throat swab was tested positive for 2019-nCoV on January 15th.

Here are the details of the case
1. Age: (b)(
2. Gender: (b)(6
3. Residence: (b)(6) Japan
4. Clinical History:

Jan 3- developed fever
Jan 6 traveled back to Japan from Wuhan, China
visited a local clinic
Jan 10 hospitalized due to pneumonia
Jan 15 discharged from hospital

Based on a report from the case, he did not visited Huanan Seafood Market.
He had a contact with a patient of pneumonia of unknown etiology.

Epidemiologic investigation is ongoing.

Best regards,

Jun

-----Original Message-----
From: fssadmin@mhlw.go.jp <fssadmin@mhlw.go.jp> On Behalf Of Menard4, Philippe (PHAC/ASPC)
Sent: Wednesday, January 15, 2020 1:01 AM
Subject: Summary of Outcomes - Wuhan, China

Dear Colleagues,

Please find attached the Summary of Outcomes from yesterday's GHSI teleconference regarding the novel coronavirus in Wuhan, China.

We ask delegates to kindly review the contents and provide any changes that may have been improperly recorded by 16 January 2020.

As well, on behalf of our colleagues from the European Commission, please find below the link to the ECDC's threat assessment:
https://www.ecdc.europa.eu/en/publications-data/pneumonia-cases-possibly-associated-novel-coronavirus-wuhan-china

Please do not hesitate to contact us should you have any questions or concerns.

Best,

Phil

Phil Menard
GHSI Secretariat

IHR Criteria

Serious Public Health Impact: YES
Human coronaviruses (CoV) causes mild to severe illness such as Middle East Respiratory Syndrome (MERS) and Severe Acute Respiratory Syndrome (SARS). The newly discovered novel coronavirus (nCoV) has been associated with an outbreak of pneumonia in Wuhan city, Hubei province in China and one related death has already been reported from Wuhan. With incomplete epidemiological information, however, it is challenging to assess the full public health risk.

Unusual or unexpected: YES
On 7 January, 2020, Chinese authorities identified a new type of coronavirus (novel coronavirus, nCoV) from a cluster of pneumonia outbreak in Wuhan city, China. It is a new strain that has not been previously identified in humans. Full genome sequences of the virus have been shared with WHO and made publicly available. The confirmed case in Japan was identified using genomic sequencing analysis performed by National Institute of Infectious Disease (NIID) in Japan.

International disease spread YES
The imported case from China to Japan amplifies the risk of international spread. However, there is no clear evidence of sustained human-to-human transmission and no evidence that nCoV passes easily between people. Preliminary investigations in China have not yet identified the source of the outbreak.

Interference with international travel or trade NO
WHO does not recommend any restriction on travel and/or trade based on the current available information.

Latest Bulletin / Situation report
Event Update 2020-01-16

Summary

On 15 January 2020, the Ministry of Health, Labour and Welfare, Japan (MHLW) reported an imported case of laboratory-confirmed 2019 novel coronavirus (2019-nCoV) from Wuhan, Hubei Province, China.

The case is (b)(6) living in Kanagawa Prefecture, Japan.
He traveled to Wuhan, China from 20 December 2019 to 6 January 2020 for visiting (b)(6) living in Wuhan.
While in China, he was staying with his family and did not visit to the Huanan Seafood Wholesale Market or any other wet markets in Wuhan. He went to Wuhan Zoo on 22 December with (b)(6)

(b)(6)

He developed fever on 3 January 2020, and took antibiotics. He traveled back to Japan on 6 January 2020, by a direct flight from Wuhan to Tokyo-Narita.
He visited a clinic on the same day and got a prescription (antibiotics and antypyretics) due to the negative result of influenza.

The case went to work on 9 and 10 January 2020 with body temperature 39 degrees Celius, with dry cough and sore throat. On 10 January 2020, as his symptoms continued, including cough, sore throat and fever of 38 degrees Celsius, he visited a local hospital and has been pointed out the abnormal CXR with an infiltrative shadow in the right lower lung. He admitted to the hospital on the same day. He has been febrile until 14 January 2020. On this day, his attending doctor notified the patient to a local public health authority as a compatible case with Unidentified Serious Infectious Illness.

The throat swab samples were sent to the National Institute of Infectious Diseases (NIID) and at NIID, PCR testing and direct sequencing have been done twice, which identified very small amount of 2019-nCoV RNA on 15 January 2020. Details of the laboratory testing will be provided in an attachment.

The patient became well and discharged from the hospital on 15 January 2020. Currently, the case is staying at home in a stable condition.

Close contacts

Family

- (b)(6) living in Wuhan developed a fever on 28 December 2019 and was hospitalized from 7 to 12 January 2020 with a clinical diagnosis of “Chlamydia pneumonia”. It is unclear whether he is later diagnosed with 2019-nCoV infection.
- (b)(6) iving in Japan has traveled to Wuhan on 27 December 2019. She developed fever on 3 January in Wuhan and then became afebrile on the next day.
- (b)(6) iving in Japan traveled with (b)(6) to Wuhan, but have no symptoms to date.
- The case, (b)(6) traveled back to Japan on 6 January 2020.
- (b)(6) living in Wuhan developed fever from 3 to 9 January 2020.
- According to the case, all of the family members had not visited the Huanan Seafood Wholesale Market.

Other close contacts

- Contact tracing and other epidemiological investigation is underway by a local health authority.

Laboratory testing

- Details of the laboratory testing is described in an attachment.

Public Health Response

- Japanese Government scales up a whole-of government coordination mechanism on 16 January 2020.
- MHLW has been strengthened surveillance for undiagnosed severe acute respiratory illnesses since the report of undiagnosed pneumonia in Wuhan, China:
- From 6 January 2020, MHLW requested local health governments to be aware of the respiratory illnesses in Wuhan by using the existing surveillance system for serious infectious illness with unknown etiology.
- NIID is supporting local authorities on epidemiologic investigations including contact tracing.
- Quarantine has been enhanced measures for screening travelers from Wuhan city since January 7th.
- NIID established an in-house PCR assay for 2019-nCoV on January 16th.
- Revision of the risk assessment by NIID is being conducted, including case definition of close contacts.
- The public risk communication has been enhanced.
- The hotline has been established among the different ministries in the government.
- The MHLW is working closely with WHO and other related Member States to foster mutual investigations and information sharing.

Commented [仲川 1]: https://www.mhlw.go.jp/stf/newpage_08767.html

Commented [仲川 2]: https://www.mhlw.go.jp/content/10900000/000582967.pdf

Detection of WN-Human1 sequence from clinical specimen.

Naganori Nao, Kazuya Shirato, and Shutoku Matsuyama
Laboratory of Acute Viral Respiratory Infections and Cytokines, Department of Virology III, National Institute of Infectious Diseases, 4-7-1 Gakuen, Musashimurayama, 208-0011 Tokyo, Japan

Method & Results

(b)(5)

(b)(5)

(b)(5)

(b)(5)

From: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP)
Sent: Sun, 19 Jan 2020 15:07:47 +0000
To: DRURY, Patrick Anthony
Cc: Ijaz, Kashef (CDC/DDPHSIS/CGH/DGHP);goarn;Dr VAN KERKHOVE, Maria;GREIN, Thomas;MORGAN, Oliver;Ryan, Michael (CDC who.int);Aldighieri, Dr. Sylvain (WDC)
Subject: RE: GOARN/Confidential> WHO internal summary of nCov (CDC)

Thanks Pat for the current comprehensive SitRep and assessment. I will handle this as strictly confidential and inform only those with a need to know.

Best,
Ray

From: DRURY, Patrick Anthony <druryp@who.int>
Sent: Saturday, January 18, 2020 5:55 PM
To: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP) <rca8@cdc.gov>
Cc: Ijaz, Kashef (CDC/DDPHSIS/CGH/DGHP) <kil6@cdc.gov>; goarn <goarn@who.int>; Dr VAN KERKHOVE, Maria <vankerkhovem@who.int>; GREIN, Thomas <greint@who.int>; MORGAN, Oliver <omorgan@who.int>; Ryan, Michael (CDC who.int) <ryanm@who.int>; Aldighieri, Dr. Sylvain (WDC) <aldighsy@paho.org>
Subject: GOARN/Confidential> WHO internal summary of nCov (CDC)

Dear Ray,
Please find attached an internal WHO summary about the outbreak, as of 17 January. We are sharing this with you as CDC focal point on the SCOM, and with key partners for coordination, operational readiness, and planning purposes, and to ensure support to affected countries effectively.
This summary is WHO internal assessment, and includes information that is sensitive, and likely to develop and change rapidly. We ask for your support and understanding that it must be treated as strictly confidential, and only shared as needed with senior leadership within your own institutions. This document is NOT to be shared publicly or communicate about. Thank you.
We intend to keep you closely informed, and to provide updated information as much as possible, and as it becomes available.
WHO will be sharing further information, public health assessment and advice to Member States and the public as it becomes available.
Thank you for your cooperation.
Pat
Pat Drury
Manager, GOARN
+41 79 3089807

From: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP)
Sent: Tue, 21 Jan 2020 16:13:26 +0000
To: Fox, LeAnne M. (CDC/DDID/NCIRD/DBD);Williams, Seymour (CDC/DDPHSIS/CGH/DGHP);Simonds, R. J. (CDC/DDPHSIS/CGH/OD);Anderson, Mark (CDC/DDPHSIS/CGH/DGHP);Arthur, Ray (CDC/DDPHSIS/CGH/DGHP);Baggett, Kip (CDC/DDPHSIS/CGH/DGHP);Beach, Michael J. (CDC/DDID/NCEZID/DFWED);Blaney, David (CDC/DDID/NCEZID/DHCPP);Brown, Vance R. (CDC/DDPHSIS/CGH/DGHP);CDC IMS Ebola Response EPI Team (eocevent176@cdc.gov);CDC IMS Modeling Unit;Christie, Athalia (CDC/DDPHSIS/CGH/OD);Damon, Inger K. (CDC/DDID/NCEZID/DHCPP);Dietz, Patty (CDC/DDNID/NCBDDD/DHDD);Fitter, David L. (CDC/DDPHSIS/CGH/GID);Fox, Kimberley (CDC/DDID/NCIRD/DBD);Gallaway, Michael (Shayne) (CDC/DDNID/NCCDPHP/DPH);Geissler, Aimee L. (CDC/DDID/NCEZID/DFWED);Gift, Thomas L. (CDC/DDID/NCHHSTP/DSTDP);Gilbert, Sherry (CDC/DDNID/NCCDPHP/DPH);Helfand, Rita (CDC/DDID/NCEZID/OD);Hyde, Terri (CDC/DDPHSIS/CGH/GID);Ijaz, Kashef (CDC/DDPHSIS/CGH/DGHP);Kaiser, Reinhard (CDC/DDPHSIS/CGH/DGHP);Knicely, Kimberly (CDC/DDPHSS/CSELS/OD);Martin, Michael (CDC/DDPHSIS/CGH/DGHT);Meltzer, Martin I. (CDC/DDID/NCEZID/DPEI) (qzm4@cdc.gov);Merrill, Rebecca D. (CDC/DDID/NCEZID/DGMQ);Montgomery, Joel M. (CDC/DDID/NCEZID/DHCPP);Neatherlin, John C. (CDC/DDPHSIS/CGH/DGHP);Nichol, Stuart T. (CDC/DDID/NCEZID/DHCPP);OConnor, John (CDC/DDID/NCEZID/OD);Prue, Christine (CDC/DDID/NCEZID/OD);Raghunathan, Pratima (CDC/DDPHSIS/CGH/OD);Rao, Carol (CDC/DDPHSIS/CGH/DGHP);Roohi, Shahrokh (CDC/DDID/NCEZID/DGMQ);RwandaEVD_CoordTem (CDC);RwandaEVD_Surv (CDC);Sami, Samira (CDC/DDID/NCHHSTP/DHPSE);Shapiro, Craig (CDC/DDPHSIS/CPR/DEO);Soke, Gnakub (Norbert) (CDC/DDPHSIS/CGH/GID);Walke, Henry (CDC/DDID/NCEZID/DPEI);Wilson, Katie (CDC/DDID/NCEZID/DHQP);Young, Cathy (CDC/DDID/NCEZID/OD)
Subject: GOARN Weekly Ops call: 2020-01-23 at 8 AM EST
Attachments: GOARN Weekly Ops call: 2020-01-23

Dear colleagues,

You are kindly invited to the GOARN Weekly Operations Call on **Thursday, 23 January 2020** at **14:00 – 15:00 (Geneva time).**

Agenda:

- EVD, DRC
    - Find daily WHO Situation updates posted on the Knowledge Platform (*Operations* > *Ebola Virus Disease, Democratic Republic of the Congo (North Kivu), 2018* > Updates (on the right side))
- Novel Coronavirus (nCoV), China
- AoB

Please see below dial-in details:
IMPORTANT: All participants must enter full name and institution name when joining the WebEx call.

Click here to join the meeting by Webex
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2. Enter the meeting access code: (b)(6)

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- *Mute your microphone* unless *speaking.*

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GOARN Operational Support Team

Global Outbreak Alert and Response Network (GOARN)
Division of Emergency Response (WRE)
WHO Health Emergencies Programme (WHE)
World Health Organization
Avenue Appia 20
1211 Geneva 27, Switzerland

E-mail: goarn@who.int

NOTE: Please note that this WebEx service allows audio and other information sent during the session to be recorded. By joining this session, you automatically consent to such recordings. If you do not consent to being recorded, discuss your concerns with the host or do not join the session. The recording is used for the purpose of minutes.

From: goarn
Sent: Tue, 21 Jan 2020 16:02:30 +0000
To: shoc@who.int
Subject: GOARN Weekly Ops call: 2020-01-23

Dear colleagues,

You are kindly invited to the GOARN Weekly Operations Call on **Thursday, 23 January 2020** at **14:00 – 15:00 (Geneva time).**

Agenda:

- EVD, DRC
    - Find daily WHO Situation updates posted on the Knowledge Platform (*Operations* > *Ebola Virus Disease, Democratic Republic of the Congo (North Kivu), 2018* > Updates (on the right side))
- Novel Coronavirus (nCoV), China
- AoB

Please see below dial-in details:
IMPORTANT: All participants must enter full name and institution name when joining the WebEx call.

Click here to join the meeting by Webex
1. Enter your full name and institution.
2. Enter the meeting access code: (b)(6)

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- On the audio and video connection pop-up, select audio connection, choose either: *"I will call in"* or *"Call using computer"*.
- *Mute your microphone* unless *speaking.*

Click here to join the meeting by phone or if you have chosen "*I will call in*" above. WHO staff can use GPN 18614

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to being recorded, discuss your concerns with the host or do not join the session. The recording is used for the purpose of minutes.

From: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP)
Sent: Thu, 23 Jan 2020 17:47:31 +0000
To: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP);Beach, Michael J. (CDC/DDID/NCEZID/DFWED);Bunga, Sudhir (CDC state.gov);Clarke, Kevin R. (CDC/DDPHSIS/CGH/DGHP);Dahl, Benjamin A. (CDC/DDPHSIS/CGH/GID);Damon, Inger K. (CDC/DDID/NCEZID/DHCPP);EOC IM;Fox, LeAnne M. (CDC/DDID/NCIRD/DBD);GDD-OUTBREAK (CDC);Geissler, Aimee L. (CDC/DDID/NCEZID/DFWED);Greene, Carolyn M. (CDC/DDID/NCIRD/ID);Helfand, Rita (CDC/DDID/NCEZID/OD);Henao, Olga (CDC/DDPHSIS/CGH/DGHP);Hyde, Terri (CDC/DDPHSIS/CGH/GID);Kaiser, Reinhard (CDC/DDPHSIS/CGH/DGHP);Klena, John D. (CDC/DDID/NCEZID/DHCPP);Knight, Nancy (CDC/DDPHSIS/CGH/DGHP);Kolwaite, Amy R. (CDC/DDID/NCEZID/DHQP);McQuiston, Jennifer H. (CDC/DDID/NCEZID/DHCPP);Neatherlin, John C. (CDC/DDPHSIS/CGH/DGHP);Nelson, Lisa J. (CDC/DDPHSIS/CGH/DGHT);Nichol, Stuart T. (CDC/DDID/NCEZID/DHCPP);OConnor, John (CDC/DDID/NCEZID/OD);Park, Benjamin (CDC/DDID/NCEZID/DHQP);Patel, Anita (CDC/DDID/NCIRD/OD);Pesik, Nicki (CDC/DDID/NCEZID/OD);Prue, Christine (CDC/DDID/NCEZID/OD);Raghunathan, Pratima (CDC/DDPHSIS/CGH/OD);Roohi, Shahrokh (CDC/DDID/NCEZID/DGMQ);Rotz, Lisa (CDC/DDID/NCEZID/DGMQ);Rouse, Edward N. (CDC/DDPHSIS/CPR/DEO);Simonds, R. J. (CDC/DDPHSIS/CGH/OD);Smith, Rachel M. (CDC/DDID/NCEZID/DHQP);Soke, Gnakub (Norbert) (CDC/DDPHSIS/CGH/GID);Spath (CDC);Williams, Seymour (CDC/DDPHSIS/CGH/DGHP)
Subject: FW: CHANGE OF DATE: GOARN Weekly Ops call tomorrow 24 January 2020 at 08:00 EST + passcode
Attachments: 20200122-sitrep-2-2019-ncov.pdf

I have updated the mailing list so some of you are seeing this invitation for the first time and for others, this is the first time that participation has required a password. Participants are reminded that the information provided by WHO and GOARN partners on this call is CONFIDENTIAL.

The details for the Webex call and agenda are below. When joining the call, please identify yourself (full name) and indicate that you are affiliated with CDC. This will save time as I suspect that the moderator may want to identify all participants. The GOARN Operational Support Team is also using the participant and institution data as part of M&E for the Weekly Ops calls.

Thank you.
Ray

Subject: CHANGE OF DATE: GOARN Weekly Ops call tomorrow 24 January 2020
Importance: High

Dear All,

Please note the **sign in details** for the Ops call tomorrow at **14:00-15:00**. Please note that the call tomorrow will **exceptionally require a meeting password** noted below. You will find the same details on your outlook calendar.

Best

Sameera
GOARN Operational Support Team

GOARN Operational Support Team changed the Webex meeting information.

When it's time, join the Webex meeting here.

Meeting number (access code): (b)(6)

Meeting password: (b)(6)

Friday, January 24, 2020
2:00 pm | (UTC+01:00) Brussels, Copenhagen, Madrid, Paris | 2 hrs

Join meeting

Join by phone

Tap to call in from a mobile device (attendees only)

(b)(6) Switzerland toll
USA/Canada toll

Global call-in numbers

Join from a video system or application

Dial (b)(6)
You can also dial 62.109.219.4 and enter your meeting number.

Join using Microsoft Lync or Microsoft Skype for Business

Dial (b)(6)

Need help? Go to http://help.webex.com

From: goarn
Sent: Thursday, January 23, 2020 11:35 AM
To: SHOC <shoc@who.int>; emergencypmo <emergencypmo@who.int>; Dr VAN KERKHOVE, Maria <vankerkhovem@who.int>; DEGAIL CHABRAT, Marie Amélie <degailm@who.int>; Alexandre.JULLY@ec.europa.eu; jpfaffmann@unicef.org; claire_beck@wvi.org; Axelle.Ronsse@brussels.msf.org; mainaa@unhcr.org; trina.helderman@medair.org; CAYABYAB, Ramoncito <cayabyabr@who.int>; hgk4@cdc.gov; ahmedz@africa-union.org; MerawiA@africa-union.org; BenjaminD@africa-union.org; T-Drake@dfid.gov.uk; C-Watts@dfid.gov.uk; KIFF, Jeremy <kiffj@who.int>; L.Baxter@savethechildren.org.uk; Anja.Wolz@brussels.msf.org; goarn@santepubliquefrance.fr; msff-nord-kivu-coepidemio@paris.msf.org; Emina@necsi-global.org; iameda@unicef.org; philippe.belanger@canada.ca; kathleen.laberge@canada.ca; francois-william.tremblay@canada.ca; (b)(6) m.marrana@oie.int; Lsauer2@jhmi.edu; LEGAND, Anais <leganda@who.int>; Emmanuel.GRELLETY@epicentre.msf.org; n.hellman@savethechildren.org.uk; e.diggle@savethechildren.org.uk; jlee106@korea.kr; boneil@samaritan.org; smedcalf@unmc.edu; allison.prather@care.org; nathalie.imbault@cepi.net; celine.gurry@cepi.net; gwen.eamer@ifrc.org; KRETSINGER, Katrina <kretsingerk@who.int>; kola.jinadu@ncdc.gov.ng; KIM, Bryan <kimbr@who.int>; Josep.jansa@ecdc.europa.eu; Ali.khan@unmc.edu; daniel.bausch@lshtm.ac.uk; cohuabunwo@afenet.net; executive.director@emphnet.net; azharul@icddrb.org; elizabeth.gooding@canada.ca; lmoses2@tulane.edu; gfontana@unicef.org; Anne-Marie.pegg@paris.msf.org; Pascale.LISSOUBA@epicentre.msf.org; FRIGO, Mara <frigom@who.int>; HARRIS, Margaret Ann <harrism@who.int>; Vittoria.DiStefano@fao.org; Maria.Romano@fao.org; Lionel.Gbaguidi@fao.org; CASTILLA ECHENIQUE, Jorge <castillaj@who.int>; LINDMEIER, Christian <lindmeierch@who.int>; dot9@cdc.gov; ALEXANDROVA EZERSKA, Lidia <alexandrovaezerskal@who.int>; (b)(6) kleung@iom.int; MINELLI, Elisabetta <MinelliE@who.int>; desk.urgence@paris.msf.org; rkamadjeu@unicef.org; INIG@rki.de; hwest@iom.int; Jansen, Andreas <JansenA@rki.de>; emanuele.capobianco@ifrc.org; aziao@unicef.org; AHLUWALIA, Indu <ajaygautami@who.int>; Evelyn.DEPOORTERE@ec.europa.eu; vicarian@paho.org; FOLEFACK TENGOMO, Gervais Leon <folefacktengomog@who.int>; ZIG-Assistenz@rki.de; SALIO, Flavio <saliof@who.int>; PAPOWITZ, Heather Eve <PAPOWITZH@who.int>; ALLAIN IOOS, Sophie <iooss@who.int>; AF RGO/WHE EMO <afrgowheemo@who.int>; AF RGO/OUTBREAK AFRO <afrooutbreak@who.int>; DIAZ, Janet Victoria <diazj@who.int>; kerriganm@nicd.ac.za; awimmer@iom.int; marii@unicef.org; k.hamilton@oie.int; rekpini@unicef.org; AROlogistics

<AROlogistics@who.int>; raraj@globalhealthdev.org; cnavarrocolorado@unicef.org; YAO, N'da Konan Michel <yaom@who.int>; FORMENTY, Pierre B.h. <formentyp@who.int>; BALDE, Thierno <baldet@who.int>; eoc@ecdc.europa.eu; olivier.lepolain@phe.gov.uk; olaolu.aderinola@ncdc.gov.ng; rapid.deployments@phe.gov.uk; VAN DE WEERDT, Reinhilde <vanr@who.int>; panu.saaristo@ifrc.org; RYAN, Michael J. <ryanm@who.int>; PESIGAN, Arturo <pesigana@who.int>; peter.horby@ndm.ox.ac.uk; QUEYRAS, Guillaume <queyrasg@who.int>; SLATTERY, Raphael James <slatteryr@who.int>; Daniel.Bausch@phe.gov.uk; ROSEWELL, Alexander Edmund <rosewella@who.int>; support@ecdc.europa.eu; lee.lior@canada.ca; HAROUNA DJINGAREY, Mamoudou <djingareyh@who.int>; ROVIRA VILAPLANA, Jose <roviraj@who.int>; ALI AHMED, Yahaya <aliahmedy@who.int>; tina.endericks@phe.gov.uk; DOULL, Linda <doulll@who.int>; PENDERGAST, Scott Douglas <PendergastS@who.int>; LEECH, Louise Jocelyn <leechl@who.int>; GRAAFF, Peter Jan <graaffp@who.int>; KENNEY, Erin Maura <kenneye@who.int>; outbreak <outbreak@who.int>; ALBERTI, Kathryn <albertik@who.int>; LEGROS, Dominique <legrosd@who.int>; OLSON, David <olsond@who.int>; AZE, Jean-christophe <azej@who.int>; paul.effler@health.wa.gov.au; mdcfda@nus.edu.sg; aldighsy@paho.org; YOTI, Zabulon <yotiza@who.int>; STOROZHENKO, Oleg Nikolayevich <storozhenkoo@who.int>; FALL, Ibrahima Soce <socef@who.int>; BARBOZA, Philippe <barbozap@who.int>; MORGAN, Oliver <omorgan@who.int>; HUGONNET, Stéphane Alexandre Louis <hugonnets@who.int>; CHRISTENSEN, Renee <rchristensen@who.int>; DRURY, Patrick Anthony <druryp@who.int>; SURI, Sameera <suris@who.int>; UMALI DALANGIN, Khristeen <umalik@who.int>; Amadou.SALL@pasteur.sn; Gail.carson@ndm.ox.ac.uk; fvogt@itg.be; januszp@nicd.ac.za; jean-claude.manuguerra@pasteur.fr; myriam.henkens@msf.org; namusisiolivia@afenet.net; brian.mccloskey@phe.gov.uk; poh_lian_lim@ttsh.com.sg; rca8@cdc.gov; jwleduc@utmb.edu; nidx@chinacdc.cn; emohsni@globalhealthdev.org; BEJTULLAHU, Armand <bejtullahua@who.int>; zhangyp@chinacdc.cn; LEE, Chin-kei <LeeC@who.int>; salmon (b)(6) (b)(6)

Cc: DRURY, Patrick Anthony <druryp@who.int>; KIFF, Jeremy <kiffj@who.int>; BEJTULLAHU, Armand <bejtullahua@who.int>; CAYABYAB, Ramoncito <cayabyabr@who.int>; goarn <goarn@who.int>

Subject: CHANGE OF DATE: GOARN Weekly Ops call: 2020-01-23

Dear All,

Due to competing priorities, the GOARN Operational Call is exceptionally **rescheduled for tomorrow, 24 January 2020 at the same time- 1400-1500 Geneva.** The agenda and dial in instructions remain the same.

We thank you all for your support and understanding.

Best

Sameera

Agenda:

- EVD, DRC
    - Find daily WHO Situation updates posted on the Knowledge Platform (*Operations* > *Ebola Virus Disease, Democratic Republic of the Congo (North Kivu), 2018* > Updates (on the right side))
- Novel Coronavirus (nCoV), China
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Global Outbreak Alert and Response Network (GOARN)
Division of Emergency Response (WRE)
WHO Health Emergencies Programme (WHE)
World Health Organization
Avenue Appia 20
1211 Geneva 27, Switzerland

E-mail: goarn@who.int

From: goarn
Sent: Thursday, January 23, 2020 9:38 AM
To: SHOC <shoc@who.int>; emergencypmo <emergencypmo@who.int>; Dr VAN KERKHOVE, Maria <vankerkhovem@who.int>; DEGAIL CHABRAT, Marie Amélie <degailm@who.int>; Alexandre.JULLY@ec.europa.eu; jpfaffmann@unicef.org; claire_beck@wvi.org; Axelle.Ronsse@brussels.msf.org; mainaa@unhcr.org; trina.helderman@medair.org; CAYABYAB, Ramoncito <cayabyabr@who.int>; hgk4@cdc.gov; ahmedz@africa-union.org; MerawiA@africa-union.org; BenjaminD@africa-union.org; T-Drake@dfid.gov.uk; C-Watts@dfid.gov.uk; KIFF, Jeremy <kiffj@who.int>; L.Baxter@savethechildren.org.uk; Anja.Wolz@brussels.msf.org; goarn@santepubliquefrance.fr; msff-nord-kivu-coepidemio@paris.msf.org; Emina@necsi-global.org; iameda@unicef.org; philippe.belanger@canada.ca; kathleen.laberge@canada.ca; francois-william.tremblay@canada.ca; (b)(6) m.marrana@oie.int; Lsauer2@jhmi.edu; LEGAND, Anais <leganda@who.int>; Emmanuel.GRELLETY@epicentre.msf.org; n.hellman@savethechildren.org.uk; e.diggle@savethechildren.org.uk; jlee106@korea.kr; boneil@samaritan.org; smedcalf@unmc.edu; allison.prather@care.org; nathalie.imbault@cepi.net; celine.gurry@cepi.net; gwen.eamer@ifrc.org; KRETSINGER, Katrina <kretsingerk@who.int>; kola.jinadu@ncdc.gov.ng; KIM, Bryan <kimbr@who.int>; Josep.jansa@ecdc.europa.eu; Ali.khan@unmc.edu; daniel.bausch@lshtm.ac.uk; cohuabunwo@afenet.net; executive.director@emphnet.net; azharul@icddrb.org; elizabeth.gooding@canada.ca; lmoses2@tulane.edu; gfontana@unicef.org; Anne-Marie.pegg@paris.msf.org; Pascale.LISSOUBA@epicentre.msf.org; FRIGO, Mara <frigom@who.int>; HARRIS, Margaret Ann <harrism@who.int>; Vittoria.DiStefano@fao.org; Maria.Romano@fao.org; Lionel.Gbaguidi@fao.org; CASTILLA ECHENIQUE, Jorge <castillaj@who.int>; LINDMEIER, Christian <lindmeierch@who.int>; dot9@cdc.gov; ALEXANDROVA EZERSKA, Lidia <alexandrovaezerskal@who.int>; (b)(6) kleung@iom.int; MINELLI, Elisabetta <MinelliE@who.int>; desk.urgence@paris.msf.org; rkamadjeu@unicef.org; INIG@rki.de; hwest@iom.int; Jansen, Andreas <JansenA@rki.de>; emanuele.capobianco@ifrc.org; aziao@unicef.org; AHLUWALIA, Indu <ajaygautami@who.int>; Evelyn.DEPOORTERE@ec.europa.eu; vicarian@paho.org; FOLEFACK

TENGOMO, Gervais Leon <folefacktengomog@who.int>; ZIG-Assistenz@rki.de; SALIO, Flavio <saliof@who.int>; PAPOWITZ, Heather Eve <PAPOWITZH@who.int>; ALLAIN IOOS, Sophie <iooss@who.int>; AF RGO/WHE EMO <afrgowheemo@who.int>; AF RGO/OUTBREAK AFRO <afrooutbreak@who.int>; DIAZ, Janet Victoria <diazj@who.int>; kerriganm@nicd.ac.za; awimmer@iom.int; marii@unicef.org; k.hamilton@oie.int; rekpini@unicef.org; AROlogistics <AROlogistics@who.int>; raraj@globalhealthdev.org; cnavarrocolorado@unicef.org; YAO, N'da Konan Michel <yaom@who.int>; FORMENTY, Pierre B.h. <formentyp@who.int>; BALDE, Thierno <baldet@who.int>; eoc@ecdc.europa.eu; olivier.lepolain@phe.gov.uk; olaolu.aderinola@ncdc.gov.ng; rapid.deployments@phe.gov.uk; VAN DE WEERDT, Reinhilde <vanr@who.int>; panu.saaristo@ifrc.org; RYAN, Michael J. <ryanm@who.int>; PESIGAN, Arturo <pesigana@who.int>; peter.horby@ndm.ox.ac.uk; QUEYRAS, Guillaume <queyrasg@who.int>; SLATTERY, Raphael James <slatteryr@who.int>; Daniel.Bausch@phe.gov.uk; ROSEWELL, Alexander Edmund <rosewella@who.int>; support@ecdc.europa.eu; lee.lior@canada.ca; HAROUNA DJINGAREY, Mamoudou <djingareyh@who.int>; ROVIRA VILAPLANA, Jose <roviraj@who.int>; ALI AHMED, Yahaya <aliahmedy@who.int>; tina.endericks@phe.gov.uk; DOULL, Linda <doulll@who.int>; PENDERGAST, Scott Douglas <PendergastS@who.int>; LEECH, Louise Jocelyn <leechl@who.int>; GRAAFF, Peter Jan <graaffp@who.int>; KENNEY, Erin Maura <kenneye@who.int>; outbreak <outbreak@who.int>; ALBERTI, Kathryn <albertik@who.int>; LEGROS, Dominique <legrosd@who.int>; OLSON, David <olsond@who.int>; AZE, Jean-christophe <azej@who.int>; paul.effler@health.wa.gov.au; mdcfda@nus.edu.sg; aldighsy@paho.org; YOTI, Zabulon <yotiza@who.int>; STOROZHENKO, Oleg Nikolayevich <storozhenkoo@who.int>; FALL, Ibrahima Soce <socef@who.int>; BARBOZA, Philippe <barbozap@who.int>; MORGAN, Oliver <omorgan@who.int>; HUGONNET, Stéphane Alexandre Louis <hugonnets@who.int>; CHRISTENSEN, Renee <rchristensen@who.int>; DRURY, Patrick Anthony <druryp@who.int>; SURI, Sameera <suris@who.int>; UMALI DALANGIN, Khristeen <umalik@who.int>; Amadou.SALL@pasteur.sn; Gail.carson@ndm.ox.ac.uk; fvogt@itg.be; januszp@nicd.ac.za; jean-claude.manuguerra@pasteur.fr; myriam.henkens@msf.org; namusisiolivia@afenet.net; brian.mccloskey@phe.gov.uk; poh_lian_lim@ttsh.com.sg; rca8@cdc.gov; jwleduc@utmb.edu; nidx@chinacdc.cn; emohsni@globalhealthdev.org; BEJTULLAHU, Armand <bejtullahua@who.int>; zhangyp@chinacdc.cn; LEE, Chin-kei <LeeC@who.int>; (b)(6) (b)(6)

Cc: goarn <goarn@who.int>
Subject: GENTLE REMINDER: GOARN Weekly Ops call: 2020-01-23

Dear Colleagues,

Please see attached for your update the latest Coronavirus Sitrep. We look forward to having you with us on the call today and welcome all partners involved in this response to feed into the discussion at the meeting with an update on their institutional involvement in the ongoing outbreak.

The Knowledge platform is being updated with relevant information regarding the ongoing outbreaks and we welcome your contribution as a GOARN partner ensure that the network is updated and engaged.
Best
Sameera

-----Original Appointment-----
From: goarn
Sent: Tuesday, January 21, 2020 5:03 PM

To: SHOC; emergencypmo; Dr VAN KERKHOVE, Maria; DEGAIL CHABRAT, Marie Amélie; Alexandre.JULLY@ec.europa.eu; jpfaffmann@unicef.org; claire_beck@wvi.org; Axelle.Ronsse@brussels.msf.org; mainaa@unhcr.org; trina.helderman@medair.org; CAYABYAB, Ramoncito; hgk4@cdc.gov; ahmedz@africa-union.org; MerawiA@africa-union.org; BenjaminD@africa-union.org; T-Drake@dfid.gov.uk; C-Watts@dfid.gov.uk; KIFF, Jeremy; L.Baxter@savethechildren.org.uk; Anja.Wolz@brussels.msf.org; goarn@santepubliquefrance.fr; msff-nord-kivu-coepidemio@paris.msf.org; Emina@necsi-global.org; iameda@unicef.org; philippe.belanger@canada.ca; kathleen.laberge@canada.ca; francois-william.tremblay@canada.ca; (b)(6) m.marrana@oie.int; Lsauer2@jhmi.edu; LEGAND, Anais; Emmanuel.GRELLETY@epicentre.msf.org; n.hellman@savethechildren.org.uk; e.diggle@savethechildren.org.uk; jlee106@korea.kr; boneil@samaritan.org; smedcalf@unmc.edu; allison.prather@care.org; nathalie.imbault@cepi.net; celine.gurry@cepi.net; gwen.eamer@ifrc.org; KRETSINGER, Katrina; kola.jinadu@ncdc.gov.ng; KIM, Bryan; Josep.jansa@ecdc.europa.eu; Ali.khan@unmc.edu; daniel.bausch@lshtm.ac.uk; cohuabunwo@afenet.net; executive.director@emphnet.net; azharul@icddrb.org; elizabeth.gooding@canada.ca; lmoses2@tulane.edu; gfontana@unicef.org; Anne-Marie.pegg@paris.msf.org; Pascale.LISSOUBA@epicentre.msf.org; FRIGO, Mara; HARRIS, Margaret Ann; Vittoria.DiStefano@fao.org; Maria.Romano@fao.org; Lionel.Gbaguidi@fao.org; CASTILLA ECHENIQUE, Jorge; LINDMEIER, Christian; dot9@cdc.gov; ALEXANDROVA EZERSKA, Lidia; (b)(6) kleung@iom.int; MINELLI, Elisabetta; desk.urgence@paris.msf.org; rkamadjeu@unicef.org; INIG@rki.de; hwest@iom.int; Jansen, Andreas; emanuele.capobianco@ifrc.org; aziao@unicef.org; AHLUWALIA, Indu; Evelyn.DEPOORTERE@ec.europa.eu; vicarian@paho.org; FOLEFACK TENGOMO, Gervais Leon; ZIG-Assistenz@rki.de; SALIO, Flavio; PAPOWITZ, Heather Eve; ALLAIN IOOS, Sophie; AF RGO/WHE EMO; AF RGO/OUTBREAK AFRO; DIAZ, Janet Victoria; kerriganm@nicd.ac.za; awimmer@iom.int; marii@unicef.org; k.hamilton@oie.int; rekpini@unicef.org; AROlogistics; raraj@globalhealthdev.org; cnavarrocolorado@unicef.org; YAO, N'da Konan Michel; FORMENTY, Pierre B.h.; BALDE, Thierno; eoc@ecdc.europa.eu; olivier.lepolain@phe.gov.uk; olaolu.aderinola@ncdc.gov.ng; rapid.deployments@phe.gov.uk; VAN DE WEERDT, Reinhilde; panu.saaristo@ifrc.org; RYAN, Michael J.; PESIGAN, Arturo; peter.horby@ndm.ox.ac.uk; QUEYRAS, Guillaume; SLATTERY, Raphael James; Daniel.Bausch@phe.gov.uk; ROSEWELL, Alexander Edmund; support@ecdc.europa.eu; lee.lior@canada.ca; HAROUNA DJINGAREY, Mamoudou; ROVIRA VILAPLANA, Jose; ALI AHMED, Yahaya; tina.endericks@phe.gov.uk; DOULL, Linda; PENDERGAST, Scott Douglas; LEECH, Louise Jocelyn; GRAAFF, Peter Jan; KENNEY, Erin Maura; outbreak; ALBERTI, Kathryn; LEGROS, Dominique; OLSON, David; AZE, Jean-christophe; paul.effler@health.wa.gov.au; mdcfda@nus.edu.sg; aldighsy@paho.org; YOTI, Zabulon; STOROZHENKO, Oleg Nikolayevich; FALL, Ibrahima Soce; BARBOZA, Philippe; MORGAN, Oliver; HUGONNET, Stéphane Alexandre Louis; CHRISTENSEN, Renee; DRURY, Patrick Anthony; SURI, Sameera; UMALI DALANGIN, Khristeen; Amadou.SALL@pasteur.sn; Gail.carson@ndm.ox.ac.uk; fvogt@itg.be; januszp@nicd.ac.za; jean-claude.manuguerra@pasteur.fr; myriam.henkens@msf.org; namusisiolivia@afenet.net; brian.mccloskey@phe.gov.uk; poh_lian_lim@ttsh.com.sg; rca8@cdc.gov; jwleduc@utmb.edu; nidx@chinacdc.cn; emohsni@globalhealthdev.org; BEJTULLAHU, Armand; zhangyp@chinacdc.cn; LEE, Chin-kei; salmon (b)(6) (b)(6)
Cc: goarn
Subject: GOARN Weekly Ops call: 2020-01-23
When: Thursday, January 23, 2020 2:00 PM-3:00 PM (UTC+01:00) Brussels, Copenhagen, Madrid, Paris.
Where: Upper SHOC / WebEx

Dear colleagues,

You are kindly invited to the GOARN Weekly Operations Call on **Thursday, 23 January 2020** at **14:00 – 15:00 (Geneva time).**

Agenda:

- EVD, DRC
    - Find daily WHO Situation updates posted on the Knowledge Platform (*Operations* > *Ebola Virus Disease, Democratic Republic of the Congo (North Kivu), 2018* > Updates (on the right side))
- Novel Coronavirus (nCoV), China
- AoB

Please see below dial-in details:
IMPORTANT: All participants must enter full name and institution name when joining the WebEx call.

Click here to join the meeting by Webex
1. Enter your full name and institution.
2. Enter the meeting access code: (b)(6)

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- On the audio and video connection pop-up, select audio connection, choose either: *"I will call in"* or *"Call using computer"*.
- *Mute your microphone* unless *speaking.*

GOARN Operational Support Team

Global Outbreak Alert and Response Network (GOARN)
Division of Emergency Response (WRE)
WHO Health Emergencies Programme (WHE)
World Health Organization
Avenue Appia 20
1211 Geneva 27, Switzerland

E-mail: goarn@who.int

NOTE: Please note that this WebEx service allows audio and other information sent during the session to be recorded. By joining this session, you automatically consent to such recordings. If you do not consent to being recorded, discuss your concerns with the host or do not join the session. The recording is used for the purpose of minutes.

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From: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP)
Sent: Thu, 2 Jul 2020 21:20:36 +0000
To: Armstrong, Gregory (CDC/DDID/NCEZID/OD);Beach, Michael J. (CDC/DDID/NCEZID/DFWED);Ben Hamida, Amen (em-EN) (CDC/DDPHSIS/CGH/DGHP);Bennett, Sarah D. (CDC/DDPHSIS/CGH/GID);Bresee, Joseph (CDC/DDID/NCIRD/ID);Bunga, Sudhir (CDC state.gov);Christie, Athalia (CDC/DDPHSIS/CGH/OD);Clarke, Kevin R. (CDC/DDPHSIS/CGH/DGHP);Dahl, Benjamin A. (CDC/DDPHSIS/CGH/GID);Damon, Inger K. (CDC/DDID/NCEZID/DHCPP);Dawood, Fatimah S. (CDC/DDID/NCIRD/ID);EOC IM;Farag, Noha (CDC/DDPHSIS/CGH/GID);Fitter, David L. (CDC/DDPHSIS/CGH/GID);Fox, LeAnne M. (CDC/DDID/NCIRD/DBD);GDD-OUTBREAK (CDC);Geissler, Aimee L. (CDC/DDID/NCEZID/DFWED);Ghiselli, Margherita (CDC/DDPHSIS/CGH/GID);Greene, Carolyn M. (CDC/DDID/NCIRD/ID);Greiner, Ashley L. (CDC/DDPHSIS/CGH/DGHP);Hagan, Jose Edward (CDC/DDPHSIS/CGH/GID);Hakim, Avi (CDC/DDPHSIS/CGH/DGHT);Helfand, Rita (CDC/DDID/NCEZID/OD);Henao, Olga (CDC/DDPHSIS/CGH/DGHP);Hyde, Terri (CDC/DDPHSIS/CGH/GID);Kaiser, Reinhard (CDC/DDPHSIS/CGH/DGHP);Klena, John D. (CDC/DDID/NCEZID/DHCPP);Knight, Nancy (CDC/DDPHSIS/CGH/DGHP);Kolwaite, Amy R. (CDC/DDID/NCEZID/DHQP);Lessa, Fernanda (CDC/DDID/NCEZID/DHQP);Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM);McCarron, Margaret (Meg) (CDC/DDID/NCIRD/ID);McQuiston, Jennifer H. (CDC/DDID/NCEZID/DHCPP);Mirza, Sara (CDC/DDID/NCIRD/DBD);Montandon, Michele (CDC/DDPHSIS/CGH/DGHT);Montgomery, Joel M. (CDC/DDID/NCEZID/DHCPP);Moolenaar, Ronald L. (CDC/DDPHSIS/CGH/DGHP);Mounts, Anthony (Tony) (CDC/DDPHSIS/CGH/GID);Neatherlin, John C. (CDC/DDPHSIS/CGH/DGHP);Nelson, Lisa J. (CDC/DDPHSIS/CGH/DGHT);Nichol, Stuart T. (CDC/DDID/NCEZID/DHCPP);OConnor, John (CDC/DDID/NCEZID/OD);Park, Benjamin (CDC/DDID/NCEZID/DHQP);Patel, Anita (CDC/DDID/NCIRD/OD);Pesik, Nicki (CDC/DDID/NCEZID/OD);Prue, Christine (CDC/DDID/NCEZID/OD);Raghunathan, Pratima (CDC/DDPHSIS/CGH/OD);Roohi, Shahrokh (CDC/DDID/NCEZID/DGMQ);Rotz, Lisa (CDC/DDID/NCEZID/DGMQ);Rouse, Edward N. (CDC/DDPHSIS/CPR/DEO);Simonds, R. J. (CDC/DDPHSIS/CGH/OD);Smith, Rachel M. (CDC/DDID/NCEZID/DHQP);Soeters, Heidi (CDC/DDPHSIS/CGH/GID);Soke, Gnakub (Norbert) (CDC/DDPHSIS/CGH/GID);Spath (CDC);Williams, Seymour (CDC/DDPHSIS/CGH/DGHP);Zhou, Weigong (CDC/DDID/NCIRD/ID)
Cc: Anantharam, Puneet (CDC/DDPHSIS/CGH/DGHP)
Subject: 2 July GOARN Weekly Ops Call Notes/Slides and Kivu-Ituri summary slide set from GOARN Steering Committee
Attachments: 4-20200630_GOARN_SCOM_ EVD Update Final.pdf, GOARN Weekly Ops Call Notes 2020 07 02.docx, DRC EVD Equateur Data Pack_2020 07 02.pdf, WHO COVID-19 Situation Update 2020 07 02.pdf, WHO COVID-19 Testing Indicators 2020 07 02.pdf, RCCE Update 2020 07 02.pdf

Attached are the 08:00 EDT/ 14:00 CET GOARN Ops call notes (includes all presentations), DRC EVD Data Pack, and other presentations from today. **I also want to call your attention to slide 7 in the GOARN SCOM slide set that illustrates the impressive innovations during the Kivu-Ituri outbreak.**

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Thanks to Puneet for capturing notes and slide.

Best,
Ray



-
Please copy GDDOUTBREAK@CDC.GOV on all outbreak related e-mails.

Global Disease Detection Operations Center (GDDOC)
Division of Global Health Protection
Center for Global Health
Centers for Disease Control and Prevention
1600 Clifton Road NE, Mailstop D68
Atlanta, GA 30333

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GOARN Weekly Ops Call Notes

Date: 2 July 2020

Time: 8:00 EDT/ 14:00 CET

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Other Business

- No updates.

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From: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP)
Sent: Thu, 19 Mar 2020 12:03:29 +0000
To: Armstrong, Gregory (CDC/DDID/NCEZID/OD);Beach, Michael J. (CDC/DDID/NCEZID/DFWED);Bennett, Sarah D. (CDC/DDPHSIS/CGH/GID);Bresee, Joseph (CDC/DDID/NCIRD/ID);Bunga, Sudhir (CDC state.gov);Clarke, Kevin R. (CDC/DDPHSIS/CGH/DGHP);Dahl, Benjamin A. (CDC/DDPHSIS/CGH/GID);Damon, Inger K. (CDC/DDID/NCEZID/DHCPP);Dawood, Fatimah S. (CDC/DDID/NCIRD/ID);EOC IM;Fox, LeAnne M. (CDC/DDID/NCIRD/DBD);GDD-OUTBREAK (CDC);Geissler, Aimee L. (CDC/DDID/NCEZID/DFWED);Greene, Carolyn M. (CDC/DDID/NCIRD/ID);Helfand, Rita (CDC/DDID/NCEZID/OD);Henao, Olga (CDC/DDPHSIS/CGH/DGHP);Hyde, Terri (CDC/DDPHSIS/CGH/GID);Kaiser, Reinhard (CDC/DDPHSIS/CGH/DGHP);Klena, John D. (CDC/DDID/NCEZID/DHCPP);Knight, Nancy (CDC/DDPHSIS/CGH/DGHP);Kolwaite, Amy R. (CDC/DDID/NCEZID/DHQP);Lessa, Fernanda (CDC/DDID/NCEZID/DHQP);Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM);McCarron, Margaret (Meg) (CDC/DDID/NCIRD/ID);McQuiston, Jennifer H. (CDC/DDID/NCEZID/DHCPP);Montandon, Michele (CDC/DDPHSIS/CGH/DGHT);Moolenaar, Ronald L. (CDC/DDPHSIS/CGH/DGHP);Neatherlin, John C. (CDC/DDPHSIS/CGH/DGHP);Nelson, Lisa J. (CDC/DDPHSIS/CGH/DGHT);Nichol, Stuart T. (CDC/DDID/NCEZID/DHCPP);OConnor, John (CDC/DDID/NCEZID/OD);Park, Benjamin (CDC/DDID/NCEZID/DHQP);Patel, Anita (CDC/DDID/NCIRD/OD);Pesik, Nicki (CDC/DDID/NCEZID/OD);Prue, Christine (CDC/DDID/NCEZID/OD);Raghunathan, Pratima (CDC/DDPHSIS/CGH/OD);Roohi, Shahrokh (CDC/DDID/NCEZID/DGMQ);Rotz, Lisa (CDC/DDID/NCEZID/DGMQ);Rouse, Edward N. (CDC/DDPHSIS/CPR/DEO);Simonds, R. J. (CDC/DDPHSIS/CGH/OD);Smith, Rachel M. (CDC/DDID/NCEZID/DHQP);Soke, Gnakub (Norbert) (CDC/DDPHSIS/CGH/GID);Spath (CDC)
Subject: RE: GOARN Weekly Ops Call Thurs. 19 March 09:00 EDT - NOTE CHANGE FROM WEBEX TO ZOOM MEETING

WHO HQ EOC COVID-19 is inviting you to a scheduled Zoom meeting.

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(Brazil)
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Meeting ID: (b)(6)

Join by Skype for Business

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From: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP)
Sent: Wednesday, March 18, 2020 5:14 PM
To: Armstrong, Gregory (CDC/DDID/NCEZID/OD) <gca3@cdc.gov>; Beach, Michael J. (CDC/DDID/NCEZID/DFWED) <mjb3@cdc.gov>; Bennett, Sarah D. (CDC/DDPHSIS/CGH/GID) <iyk3@cdc.gov>; Bresee, Joseph (CDC/DDID/NCIRD/ID) <jsb6@cdc.gov>; Bunga, Sudhir (CDC state.gov) <BungaS@state.gov>; Clarke, Kevin R. (CDC/DDPHSIS/CGH/DGHP) <kvc6@cdc.gov>; Dahl, Benjamin A. (CDC/DDPHSIS/CGH/GID) <bid5@cdc.gov>; Damon, Inger K. (CDC/DDID/NCEZID/DHCPP) <iad7@cdc.gov>; Dawood, Fatimah S. (CDC/DDID/NCIRD/ID) <hgj0@cdc.gov>; EOC IM <eocim2@cdc.gov>; Fox, LeAnne M. (CDC/DDID/NCIRD/DBD) <lff4@cdc.gov>; GDD-OUTBREAK (CDC) <GDDOUTBREAK@cdc.gov>; Geissler, Aimee L. (CDC/DDID/NCEZID/DFWED) <ihq5@cdc.gov>; Greene, Carolyn M. (CDC/DDID/NCIRD/ID) <cqg4@cdc.gov>; Helfand, Rita (CDC/DDID/NCEZID/OD) <rzh7@cdc.gov>; Henao, Olga (CDC/DDPHSIS/CGH/DGHP) <dot8@cdc.gov>; Hyde, Terri (CDC/DDPHSIS/CGH/GID) <tkh4@cdc.gov>; Kaiser, Reinhard (CDC/DDPHSIS/CGH/DGHP) <rik9@cdc.gov>; Klena, John D. (CDC/DDID/NCEZID/DHCPP) <irc4@cdc.gov>; Knight, Nancy (CDC/DDPHSIS/CGH/DGHP) <fma2@cdc.gov>; Kolwaite, Amy R. (CDC/DDID/NCEZID/DHQP) <izj9@cdc.gov>; Lessa, Fernanda (CDC/DDID/NCEZID/DHQP) <dta3@cdc.gov>; Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM) <bxm5@cdc.gov>; McCarron, Margaret (Meg) (CDC/DDID/NCIRD/ID) <dme8@cdc.gov>; McQuiston, Jennifer H. (CDC/DDID/NCEZID/DHCPP) <fzh7@cdc.gov>; Montandon, Michele (CDC/DDPHSIS/CGH/DGHT) <nkf3@cdc.gov>; Moolenaar, Ronald L. (CDC/DDPHSIS/CGH/DGHP) <rlm8@cdc.gov>; Neatherlin, John C. (CDC/DDPHSIS/CGH/DGHP) <jjn6@cdc.gov>; Nelson, Lisa J. (CDC/DDPHSIS/CGH/DGHT) <lbn9@cdc.gov>; Nichol, Stuart T. (CDC/DDID/NCEZID/DHCPP) <stn1@cdc.gov>; OConnor, John (CDC/DDID/NCEZID/OD) <jpo2@cdc.gov>; Park, Benjamin (CDC/DDID/NCEZID/DHQP) <bip5@cdc.gov>; Patel, Anita (CDC/DDID/NCIRD/OD) <bop1@cdc.gov>; Pesik, Nicki (CDC/DDID/NCEZID/OD) <ndp9@cdc.gov>; Prue, Christine (CDC/DDID/NCEZID/OD) <cep9@cdc.gov>; Raghunathan, Pratima (CDC/DDPHSIS/CGH/OD) <pgr4@cdc.gov>; Roohi, Shahrokh (CDC/DDID/NCEZID/DGMQ) <snr2@cdc.gov>; Rotz, Lisa (CDC/DDID/NCEZID/DGMQ) <ler8@cdc.gov>;

Rouse, Edward N. (CDC/DDPHSIS/CPR/DEO) <dmz0@cdc.gov>; Simonds, R. J. (CDC/DDPHSIS/CGH/OD) <rxs5@cdc.gov>; Smith, Rachel M. (CDC/DDID/NCEZID/DHQP) <vih9@cdc.gov>; Soke, Gnakub (Norbert) (CDC/DDPHSIS/CGH/GID) <yxo2@cdc.gov>; Spath (CDC) <Spath@cdc.gov>
Subject: GOARN Weekly Ops Call Thurs. 19 March 09:00 EDT

Dear Colleagues,
You are kindly invited to the GOARN Weekly Operations Call on Thursday, 19 March 2020 at 14:00 – 15:00 (Geneva time).
Agenda:

* EVD, DRC
* COVID-19
* Other business

Please see below dial-in details:
IMPORTANT: All participants must enter full name and institution name when joining the WebEx call.

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GOARN Operational Support Team

Global Outbreak Alert and Response Network (GOARN)
Division of Emergency Response (WRE)
WHO Health Emergencies Programme (WHE)
World Health Organization
Avenue Appia 20
1211 Geneva 27, Switzerland

E-mail: goarn@who.int

Ray R. Arthur, PhD
Lead, Global Disease Detection Operations Center
Emergency Response and Recovery Branch

Division of Global Health Protection
Center for Global Health
Centers for Disease Control and Prevention

1600 Clifton Road, NE
MS: H21-9
Atlanta, GA 30329
Phone: 404-639-3855

Mobile: (b)(6)
rarthur@cdc.gov

From: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP)
Sent: Wed, 25 Mar 2020 14:25:38 +0000
To: Armstrong, Gregory (CDC/DDID/NCEZID/OD);Beach, Michael J. (CDC/DDID/NCEZID/DFWED);Bennett, Sarah D. (CDC/DDPHSIS/CGH/GID);Bresee, Joseph (CDC/DDID/NCIRD/ID);Bunga, Sudhir (CDC state.gov);Clarke, Kevin R. (CDC/DDPHSIS/CGH/DGHP);Dahl, Benjamin A. (CDC/DDPHSIS/CGH/GID);Damon, Inger K. (CDC/DDID/NCEZID/DHCPP);Dawood, Fatimah S. (CDC/DDID/NCIRD/ID);EOC IM;Fox, LeAnne M. (CDC/DDID/NCIRD/DBD);GDD-OUTBREAK (CDC);Geissler, Aimee L. (CDC/DDID/NCEZID/DFWED);Greene, Carolyn M. (CDC/DDID/NCIRD/ID);Helfand, Rita (CDC/DDID/NCEZID/OD);Henao, Olga (CDC/DDPHSIS/CGH/DGHP);Hyde, Terri (CDC/DDPHSIS/CGH/GID);Kaiser, Reinhard (CDC/DDPHSIS/CGH/DGHP);Klena, John D. (CDC/DDID/NCEZID/DHCPP);Knight, Nancy (CDC/DDPHSIS/CGH/DGHP);Kolwaite, Amy R. (CDC/DDID/NCEZID/DHQP);Lessa, Fernanda (CDC/DDID/NCEZID/DHQP);Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM);McCarron, Margaret (Meg) (CDC/DDID/NCIRD/ID);McQuiston, Jennifer H. (CDC/DDID/NCEZID/DHCPP);Montandon, Michele (CDC/DDPHSIS/CGH/DGHT);Moolenaar, Ronald L. (CDC/DDPHSIS/CGH/DGHP);Neatherlin, John C. (CDC/DDPHSIS/CGH/DGHP);Nelson, Lisa J. (CDC/DDPHSIS/CGH/DGHT);Nichol, Stuart T. (CDC/DDID/NCEZID/DHCPP);OConnor, John (CDC/DDID/NCEZID/OD);Park, Benjamin (CDC/DDID/NCEZID/DHQP);Patel, Anita (CDC/DDID/NCIRD/OD);Pesik, Nicki (CDC/DDID/NCEZID/OD);Prue, Christine (CDC/DDID/NCEZID/OD);Raghunathan, Pratima (CDC/DDPHSIS/CGH/OD);Roohi, Shahrokh (CDC/DDID/NCEZID/DGMQ);Rotz, Lisa (CDC/DDID/NCEZID/DGMQ);Rouse, Edward N. (CDC/DDPHSIS/CPR/DEO);Simonds, R. J. (CDC/DDPHSIS/CGH/OD);Smith, Rachel M. (CDC/DDID/NCEZID/DHQP);Soke, Gnakub (Norbert) (CDC/DDPHSIS/CGH/GID);Spath (CDC)
Subject: GOARN Weekly Ops Meeting Thurs. 26 March at 09:00 EDT - Note Zoom Mtg

Dear Colleagues,
You are kindly invited to the GOARN Weekly Operations Call on Thursday, 26 March 2020 at 14:00 – 15:00 (Geneva time).
Agenda:

* EVD, DRC
* COVID-19
* Other business

Please see below dial-in details:
IMPORTANT: All participants must enter full name and institution name when joining the ZOOM call.

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GOARN Operational Support Team

Global Outbreak Alert and Response Network (GOARN)
Division of Emergency Response (WRE)
WHO Health Emergencies Programme (WHE)
World Health Organization
Avenue Appia 20
1211 Geneva 27, Switzerland

E-mail: goarn@who.int

Ray R. Arthur, PhD
Lead, Global Disease Detection Operations Center
Emergency Response and Recovery Branch

Division of Global Health Protection
Center for Global Health
Centers for Disease Control and Prevention

1600 Clifton Road, NE
MS: H21-9
Atlanta, GA 30329
Phone: 404-639-3855
Mobile: (b)(6)
rarthur@cdc.gov

From: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP)
Sent: Tue, 31 Mar 2020 21:58:37 +0000
To: Armstrong, Gregory (CDC/DDID/NCEZID/OD);Beach, Michael J. (CDC/DDID/NCEZID/DFWED);Bennett, Sarah D. (CDC/DDPHSIS/CGH/GID);Bresee, Joseph (CDC/DDID/NCIRD/ID);Bunga, Sudhir (CDC state.gov);Clarke, Kevin R. (CDC/DDPHSIS/CGH/DGHP);Dahl, Benjamin A. (CDC/DDPHSIS/CGH/GID);Damon, Inger K. (CDC/DDID/NCEZID/DHCPP);Dawood, Fatimah S. (CDC/DDID/NCIRD/ID);EOC IM;Fox, LeAnne M. (CDC/DDID/NCIRD/DBD);GDD-OUTBREAK (CDC);Geissler, Aimee L. (CDC/DDID/NCEZID/DFWED);Greene, Carolyn M. (CDC/DDID/NCIRD/ID);Helfand, Rita (CDC/DDID/NCEZID/OD);Henao, Olga (CDC/DDPHSIS/CGH/DGHP);Hyde, Terri (CDC/DDPHSIS/CGH/GID);Kaiser, Reinhard (CDC/DDPHSIS/CGH/DGHP);Klena, John D. (CDC/DDID/NCEZID/DHCPP);Knight, Nancy (CDC/DDPHSIS/CGH/DGHP);Kolwaite, Amy R. (CDC/DDID/NCEZID/DHQP);Lessa, Fernanda (CDC/DDID/NCEZID/DHQP);Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM);McCarron, Margaret (Meg) (CDC/DDID/NCIRD/ID);McQuiston, Jennifer H. (CDC/DDID/NCEZID/DHCPP);Montandon, Michele (CDC/DDPHSIS/CGH/DGHT);Moolenaar, Ronald L. (CDC/DDPHSIS/CGH/DGHP);Neatherlin, John C. (CDC/DDPHSIS/CGH/DGHP);Nelson, Lisa J. (CDC/DDPHSIS/CGH/DGHT);Nichol, Stuart T. (CDC/DDID/NCEZID/DHCPP);OConnor, John (CDC/DDID/NCEZID/OD);Park, Benjamin (CDC/DDID/NCEZID/DHQP);Patel, Anita (CDC/DDID/NCIRD/OD);Pesik, Nicki (CDC/DDID/NCEZID/OD);Prue, Christine (CDC/DDID/NCEZID/OD);Raghunathan, Pratima (CDC/DDPHSIS/CGH/OD);Roohi, Shahrokh (CDC/DDID/NCEZID/DGMQ);Rotz, Lisa (CDC/DDID/NCEZID/DGMQ);Rouse, Edward N. (CDC/DDPHSIS/CPR/DEO);Simonds, R. J. (CDC/DDPHSIS/CGH/OD);Smith, Rachel M. (CDC/DDID/NCEZID/DHQP);Soke, Gnakub (Norbert) (CDC/DDPHSIS/CGH/GID);Spath (CDC)
Subject: GOARN Weekly Ops call - Thurs 2 April 08:00 EDT

Dear Colleagues,

Please join the call on Thursday.

Draft agenda:

1. EVD, DRC
2. Covid 19
    a. Epi update and current priorities
    b. Operations update: Regions and partner feedback
    c. Technical update: Networks and Go.data
3. AOB

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Ray R. Arthur, PhD
Lead, Global Disease Detection Operations Center
Emergency Response and Recovery Branch

Division of Global Health Protection
Center for Global Health
Centers for Disease Control and Prevention

1600 Clifton Road, NE
MS: H21-9
Atlanta, GA 30329
Phone: 404-639-3855
Mobile: (b)(6)
rarthur@cdc.gov

From: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP)
Sent: Tue, 7 Apr 2020 19:29:25 +0000
To: Armstrong, Gregory (CDC/DDID/NCEZID/OD);Beach, Michael J. (CDC/DDID/NCEZID/DFWED);Bennett, Sarah D. (CDC/DDPHSIS/CGH/GID);Bresee, Joseph (CDC/DDID/NCIRD/ID);Bunga, Sudhir (CDC state.gov);Clarke, Kevin R. (CDC/DDPHSIS/CGH/DGHP);Dahl, Benjamin A. (CDC/DDPHSIS/CGH/GID);Damon, Inger K. (CDC/DDID/NCEZID/DHCPP);Dawood, Fatimah S. (CDC/DDID/NCIRD/ID);EOC IM;Fox, LeAnne M. (CDC/DDID/NCIRD/DBD);GDD-OUTBREAK (CDC);Geissler, Aimee L. (CDC/DDID/NCEZID/DFWED);Greene, Carolyn M. (CDC/DDID/NCIRD/ID);Helfand, Rita (CDC/DDID/NCEZID/OD);Henao, Olga (CDC/DDPHSIS/CGH/DGHP);Hyde, Terri (CDC/DDPHSIS/CGH/GID);Kaiser, Reinhard (CDC/DDPHSIS/CGH/DGHP);Klena, John D. (CDC/DDID/NCEZID/DHCPP);Knight, Nancy (CDC/DDPHSIS/CGH/DGHP);Kolwaite, Amy R. (CDC/DDID/NCEZID/DHQP);Lessa, Fernanda (CDC/DDID/NCEZID/DHQP);Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM);McCarron, Margaret (Meg) (CDC/DDID/NCIRD/ID);McQuiston, Jennifer H. (CDC/DDID/NCEZID/DHCPP);Montandon, Michele (CDC/DDPHSIS/CGH/DGHT);Moolenaar, Ronald L. (CDC/DDPHSIS/CGH/DGHP);Neatherlin, John C. (CDC/DDPHSIS/CGH/DGHP);Nelson, Lisa J. (CDC/DDPHSIS/CGH/DGHT);Nichol, Stuart T. (CDC/DDID/NCEZID/DHCPP);OConnor, John (CDC/DDID/NCEZID/OD);Park, Benjamin (CDC/DDID/NCEZID/DHQP);Patel, Anita (CDC/DDID/NCIRD/OD);Pesik, Nicki (CDC/DDID/NCEZID/OD);Prue, Christine (CDC/DDID/NCEZID/OD);Raghunathan, Pratima (CDC/DDPHSIS/CGH/OD);Roohi, Shahrokh (CDC/DDID/NCEZID/DGMQ);Rotz, Lisa (CDC/DDID/NCEZID/DGMQ);Rouse, Edward N. (CDC/DDPHSIS/CPR/DEO);Simonds, R. J. (CDC/DDPHSIS/CGH/OD);Smith, Rachel M. (CDC/DDID/NCEZID/DHQP);Soke, Gnakub (Norbert) (CDC/DDPHSIS/CGH/GID);Spath (CDC)
Subject: GOARN Weekly Ops Call - Thurs. 9 April at 08:00 AM

Dear Colleagues,

Please join this week's call.

Agenda:

1. EVD (we didn't provide an update last week as I slipped up).
2. COVID-19
3. AOB

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Ray R. Arthur, PhD
Lead, Global Disease Detection Operations Center
Emergency Response and Recovery Branch

Division of Global Health Protection
Center for Global Health
Centers for Disease Control and Prevention

1600 Clifton Road, NE
MS: H21-9
Atlanta, GA 30329
Phone: 404-639-3855
Mobile: (b)(6)
rarthur@cdc.gov

From: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP)
Sent: Thu, 9 Apr 2020 20:34:16 +0000
To: Smith, Rachel M. (CDC/DDID/NCEZID/DHQP);Armstrong, Gregory (CDC/DDID/NCEZID/OD);Beach, Michael J. (CDC/DDID/NCEZID/DFWED);Bennett, Sarah D. (CDC/DDPHSIS/CGH/GID);Bresee, Joseph (CDC/DDID/NCIRD/ID);Bunga, Sudhir (CDC state.gov);Clarke, Kevin R. (CDC/DDPHSIS/CGH/DGHP);Dahl, Benjamin A. (CDC/DDPHSIS/CGH/GID);Damon, Inger K. (CDC/DDID/NCEZID/DHCPP);Dawood, Fatimah S. (CDC/DDID/NCIRD/ID);EOC IM;Fox, LeAnne M. (CDC/DDID/NCIRD/DBD);GDD-OUTBREAK (CDC);Geissler, Aimee L. (CDC/DDID/NCEZID/DFWED);Greene, Carolyn M. (CDC/DDID/NCIRD/ID);Helfand, Rita (CDC/DDID/NCEZID/OD);Henao, Olga (CDC/DDPHSIS/CGH/DGHP);Hyde, Terri (CDC/DDPHSIS/CGH/GID);Kaiser, Reinhard (CDC/DDPHSIS/CGH/DGHP);Klena, John D. (CDC/DDID/NCEZID/DHCPP);Knight, Nancy (CDC/DDPHSIS/CGH/DGHP);Kolwaite, Amy R. (CDC/DDID/NCEZID/DHQP);Lessa, Fernanda (CDC/DDID/NCEZID/DHQP);Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM);McCarron, Margaret (Meg) (CDC/DDID/NCIRD/ID);McQuiston, Jennifer H. (CDC/DDID/NCEZID/DHCPP);Montandon, Michele (CDC/DDPHSIS/CGH/DGHT);Moolenaar, Ronald L. (CDC/DDPHSIS/CGH/DGHP);Neatherlin, John C. (CDC/DDPHSIS/CGH/DGHP);Nelson, Lisa J. (CDC/DDPHSIS/CGH/DGHT);Nichol, Stuart T. (CDC/DDID/NCEZID/DHCPP);OConnor, John (CDC/DDID/NCEZID/OD);Park, Benjamin (CDC/DDID/NCEZID/DHQP);Patel, Anita (CDC/DDID/NCIRD/OD);Pesik, Nicki (CDC/DDID/NCEZID/OD);Prue, Christine (CDC/DDID/NCEZID/OD);Raghunathan, Pratima (CDC/DDPHSIS/CGH/OD);Roohi, Shahrokh (CDC/DDID/NCEZID/DGMQ);Rotz, Lisa (CDC/DDID/NCEZID/DGMQ);Rouse, Edward N. (CDC/DDPHSIS/CPR/DEO);Simonds, R. J. (CDC/DDPHSIS/CGH/OD);Soke, Gnakub (Norbert) (CDC/DDPHSIS/CGH/GID);Spath (CDC)
Cc: Anantharam, Puneet (CDC/DDPHSIS/CGH/DGHP)
Subject: Slides and call notes from GOARN Weekly Ops Call 9 April
Attachments: Ebola DRC Epi Data Pack 2020 04 09.pptx, GOARN Meeting Notes 2020 04 09.docx, GOARN Meeting Slides 2020 04 09.pptx

Attached are the 08:00 EDT/ 14:00 CET GOARN meeting notes, EVD Epi Data Pack, and COVID modeling slides from today.

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Thanks to Puneet Anantharam for preparing the notes.

Ray

Ray R. Arthur, PhD
Lead, Global Disease Detection Operations Center
Emergency Response and Recovery Branch

Division of Global Health Protection
Center for Global Health
Centers for Disease Control and Prevention

1600 Clifton Road, NE
MS: H21-9
Atlanta, GA 30329
Phone: 404-639-3855
Mobile (b)(6)
rarthur@cdc.gov

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GOARN CALL Meeting Notes

Date: 09 April 2020

Time: 8:00 EDT/ 14:00 CET

EVD, DRC

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From: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP)
Sent: Thu, 23 Jan 2020 12:00:32 +0000
To: Patel, Anita (CDC/DDID/NCIRD/OD);Greene, Carolyn M. (CDC/DDID/NCIRD/ID);Fox, LeAnne M. (CDC/DDID/NCIRD/DBD);Bensyl, Diana M. (CDC/DDPHSIS/CGH/DGHP);Blanton, Jesse (CDC/DDID/NCEZID/DGMQ);Bunga, Sudhir (CDC state.gov);Clarke, Kevin R. (CDC/DDPHSIS/CGH/DGHP);Dahl, Benjamin A. (CDC/DDPHSIS/CGH/GID);Damon, Inger K. (CDC/DDID/NCEZID/DHCPP);EOC IM;Ewetola, Raimi (CDC/DDPHSIS/CGH/DGHT);GDD-OUTBREAK (CDC);Geissler, Aimee L. (CDC/DDID/NCEZID/DFWED);Helfand, Rita (CDC/DDID/NCEZID/OD);Hyde, Terri (CDC/DDPHSIS/CGH/GID);Klena, John D. (CDC/DDID/NCEZID/DHCPP);Kolwaite, Amy R. (CDC/DDID/NCEZID/DHQP);Macdonald, Gene (CDC/CGH/DGHT);McQuiston, Jennifer H. (CDC/DDID/NCEZID/DHCPP);Neatherlin, John C. (CDC/DDPHSIS/CGH/DGHP);Nelson, Lisa J. (CDC/DDPHSIS/CGH/DGHT);Nichol, Stuart T. (CDC/DDID/NCEZID/DHCPP);OConnor, John (CDC/DDID/NCEZID/OD);Park, Benjamin (CDC/DDID/NCEZID/DHQP);Pesik, Nicki (CDC/DDID/NCEZID/OD);Prue, Christine (CDC/DDID/NCEZID/OD);Raghunathan, Pratima (CDC/DDPHSIS/CGH/OD);Roohi, Shahrokh (CDC/DDID/NCEZID/DGMQ);Rotz, Lisa (CDC/DDID/NCEZID/DGMQ);Rouse, Edward N. (CDC/DDPHSIS/CPR/DEO);Smith, Rachel M. (CDC/DDID/NCEZID/DHQP);Spath (CDC);Thomas, Peter (CDC/DDPHSIS/CGH/DGHP);Walke, Henry (CDC/DDID/NCEZID/DPEI);Williams, Seymour (CDC/DDPHSIS/CGH/DGHP);Knight, Nancy (CDC/DDPHSIS/CGH/DGHP)
Subject: RE: CHANGE OF DATE: GOARN Weekly Ops call: 2020-01-23
Attachments: 20200122-sitrep-2-2019-ncov.pdf

WHO has provided the attached 22 Jan. 2019-nCoV SitRep.

Best,
Ray

From: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP)
Sent: Thursday, January 23, 2020 6:47 AM
To: Patel, Anita (CDC/DDID/NCIRD/OD) <bop1@cdc.gov>; Greene, Carolyn M. (CDC/DDID/NCIRD/ID) <cqg4@cdc.gov>; Fox, LeAnne M. (CDC/DDID/NCIRD/DBD) <lff4@cdc.gov>; Arthur, Ray (CDC/DDPHSIS/CGH/DGHP) <rca8@cdc.gov>; Bensyl, Diana M. (CDC/DDPHSIS/CGH/DGHP) <zqg6@cdc.gov>; Blanton, Jesse (CDC/DDID/NCEZID/DGMQ) <asi5@cdc.gov>; Bunga, Sudhir (CDC state.gov) <BungaS@state.gov>; Clarke, Kevin R. (CDC/DDPHSIS/CGH/DGHP) <kvc6@cdc.gov>; Dahl, Benjamin A. (CDC/DDPHSIS/CGH/GID) <bid5@cdc.gov>; Damon, Inger K. (CDC/DDID/NCEZID/DHCPP) <iad7@cdc.gov>; EOC IM <eocim2@cdc.gov>; Ewetola, Raimi (CDC/DDPHSIS/CGH/DGHT) <hcx6@cdc.gov>; GDD-OUTBREAK (CDC) <GDDOUTBREAK@cdc.gov>; Geissler, Aimee L. (CDC/DDID/NCEZID/DFWED) <ihq5@cdc.gov>; Helfand, Rita (CDC/DDID/NCEZID/OD) <rzh7@cdc.gov>; Hyde, Terri (CDC/DDPHSIS/CGH/GID) <tkh4@cdc.gov>; Klena, John D. (CDC/DDID/NCEZID/DHCPP) <irc4@cdc.gov>; Kolwaite, Amy R. (CDC/DDID/NCEZID/DHQP) <izj9@cdc.gov>; 'Macdonald, Gene (CDC/CGH/DGHT)' <fuu5@cdc.gov>; McQuiston, Jennifer H. (CDC/DDID/NCEZID/DHCPP) <fzh7@cdc.gov>; Neatherlin, John C. (CDC/DDPHSIS/CGH/DGHP) <jjn6@cdc.gov>; Nelson, Lisa J. (CDC/DDPHSIS/CGH/DGHT) <lbn9@cdc.gov>; Nichol, Stuart T. (CDC/DDID/NCEZID/DHCPP) <stn1@cdc.gov>; OConnor, John (CDC/DDID/NCEZID/OD) <jpo2@cdc.gov>; Park, Benjamin (CDC/DDID/NCEZID/DHQP) <bip5@cdc.gov>; Pesik, Nicki (CDC/DDID/NCEZID/OD) <ndp9@cdc.gov>;

Prue, Christine (CDC/DDID/NCEZID/OD) <cep9@cdc.gov>; Raghunathan, Pratima (CDC/DDPHSIS/CGH/OD) <pgr4@cdc.gov>; Roohi, Shahrokh (CDC/DDID/NCEZID/DGMQ) <snr2@cdc.gov>; Rotz, Lisa (CDC/DDID/NCEZID/DGMQ) <ler8@cdc.gov>; Rouse, Edward N. (CDC/DDPHSIS/CPR/DEO) <dmz0@cdc.gov>; Smith, Rachel M. (CDC/DDID/NCEZID/DHQP) <vih9@cdc.gov>; Spath (CDC) <Spath@cdc.gov>; Thomas, Peter (CDC/DDPHSIS/CGH/DGHP) <pbt7@cdc.gov>; Walke, Henry (CDC/DDID/NCEZID/DPEI) <hfw3@cdc.gov>
Subject: FW: CHANGE OF DATE: GOARN Weekly Ops call: 2020-01-23
Importance: High

Due to a second day of deliberations by the IHR EC on whether 2019-nCoV constitutes a PHEIC, the weekly GOARN Ops call has moved to Friday 24 Jan. The call will be a 08:00 EST.

Thanks.
Ray

Dear All,
Due to competing priorities, the GOARN Operational Call is exceptionally **rescheduled for tomorrow, 24 January 2020 at the same time- 1400-1500 Geneva.** The agenda and dial in instructions remain the same.
We thank you all for your support and understanding.
Best
Sameera

Agenda:

- EVD, DRC
    - Find daily WHO Situation updates posted on the Knowledge Platform (*Operations* > *Ebola Virus Disease, Democratic Republic of the Congo (North Kivu), 2018* > Updates (on the right side))
- Novel Coronavirus (nCoV), China
- AoB

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GOARN Operational Support Team

Global Outbreak Alert and Response Network (GOARN)
Division of Emergency Response (WRE)
WHO Health Emergencies Programme (WHE)
World Health Organization
Avenue Appia 20
1211 Geneva 27, Switzerland

E-mail: goarn@who.int

From: goarn
Sent: Thursday, January 23, 2020 9:38 AM
To: SHOC <shoc@who.int>; emergencypmo <emergencypmo@who.int>; Dr VAN KERKHOVE, Maria <vankerkhovem@who.int>; DEGAIL CHABRAT, Marie Amélie <degailm@who.int>; Alexandre.JULLY@ec.europa.eu; jpfaffmann@unicef.org; claire_beck@wvi.org; Axelle.Ronsse@brussels.msf.org; mainaa@unhcr.org; trina.helderman@medair.org; CAYABYAB, Ramoncito <cayabyabr@who.int>; hgk4@cdc.gov; ahmedz@africa-union.org; MerawiA@africa-union.org; BenjaminD@africa-union.org; T-Drake@dfid.gov.uk; C-Watts@dfid.gov.uk; KIFF, Jeremy <kiffj@who.int>; L.Baxter@savethechildren.org.uk; Anja.Wolz@brussels.msf.org; goarn@santepubliquefrance.fr; msff-nord-kivu-coepidemio@paris.msf.org; Emina@necsi-global.org; iameda@unicef.org; philippe.belanger@canada.ca; kathleen.laberge@canada.ca; francois-william.tremblay@canada.ca; (b)(6) m.marrana@oie.int; Lsauer2@jhmi.edu; LEGAND, Anais <leganda@who.int>; Emmanuel.GRELLETY@epicentre.msf.org; n.hellman@savethechildren.org.uk; e.diggle@savethechildren.org.uk; jlee106@korea.kr; boneil@samaritan.org; smedcalf@unmc.edu; allison.prather@care.org; nathalie.imbault@cepi.net; celine.gurry@cepi.net; gwen.eamer@ifrc.org; KRETSINGER, Katrina <kretsingerk@who.int>; kola.jinadu@ncdc.gov.ng; KIM, Bryan <kimbr@who.int>; Josep.jansa@ecdc.europa.eu; Ali.khan@unmc.edu; daniel.bausch@lshtm.ac.uk; cohuabunwo@afenet.net; executive.director@emphnet.net; azharul@icddrb.org; elizabeth.gooding@canada.ca; lmoses2@tulane.edu; gfontana@unicef.org; Anne-Marie.pegg@paris.msf.org; Pascale.LISSOUBA@epicentre.msf.org; FRIGO, Mara <frigom@who.int>; HARRIS, Margaret Ann <harrism@who.int>; Vittoria.DiStefano@fao.org; Maria.Romano@fao.org; Lionel.Gbaguidi@fao.org; CASTILLA ECHENIQUE, Jorge <castillaj@who.int>; LINDMEIER, Christian <lindmeierch@who.int>; dot9@cdc.gov; ALEXANDROVA EZERSKA, Lidia <alexandrovaezerskal@who.int>; (b)(6) kleung@iom.int; MINELLI, Elisabetta <MinelliE@who.int>; desk.urgence@paris.msf.org; rkamadjeu@unicef.org; INIG@rki.de; hwest@iom.int; Jansen, Andreas <JansenA@rki.de>; emanuele.capobianco@ifrc.org; aziao@unicef.org; AHLUWALIA, Indu <ajaygautami@who.int>; Evelyn.DEPOORTERE@ec.europa.eu; vicarian@paho.org; FOLEFACK TENGOMO, Gervais Leon <folefacktengomog@who.int>; ZIG-Assistenz@rki.de; SALIO, Flavio <saliof@who.int>; PAPOWITZ, Heather Eve <PAPOWITZH@who.int>; ALLAIN IOOS, Sophie <iooss@who.int>; AF RGO/WHE EMO <afrgowheemo@who.int>; AF RGO/OUTBREAK AFRO <afrooutbreak@who.int>; DIAZ, Janet Victoria <diazj@who.int>; kerriganm@nicd.ac.za; awimmer@iom.int; marii@unicef.org; k.hamilton@oie.int; rekpini@unicef.org; AROlogistics <AROlogistics@who.int>; raraj@globalhealthdev.org; cnavarrocolorado@unicef.org; YAO, N'da Konan Michel <yaom@who.int>; FORMENTY, Pierre B.h. <formentyp@who.int>; BALDE, Thierno <baldet@who.int>; eoc@ecdc.europa.eu; olivier.lepolain@phe.gov.uk; olaolu.aderinola@ncdc.gov.ng; rapid.deployments@phe.gov.uk; VAN DE WEERDT, Reinhilde <vanr@who.int>; panu.saaristo@ifrc.org; RYAN, Michael J. <ryanm@who.int>; PESIGAN, Arturo <pesigana@who.int>; peter.horby@ndm.ox.ac.uk; QUEYRAS, Guillaume <queyrasg@who.int>; SLATTERY, Raphael James

<slatteryr@who.int>; Daniel.Bausch@phe.gov.uk; ROSEWELL, Alexander Edmund <rosewella@who.int>; support@ecdc.europa.eu; lee.lior@canada.ca; HAROUNA DJINGAREY, Mamoudou <djingareyh@who.int>; ROVIRA VILAPLANA, Jose <roviraj@who.int>; ALI AHMED, Yahaya <aliahmedy@who.int>; tina.endericks@phe.gov.uk; DOULL, Linda <doulll@who.int>; PENDERGAST, Scott Douglas <PendergastS@who.int>; LEECH, Louise Jocelyn <leechl@who.int>; GRAAFF, Peter Jan <graaffp@who.int>; KENNEY, Erin Maura <kenneye@who.int>; outbreak <outbreak@who.int>; ALBERTI, Kathryn <albertik@who.int>; LEGROS, Dominique <legrosd@who.int>; OLSON, David <olsond@who.int>; AZE, Jean-christophe <azej@who.int>; paul.effler@health.wa.gov.au; mdcfda@nus.edu.sg; aldighsy@paho.org; YOTI, Zabulon <yotiza@who.int>; STOROZHENKO, Oleg Nikolayevich <storozhenkoo@who.int>; FALL, Ibrahima Soce <socef@who.int>; BARBOZA, Philippe <barbozap@who.int>; MORGAN, Oliver <omorgan@who.int>; HUGONNET, Stéphane Alexandre Louis <hugonnets@who.int>; CHRISTENSEN, Renee <rchristensen@who.int>; DRURY, Patrick Anthony <druryp@who.int>; SURI, Sameera <suris@who.int>; UMALI DALANGIN, Khristeen <umalik@who.int>; Amadou.SALL@pasteur.sn; Gail.carson@ndm.ox.ac.uk; fvogt@itg.be; januszp@nicd.ac.za; jean-claude.manuguerra@pasteur.fr; myriam.henkens@msf.org; namusisiolivia@afenet.net; brian.mccloskey@phe.gov.uk; poh_lian_lim@ttsh.com.sg; rca8@cdc.gov; jwleduc@utmb.edu; nidx@chinacdc.cn; emohsni@globalhealthdev.org; BEJTULLAHU, Armand <bejtullahua@who.int>; zhangyp@chinacdc.cn; LEE, Chin-kei <LeeC@who.int>; (b)(6) (b)(6)

Cc: goarn <goarn@who.int>

Subject: GENTLE REMINDER: GOARN Weekly Ops call: 2020-01-23

Dear Colleagues,

Please see attached for your update the latest Coronavirus Sitrep. We look forward to having you with us on the call today and welcome all partners involved in this response to feed into the discussion at the meeting with an update on their institutional involvement in the ongoing outbreak.

The Knowledge platform is being updated with relevant information regarding the ongoing outbreaks and we welcome your contribution as a GOARN partner ensure that the network is updated and engaged.
Best
Sameera

-----Original Appointment-----

From: goarn

Sent: Tuesday, January 21, 2020 5:03 PM

To: SHOC; emergencypmo; Dr VAN KERKHOVE, Maria; DEGAIL CHABRAT, Marie Amélie; Alexandre.JULLY@ec.europa.eu; jpfaffmann@unicef.org; claire_beck@wvi.org; Axelle.Ronsse@brussels.msf.org; mainaa@unhcr.org; trina.helderman@medair.org; CAYABYAB, Ramoncito; hgk4@cdc.gov; ahmedz@africa-union.org; MerawiA@africa-union.org; BenjaminD@africa-union.org; T-Drake@dfid.gov.uk; C-Watts@dfid.gov.uk; KIFF, Jeremy; L.Baxter@savethechildren.org.uk; Anja.Wolz@brussels.msf.org; goarn@santepubliquefrance.fr; msff-nord-kivu-coepidemio@paris.msf.org; Emina@necsi-global.org; iameda@unicef.org; philippe.belanger@canada.ca; kathleen.laberge@canada.ca; francois-william.tremblay@canada.ca; (b)(6) m.marrana@oie.int; Lsauer2@jhmi.edu; LEGAND, Anais; Emmanuel.GRELLETY@epicentre.msf.org; n.hellman@savethechildren.org.uk; e.diggle@savethechildren.org.uk; jlee106@korea.kr; boneil@samaritan.org; smedcalf@unmc.edu;

allison.prather@care.org; nathalie.imbault@cepi.net; celine.gurry@cepi.net; gwen.eamer@ifrc.org; KRETSINGER, Katrina; kola.jinadu@ncdc.gov.ng; KIM, Bryan; Josep.jansa@ecdc.europa.eu; Ali.khan@unmc.edu; daniel.bausch@lshtm.ac.uk; cohuabunwo@afenet.net; executive.director@emphnet.net; azharul@icddrb.org; elizabeth.gooding@canada.ca; lmoses2@tulane.edu; gfontana@unicef.org; Anne-Marie.pegg@paris.msf.org; Pascale.LISSOUBA@epicentre.msf.org; FRIGO, Mara; HARRIS, Margaret Ann; Vittoria.DiStefano@fao.org; Maria.Romano@fao.org; Lionel.Gbaguidi@fao.org; CASTILLA ECHENIQUE, Jorge; LINDMEIER, Christian; dot9@cdc.gov; ALEXANDROVA EZERSKA, Lidia; (b)(6) kleung@iom.int; MINELLI, Elisabetta; desk.urgence@paris.msf.org; rkamadjeu@unicef.org; INIG@rki.de; hwest@iom.int; Jansen, Andreas; emanuele.capobianco@ifrc.org; aziao@unicef.org; AHLUWALIA, Indu; Evelyn.DEPOORTERE@ec.europa.eu; vicarian@paho.org; FOLEFACK TENGOMO, Gervais Leon; ZIG-Assistenz@rki.de; SALIO, Flavio; PAPOWITZ, Heather Eve; ALLAIN IOOS, Sophie; AF RGO/WHE EMO; AF RGO/OUTBREAK AFRO; DIAZ, Janet Victoria; kerriganm@nicd.ac.za; awimmer@iom.int; marii@unicef.org; k.hamilton@oie.int; rekpini@unicef.org; AROlogistics; raraj@globalhealthdev.org; cnavarrocolorado@unicef.org; YAO, N'da Konan Michel; FORMENTY, Pierre B.h.; BALDE, Thierno; eoc@ecdc.europa.eu; olivier.lepolain@phe.gov.uk; olaolu.aderinola@ncdc.gov.ng; rapid.deployments@phe.gov.uk; VAN DE WEERDT, Reinhilde; panu.saaristo@ifrc.org; RYAN, Michael J.; PESIGAN, Arturo; peter.horby@ndm.ox.ac.uk; QUEYRAS, Guillaume; SLATTERY, Raphael James; Daniel.Bausch@phe.gov.uk; ROSEWELL, Alexander Edmund; support@ecdc.europa.eu; lee.lior@canada.ca; HAROUNA DJINGAREY, Mamoudou; ROVIRA VILAPLANA, Jose; ALI AHMED, Yahaya; tina.endericks@phe.gov.uk; DOULL, Linda; PENDERGAST, Scott Douglas; LEECH, Louise Jocelyn; GRAAFF, Peter Jan; KENNEY, Erin Maura; outbreak; ALBERTI, Kathryn; LEGROS, Dominique; OLSON, David; AZE, Jean-christophe; paul.effler@health.wa.gov.au; mdcfda@nus.edu.sg; aldighsy@paho.org; YOTI, Zabulon; STOROZHENKO, Oleg Nikolayevich; FALL, Ibrahima Soce; BARBOZA, Philippe; MORGAN, Oliver; HUGONNET, Stéphane Alexandre Louis; CHRISTENSEN, Renee; DRURY, Patrick Anthony; SURI, Sameera; UMALI DALANGIN, Khristeen; Amadou.SALL@pasteur.sn; Gail.carson@ndm.ox.ac.uk; fvogt@itg.be; januszp@nicd.ac.za; jean-claude.manuguerra@pasteur.fr; myriam.henkens@msf.org; namusisiolivia@afenet.net; brian.mccloskey@phe.gov.uk; poh_lian_lim@ttsh.com.sg; rca8@cdc.gov; jwleduc@utmb.edu; nidx@chinacdc.cn; emohsni@globalhealthdev.org; BEJTULLAHU, Armand; zhangyp@chinacdc.cn; LEE, Chin-kei; (b)(6) (b)(6)
Cc: goarn
Subject: GOARN Weekly Ops call: 2020-01-23
When: Thursday, January 23, 2020 2:00 PM-3:00 PM (UTC+01:00) Brussels, Copenhagen, Madrid, Paris.
Where: Upper SHOC / WebEx

Dear colleagues,

You are kindly invited to the GOARN Weekly Operations Call on **Thursday, 23 January 2020** at **14:00 – 15:00 (Geneva time).**

Agenda:

- EVD, DRC
    - Find daily WHO Situation updates posted on the Knowledge Platform (*Operations* > *Ebola Virus Disease, Democratic Republic of the Congo (North Kivu), 2018* > Updates (on the right side))
- Novel Coronavirus (nCoV), China
- AoB

Please see below dial-in details:
IMPORTANT: All participants must enter full name and institution name when joining the WebEx call.

Click here to join the meeting by Webex
1. Enter your full name and institution.
2. Enter the meeting access code: (b)(6)

You have two options to connect to your audio within Webex:

- On the audio and video connection pop-up, select audio connection, choose either: *"I will call in"* or *"Call using computer"*.
- *Mute your microphone* unless *speaking.*

GOARN Operational Support Team

Global Outbreak Alert and Response Network (GOARN)
Division of Emergency Response (WRE)
WHO Health Emergencies Programme (WHE)
World Health Organization
Avenue Appia 20
1211 Geneva 27, Switzerland

E-mail: goarn@who.int

NOTE: Please note that this WebEx service allows audio and other information sent during the session to be recorded. By joining this session, you automatically consent to such recordings. If you do not consent to being recorded, discuss your concerns with the host or do not join the session. The recording is used for the purpose of minutes.

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(b)(4)

From: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP)
Sent: Fri, 24 Jan 2020 12:21:07 +0000
To: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP);Beach, Michael J. (CDC/DDID/NCEZID/DFWED);Bunga, Sudhir (CDC state.gov);Clarke, Kevin R. (CDC/DDPHSIS/CGH/DGHP);Dahl, Benjamin A. (CDC/DDPHSIS/CGH/GID);Damon, Inger K. (CDC/DDID/NCEZID/DHCPP);EOC IM;Fox, LeAnne M. (CDC/DDID/NCIRD/DBD);GDD-OUTBREAK (CDC);Geissler, Aimee L. (CDC/DDID/NCEZID/DFWED);Greene, Carolyn M. (CDC/DDID/NCIRD/ID);Helfand, Rita (CDC/DDID/NCEZID/OD);Henao, Olga (CDC/DDPHSIS/CGH/DGHP);Hyde, Terri (CDC/DDPHSIS/CGH/GID);Kaiser, Reinhard (CDC/DDPHSIS/CGH/DGHP);Klena, John D. (CDC/DDID/NCEZID/DHCPP);Knight, Nancy (CDC/DDPHSIS/CGH/DGHP);Kolwaite, Amy R. (CDC/DDID/NCEZID/DHQP);McQuiston, Jennifer H. (CDC/DDID/NCEZID/DHCPP);Neatherlin, John C. (CDC/DDPHSIS/CGH/DGHP);Nelson, Lisa J. (CDC/DDPHSIS/CGH/DGHT);Nichol, Stuart T. (CDC/DDID/NCEZID/DHCPP);OConnor, John (CDC/DDID/NCEZID/OD);Park, Benjamin (CDC/DDID/NCEZID/DHQP);Patel, Anita (CDC/DDID/NCIRD/OD);Pesik, Nicki (CDC/DDID/NCEZID/OD);Prue, Christine (CDC/DDID/NCEZID/OD);Raghunathan, Pratima (CDC/DDPHSIS/CGH/OD);Roohi, Shahrokh (CDC/DDID/NCEZID/DGMQ);Rotz, Lisa (CDC/DDID/NCEZID/DGMQ);Rouse, Edward N. (CDC/DDPHSIS/CPR/DEO);Simonds, R. J. (CDC/DDPHSIS/CGH/OD);Smith, Rachel M. (CDC/DDID/NCEZID/DHQP);Soke, Gnakub (Norbert) (CDC/DDPHSIS/CGH/GID);Spath (CDC);Williams, Seymour (CDC/DDPHSIS/CGH/DGHP)
Subject: GOARN Weekly Ops call 24 January 2020 - CANCELLED

Very sad news. For those who did not know (b)(6) and had a strong connection with CDC.

I will inform everyone when the call is rescheduled.

Ray

From: goarn <goarn@who.int>
Sent: Friday, January 24, 2020 5:37 AM
Subject: RE: CHANGE OF DATE: GOARN Weekly Ops call tomorrow 24 January 2020

Dear Colleagues,

We are deeply saddened to inform you of the sudden passing of our colleague and leader Dr Peter Salama last night.

Our thoughts are with Pete's (b)(6) his daily and friends, and close colleagues around the globe, and in many partner agencies.

Pete was leading the work on Universal Health Coverage and his passing is a tremendous loss to the leadership of WHO. Pete lead the WHE Programme he was a staunch supporter and shaper of a collaborative WHO and of GOARN.

The Operational support team had the privilege of working with him and of learning so much from his vision as our leader.

We ask for your understanding that we **will not be hosting an operations call** this afternoon.

We will alert you as soon as possible of the earliest possible time for a conference call on the ongoing outbreaks and response missions.

Please consult the GOARN Knowledge platform (https://extranet.who.int/goarnops/) for latest updates and to feedback to the GOARN community on information and updates you would like to share. You can also reach us by email to goarn@who.int if you have any urgent questions ongoing missions.

We thank you all for your understanding and support at this difficult time.
Best
Sameera
GOARN Operational Support Team

From: goarn
Sent: Thursday, January 23, 2020 1:31 PM
To: SHOC <shoc@who.int>; emergencypmo <emergencypmo@who.int>; Dr VAN KERKHOVE, Maria <vankerkhovem@who.int>; DEGAIL CHABRAT, Marie Amélie <degailm@who.int>; Alexandre.JULLY@ec.europa.eu; jpfaffmann@unicef.org; claire_beck@wvi.org; Axelle.Ronsse@brussels.msf.org; mainaa@unhcr.org; trina.helderman@medair.org; CAYABYAB, Ramoncito <cayabyabr@who.int>; hgk4@cdc.gov; ahmedz@africa-union.org; MerawiA@africa-union.org; BenjaminD@africa-union.org; T-Drake@dfid.gov.uk; C-Watts@dfid.gov.uk; KIFF, Jeremy <kiffj@who.int>; L.Baxter@savethechildren.org.uk; Anja.Wolz@brussels.msf.org; goarn@santepubliquefrance.fr; msff-nord-kivu-coepidemio@paris.msf.org; Emina@necsi-global.org; iameda@unicef.org; philippe.belanger@canada.ca; kathleen.laberge@canada.ca; francois-william.tremblay@canada.ca; (b)(6) m.marrana@oie.int; Lsauer2@jhmi.edu; LEGAND, Anais <leganda@who.int>; Emmanuel.GRELLETY@epicentre.msf.org; n.hellman@savethechildren.org.uk; e.diggle@savethechildren.org.uk; jlee106@korea.kr; boneil@samaritan.org; smedcalf@unmc.edu; allison.prather@care.org; nathalie.imbault@cepi.net; celine.gurry@cepi.net; gwen.eamer@ifrc.org; KRETSINGER, Katrina <kretsingerk@who.int>; kola.jinadu@ncdc.gov.ng; KIM, Bryan <kimbr@who.int>; Josep.jansa@ecdc.europa.eu; Ali.khan@unmc.edu; daniel.bausch@lshtm.ac.uk; cohuabunwo@afenet.net; executive.director@emphnet.net; azharul@icddrb.org; elizabeth.gooding@canada.ca; lmoses2@tulane.edu; gfontana@unicef.org; Anne-Marie.pegg@paris.msf.org; Pascale.LISSOUBA@epicentre.msf.org; FRIGO, Mara <frigom@who.int>; HARRIS, Margaret Ann <harrism@who.int>; Vittoria.DiStefano@fao.org; Maria.Romano@fao.org; Lionel.Gbaguidi@fao.org; CASTILLA ECHENIQUE, Jorge <castillaj@who.int>; LINDMEIER, Christian <lindmeierch@who.int>; dot9@cdc.gov; ALEXANDROVA EZERSKA, Lidia <alexandrovaezerskal@who.int>; (b)(6) kleung@iom.int; MINELLI, Elisabetta <MinelliE@who.int>; desk.urgence@paris.msf.org; rkamadjeu@unicef.org; INIG@rki.de; hwest@iom.int; Jansen, Andreas <JansenA@rki.de>; emanuele.capobianco@ifrc.org; aziao@unicef.org; AHLUWALIA, Indu <ajaygautami@who.int>; Evelyn.DEPOORTERE@ec.europa.eu; vicarian@paho.org; FOLEFACK TENGOMO, Gervais Leon <folefacktengomog@who.int>; ZIG-Assistenz@rki.de; SALIO, Flavio <saliof@who.int>; PAPOWITZ, Heather Eve <PAPOWITZH@who.int>; ALLAIN IOOS, Sophie

<iooss@who.int>; AF RGO/WHE EMO <afrgowheemo@who.int>; AF RGO/OUTBREAK AFRO <afrooutbreak@who.int>; DIAZ, Janet Victoria <diazj@who.int>; kerriganm@nicd.ac.za; awimmer@iom.int; marii@unicef.org; k.hamilton@oie.int; rekpini@unicef.org; AROlogistics <AROlogistics@who.int>; raraj@globalhealthdev.org; cnavarrocolorado@unicef.org; YAO, N'da Konan Michel <yaom@who.int>; FORMENTY, Pierre B.h. <formentyp@who.int>; BALDE, Thierno <baldet@who.int>; eoc@ecdc.europa.eu; olivier.lepolain@phe.gov.uk; olaolu.aderinola@ncdc.gov.ng; rapid.deployments@phe.gov.uk; VAN DE WEERDT, Reinhilde <vanr@who.int>; panu.saaristo@ifrc.org; RYAN, Michael J. <ryanm@who.int>; PESIGAN, Arturo <pesigana@who.int>; peter.horby@ndm.ox.ac.uk; QUEYRAS, Guillaume <queyrasg@who.int>; SLATTERY, Raphael James <slatteryr@who.int>; Daniel.Bausch@phe.gov.uk; ROSEWELL, Alexander Edmund <rosewella@who.int>; support@ecdc.europa.eu; lee.lior@canada.ca; HAROUNA DJINGAREY, Mamoudou <djingareyh@who.int>; ROVIRA VILAPLANA, Jose <roviraj@who.int>; ALI AHMED, Yahaya <aliahmedy@who.int>; tina.endericks@phe.gov.uk; DOULL, Linda <doulll@who.int>; PENDERGAST, Scott Douglas <PendergastS@who.int>; LEECH, Louise Jocelyn <leechl@who.int>; GRAAFF, Peter Jan <graaffp@who.int>; KENNEY, Erin Maura <kenneye@who.int>; outbreak <outbreak@who.int>; ALBERTI, Kathryn <albertik@who.int>; LEGROS, Dominique <legrosd@who.int>; OLSON, David <olsond@who.int>; AZE, Jean-christophe <azej@who.int>; paul.effler@health.wa.gov.au; mdcfda@nus.edu.sg; aldighsy@paho.org; YOTI, Zabulon <yotiza@who.int>; STOROZHENKO, Oleg Nikolayevich <storozhenkoo@who.int>; FALL, Ibrahima Soce <socef@who.int>; BARBOZA, Philippe <barbozap@who.int>; MORGAN, Oliver <omorgan@who.int>; HUGONNET, Stéphane Alexandre Louis <hugonnets@who.int>; CHRISTENSEN, Renee <rchristensen@who.int>; DRURY, Patrick Anthony <druryp@who.int>; SURI, Sameera <suris@who.int>; UMALI DALANGIN, Khristeen <umalik@who.int>; Amadou.SALL@pasteur.sn; Gail.carson@ndm.ox.ac.uk; fvogt@itg.be; januszp@nicd.ac.za; jean-claude.manuguerra@pasteur.fr; myriam.henkens@msf.org; namusisiolivia@afenet.net; brian.mccloskey@phe.gov.uk; poh_lian_lim@ttsh.com.sg; rca8@cdc.gov; jwleduc@utmb.edu; nidx@chinacdc.cn; emohsni@globalhealthdev.org; BEJTULLAHU, Armand <bejtullahua@who.int>; zhangyp@chinacdc.cn; LEE, Chin-kei <LeeC@who.int>; salmon_(b)(6)
(b)(6)

Cc: DRURY, Patrick Anthony <druryp@who.int>; KIFF, Jeremy <kiffj@who.int>; BEJTULLAHU, Armand <bejtullahua@who.int>; CAYABYAB, Ramoncito <cayabyabr@who.int>
Subject: CHANGE OF DATE: GOARN Weekly Ops call tomorrow 24 January 2020
Importance: High

Dear All,

Please note the **sign in details** for the Ops call tomorrow at **14:00-15:00**. Please note that the call tomorrow will **exceptionally require a meeting password** noted below. You will find the same details on your outlook calendar.

Best
Sameera
GOARN Operational Support Team

GOARN Operational Support Team changed the Webex meeting information.

When it's time, join the Webex meeting here.

Meeting number (access code): (b)(6)

Meeting password: (b)(6)

Friday, January 24, 2020
2:00 pm | (UTC+01:00) Brussels, Copenhagen, Madrid, Paris | 2 hrs

Join meeting

Join by phone

Tap to call in from a mobile device (attendees only)

(b)(6) Switzerland toll
USA/Canada toll

Global call-in numbers

Join from a video system or application

Dial (b)(6)

You can also dial 62.109.219.4 and enter your meeting number.

Join using Microsoft Lync or Microsoft Skype for Business

Dial (b)(6)

Need help? Go to http://help.webex.com

From: goarn
Sent: Thursday, January 23, 2020 11:35 AM
To: SHOC <shoc@who.int>; emergencypmo <emergencypmo@who.int>; Dr VAN KERKHOVE, Maria <vankerkhovem@who.int>; DEGAIL CHABRAT, Marie Amélie <degailm@who.int>; Alexandre.JULLY@ec.europa.eu; jpfaffmann@unicef.org; claire_beck@wvi.org; Axelle.Ronsse@brussels.msf.org; mainaa@unhcr.org; trina.helderman@medair.org; CAYABYAB, Ramoncito <cayabyabr@who.int>; hgk4@cdc.gov; ahmedz@africa-union.org; MerawiA@africa-union.org; BenjaminD@africa-union.org; T-Drake@dfid.gov.uk; C-Watts@dfid.gov.uk; KIFF, Jeremy <kiffj@who.int>; L.Baxter@savethechildren.org.uk; Anja.Wolz@brussels.msf.org; goarn@santepubliquefrance.fr; msff-nord-kivu-coepidemio@paris.msf.org; Emina@necsi-global.org; iameda@unicef.org; philippe.belanger@canada.ca; kathleen.laberge@canada.ca; francois-william.tremblay@canada.ca; (b)(6) m.marrana@oie.int; Lsauer2@jhmi.edu; LEGAND, Anais <leganda@who.int>; Emmanuel.GRELLETY@epicentre.msf.org; n.hellman@savethechildren.org.uk; e.diggle@savethechildren.org.uk; jlee106@korea.kr; boneil@samaritan.org; smedcalf@unmc.edu; allison.prather@care.org; nathalie.imbault@cepi.net; celine.gurry@cepi.net; gwen.eamer@ifrc.org; KRETSINGER, Katrina <kretsingerk@who.int>; kola.jinadu@ncdc.gov.ng; KIM, Bryan <kimbr@who.int>; Josep.jansa@ecdc.europa.eu; Ali.khan@unmc.edu; daniel.bausch@lshtm.ac.uk; cohuabunwo@afenet.net; executive.director@emphnet.net; azharul@icddrb.org; elizabeth.gooding@canada.ca; lmoses2@tulane.edu; gfontana@unicef.org; Anne-Marie.pegg@paris.msf.org; Pascale.LISSOUBA@epicentre.msf.org; FRIGO, Mara <frigom@who.int>; HARRIS, Margaret Ann <harrism@who.int>; Vittoria.DiStefano@fao.org; Maria.Romano@fao.org; Lionel.Gbaguidi@fao.org; CASTILLA ECHENIQUE, Jorge <castillaj@who.int>; LINDMEIER, Christian <lindmeierch@who.int>; dot9@cdc.gov; ALEXANDROVA EZERSKA, Lidia <alexandrovaezerskal@who.int>; (b)(6) kleung@iom.int; MINELLI, Elisabetta <MinelliE@who.int>; desk.urgence@paris.msf.org; rkamadjeu@unicef.org; INIG@rki.de; hwest@iom.int; Jansen, Andreas <JansenA@rki.de>; emanuele.capobianco@ifrc.org; aziao@unicef.org; AHLUWALIA, Indu <ajaygautami@who.int>; Evelyn.DEPOORTERE@ec.europa.eu; vicarian@paho.org; FOLEFACK TENGOMO, Gervais Leon <folefacktengomog@who.int>; ZIG-Assistenz@rki.de; SALIO, Flavio <saliof@who.int>; PAPOWITZ, Heather Eve <PAPOWITZH@who.int>; ALLAIN IOOS, Sophie <iooss@who.int>; AF RGO/WHE EMO <afrgowheemo@who.int>; AF RGO/OUTBREAK AFRO <afrooutbreak@who.int>; DIAZ, Janet Victoria <diazj@who.int>; kerriganm@nicd.ac.za; awimmer@iom.int; marii@unicef.org; k.hamilton@oie.int; rekpini@unicef.org; AROlogistics <AROlogistics@who.int>; raraj@globalhealthdev.org; cnavarrocolorado@unicef.org; YAO, N'da Konan Michel <yaom@who.int>; FORMENTY, Pierre B.h. <formentyp@who.int>; BALDE, Thierno <baldet@who.int>; eoc@ecdc.europa.eu; olivier.lepolain@phe.gov.uk; olaolu.aderinola@ncdc.gov.ng; rapid.deployments@phe.gov.uk; VAN DE WEERDT, Reinhilde <vanr@who.int>; panu.saaristo@ifrc.org; RYAN, Michael J. <ryanm@who.int>; PESIGAN, Arturo <pesigana@who.int>; peter.horby@ndm.ox.ac.uk; QUEYRAS, Guillaume <queyrasg@who.int>; SLATTERY, Raphael James <slatteryr@who.int>; Daniel.Bausch@phe.gov.uk; ROSEWELL, Alexander Edmund <rosewella@who.int>; support@ecdc.europa.eu; lee.lior@canada.ca; HAROUNA DJINGAREY, Mamoudou

<djingareyh@who.int>; ROVIRA VILAPLANA, Jose <roviraj@who.int>; ALI AHMED, Yahaya <aliahmedy@who.int>; tina.endericks@phe.gov.uk; DOULL, Linda <doulll@who.int>; PENDERGAST, Scott Douglas <PendergastS@who.int>; LEECH, Louise Jocelyn <leechl@who.int>; GRAAFF, Peter Jan <graaffp@who.int>; KENNEY, Erin Maura <kenneye@who.int>; outbreak <outbreak@who.int>; ALBERTI, Kathryn <albertik@who.int>; LEGROS, Dominique <legrosd@who.int>; OLSON, David <olsond@who.int>; AZE, Jean-christophe <azej@who.int>; paul.effler@health.wa.gov.au; mdcfda@nus.edu.sg; aldighsy@paho.org; YOTI, Zabulon <yotiza@who.int>; STOROZHENKO, Oleg Nikolayevich <storozhenkoo@who.int>; FALL, Ibrahima Soce <socef@who.int>; BARBOZA, Philippe <barbozap@who.int>; MORGAN, Oliver <omorgan@who.int>; HUGONNET, Stéphane Alexandre Louis <hugonnets@who.int>; CHRISTENSEN, Renee <rchristensen@who.int>; DRURY, Patrick Anthony <druryp@who.int>; SURI, Sameera <suris@who.int>; UMALI DALANGIN, Khristeen <umalik@who.int>; Amadou.SALL@pasteur.sn; Gail.carson@ndm.ox.ac.uk; fvogt@itg.be; januszp@nicd.ac.za; jean-claude.manuguerra@pasteur.fr; myriam.henkens@msf.org; namusisiolivia@afenet.net; brian.mccloskey@phe.gov.uk; poh_lian_lim@ttsh.com.sg; rca8@cdc.gov; jwleduc@utmb.edu; nidx@chinacdc.cn; emohsni@globalhealthdev.org; BEJTULLAHU, Armand <bejtullahua@who.int>; zhangyp@chinacdc.cn; LEE, Chin-kei <LeeC@who.int>; salmon (b)(6) vdelriovilas@yahoo.co.uk
Cc: DRURY, Patrick Anthony <druryp@who.int>; KIFF, Jeremy <kiffj@who.int>; BEJTULLAHU, Armand <bejtullahua@who.int>; CAYABYAB, Ramoncito <cayabyabr@who.int>; goarn <goarn@who.int>
Subject: CHANGE OF DATE: GOARN Weekly Ops call: 2020-01-23

Dear All,
Due to competing priorities, the GOARN Operational Call is exceptionally **rescheduled for tomorrow, 24 January 2020 at the same time- 1400-1500 Geneva.** The agenda and dial in instructions remain the same.
We thank you all for your support and understanding.
Best
Sameera

Agenda:

- EVD, DRC
    - Find daily WHO Situation updates posted on the Knowledge Platform (*Operations* > *Ebola Virus Disease, Democratic Republic of the Congo (North Kivu), 2018* > Updates (on the right side))
- Novel Coronavirus (nCoV), China
- AoB

Please see below dial-in details:
IMPORTANT: All participants must enter full name and institution name when joining the WebEx call.

Click here to join the meeting by Webex
1. Enter your full name and institution.
2. Enter the meeting access code: (b)(6)

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- *Mute your microphone* unless *speaking.*

GOARN Operational Support Team

Global Outbreak Alert and Response Network (GOARN)
Division of Emergency Response (WRE)
WHO Health Emergencies Programme (WHE)
World Health Organization
Avenue Appia 20
1211 Geneva 27, Switzerland

E-mail: goarn@who.int

From: goarn
Sent: Thursday, January 23, 2020 9:38 AM
To: SHOC <shoc@who.int>; emergencypmo <emergencypmo@who.int>; Dr VAN KERKHOVE, Maria <vankerkhovem@who.int>; DEGAIL CHABRAT, Marie Amélie <degailm@who.int>; Alexandre.JULLY@ec.europa.eu; jpfaffmann@unicef.org; claire_beck@wvi.org; Axelle.Ronsse@brussels.msf.org; mainaa@unhcr.org; trina.helderman@medair.org; CAYABYAB, Ramoncito <cayabyabr@who.int>; hgk4@cdc.gov; ahmedz@africa-union.org; MerawiA@africa-union.org; BenjaminD@africa-union.org; T-Drake@dfid.gov.uk; C-Watts@dfid.gov.uk; KIFF, Jeremy <kiffj@who.int>; L.Baxter@savethechildren.org.uk; Anja.Wolz@brussels.msf.org; goarn@santepubliquefrance.fr; msff-nord-kivu-coepidemio@paris.msf.org; Emina@necsi-global.org; iameda@unicef.org; philippe.belanger@canada.ca; kathleen.laberge@canada.ca; francois-william.tremblay@canada.ca; (b)(6) m.marrana@oie.int; Lsauer2@jhmi.edu; LEGAND, Anais <leganda@who.int>; Emmanuel.GRELLETY@epicentre.msf.org; n.hellman@savethechildren.org.uk; e.diggle@savethechildren.org.uk; jlee106@korea.kr; boneil@samaritan.org; smedcalf@unmc.edu; allison.prather@care.org; nathalie.imbault@cepi.net; celine.gurry@cepi.net; gwen.eamer@ifrc.org; KRETSINGER, Katrina <kretsingerk@who.int>; kola.jinadu@ncdc.gov.ng; KIM, Bryan <kimbr@who.int>; Josep.jansa@ecdc.europa.eu; Ali.khan@unmc.edu; daniel.bausch@lshtm.ac.uk; cohuabunwo@afenet.net; executive.director@emphnet.net; azharul@icddrb.org; elizabeth.gooding@canada.ca; lmoses2@tulane.edu; gfontana@unicef.org; Anne-Marie.pegg@paris.msf.org; Pascale.LISSOUBA@epicentre.msf.org; FRIGO, Mara <frigom@who.int>; HARRIS, Margaret Ann <harrism@who.int>; Vittoria.DiStefano@fao.org; Maria.Romano@fao.org; Lionel.Gbaguidi@fao.org; CASTILLA ECHENIQUE, Jorge <castillaj@who.int>; LINDMEIER, Christian <lindmeierch@who.int>; dot9@cdc.gov; ALEXANDROVA EZERSKA, Lidia <alexandrovaezerskal@who.int>; (b)(6) kleung@iom.int; MINELLI, Elisabetta <MinelliE@who.int>; desk.urgence@paris.msf.org; rkamadjeu@unicef.org; INIG@rki.de; hwest@iom.int; Jansen, Andreas <JansenA@rki.de>; emanuele.capobianco@ifrc.org; aziao@unicef.org; AHLUWALIA, Indu <ajaygautami@who.int>; Evelyn.DEPOORTERE@ec.europa.eu; vicarian@paho.org; FOLEFACK TENGOMO, Gervais Leon <folefacktengomog@who.int>; ZIG-Assistenz@rki.de; SALIO, Flavio <saliof@who.int>; PAPOWITZ, Heather Eve <PAPOWITZH@who.int>; ALLAIN IOOS, Sophie <iooss@who.int>; AF RGO/WHE EMO <afrgowheemo@who.int>; AF RGO/OUTBREAK AFRO <afrooutbreak@who.int>; DIAZ, Janet Victoria <diazj@who.int>; kerriganm@nicd.ac.za; awimmer@iom.int; marii@unicef.org; k.hamilton@oie.int; rekpini@unicef.org; AROlogistics <AROlogistics@who.int>; raraj@globalhealthdev.org; cnavarrocolorado@unicef.org; YAO, N'da Konan Michel <yaom@who.int>; FORMENTY, Pierre B.h. <formentyp@who.int>; BALDE, Thierno

<baldet@who.int>; eoc@ecdc.europa.eu; olivier.lepolain@phe.gov.uk; olaolu.aderinola@ncdc.gov.ng; rapid.deployments@phe.gov.uk; VAN DE WEERDT, Reinhilde <vanr@who.int>; panu.saaristo@ifrc.org; RYAN, Michael J. <ryanm@who.int>; PESIGAN, Arturo <pesigana@who.int>; peter.horby@ndm.ox.ac.uk; QUEYRAS, Guillaume <queyrasg@who.int>; SLATTERY, Raphael James <slatteryr@who.int>; Daniel.Bausch@phe.gov.uk; ROSEWELL, Alexander Edmund <rosewella@who.int>; support@ecdc.europa.eu; lee.lior@canada.ca; HAROUNA DJINGAREY, Mamoudou <djingareyh@who.int>; ROVIRA VILAPLANA, Jose <roviraj@who.int>; ALI AHMED, Yahaya <aliahmedy@who.int>; tina.endericks@phe.gov.uk; DOULL, Linda <doulll@who.int>; PENDERGAST, Scott Douglas <PendergastS@who.int>; LEECH, Louise Jocelyn <leechl@who.int>; GRAAFF, Peter Jan <graaffp@who.int>; KENNEY, Erin Maura <kenneye@who.int>; outbreak <outbreak@who.int>; ALBERTI, Kathryn <albertik@who.int>; LEGROS, Dominique <legrosd@who.int>; OLSON, David <olsond@who.int>; AZE, Jean-christophe <azej@who.int>; paul.effler@health.wa.gov.au; mdcfda@nus.edu.sg; aldighsy@paho.org; YOTI, Zabulon <yotiza@who.int>; STOROZHENKO, Oleg Nikolayevich <storozhenkoo@who.int>; FALL, Ibrahima Soce <socef@who.int>; BARBOZA, Philippe <barbozap@who.int>; MORGAN, Oliver <omorgan@who.int>; HUGONNET, Stéphane Alexandre Louis <hugonnets@who.int>; CHRISTENSEN, Renee <rchristensen@who.int>; DRURY, Patrick Anthony <druryp@who.int>; SURI, Sameera <suris@who.int>; UMALI DALANGIN, Khristeen <umalik@who.int>; Amadou.SALL@pasteur.sn; Gail.carson@ndm.ox.ac.uk; fvogt@itg.be; januszp@nicd.ac.za; jean-claude.manuguerra@pasteur.fr; myriam.henkens@msf.org; namusisiolivia@afenet.net; brian.mccloskey@phe.gov.uk; poh_lian_lim@ttsh.com.sg; rca8@cdc.gov; jwleduc@utmb.edu; nidx@chinacdc.cn; emohsni@globalhealthdev.org; BEJTULLAHU, Armand <bejtullahua@who.int>; zhangyp@chinacdc.cn; LEE, Chin-kei <LeeC@who.int>; salmon_(b)(6)
(b)(6)
Cc: goarn <goarn@who.int>
Subject: GENTLE REMINDER: GOARN Weekly Ops call: 2020-01-23

Dear Colleagues,

Please see attached for your update the latest Coronavirus Sitrep. We look forward to having you with us on the call today and welcome all partners involved in this response to feed into the discussion at the meeting with an update on their institutional involvement in the ongoing outbreak.

The Knowledge platform is being updated with relevant information regarding the ongoing outbreaks and we welcome your contribution as a GOARN partner ensure that the network is updated and engaged.
Best
Sameera

-----Original Appointment-----
From: goarn
Sent: Tuesday, January 21, 2020 5:03 PM
To: SHOC; emergencypmo; Dr VAN KERKHOVE, Maria; DEGAIL CHABRAT, Marie Amélie; Alexandre.JULLY@ec.europa.eu; jpfaffmann@unicef.org; claire_beck@wvi.org; Axelle.Ronsse@brussels.msf.org; mainaa@unhcr.org; trina.helderman@medair.org; CAYABYAB, Ramoncito; hgk4@cdc.gov; ahmedz@africa-union.org; MerawiA@africa-union.org; BenjaminD@africa-union.org; T-Drake@dfid.gov.uk; C-Watts@dfid.gov.uk; KIFF, Jeremy; L.Baxter@savethechildren.org.uk; Anja.Wolz@brussels.msf.org; goarn@santepubliquefrance.fr; msff-nord-kivu-coepidemio@paris.msf.org; Emina@necsi-global.org; iameda@unicef.org;

philippe.belanger@canada.ca; kathleen.laberge@canada.ca; francois-william.tremblay@canada.ca; (b)(6) m.marrana@oie.int; Lsauer2@jhmi.edu; LEGAND, Anais; Emmanuel.GRELLETY@epicentre.msf.org; n.hellman@savethechildren.org.uk; e.diggle@savethechildren.org.uk; jlee106@korea.kr; boneil@samaritan.org; smedcalf@unmc.edu; allison.prather@care.org; nathalie.imbault@cepi.net; celine.gurry@cepi.net; gwen.eamer@ifrc.org; KRETSINGER, Katrina; kola.jinadu@ncdc.gov.ng; KIM, Bryan; Josep.jansa@ecdc.europa.eu; Ali.khan@unmc.edu; daniel.bausch@lshtm.ac.uk; cohuabunwo@afenet.net; executive.director@emphnet.net; azharul@icddrb.org; elizabeth.gooding@canada.ca; lmoses2@tulane.edu; gfontana@unicef.org; Anne-Marie.pegg@paris.msf.org; Pascale.LISSOUBA@epicentre.msf.org; FRIGO, Mara; HARRIS, Margaret Ann; Vittoria.DiStefano@fao.org; Maria.Romano@fao.org; Lionel.Gbaguidi@fao.org; CASTILLA ECHENIQUE, Jorge; LINDMEIER, Christian; dot9@cdc.gov; ALEXANDROVA EZERSKA, Lidia; (b)(6) kleung@iom.int; MINELLI, Elisabetta; desk.urgence@paris.msf.org; rkamadjeu@unicef.org; INIG@rki.de; hwest@iom.int; Jansen, Andreas; emanuele.capobianco@ifrc.org; aziao@unicef.org; AHLUWALIA, Indu; Evelyn.DEPOORTERE@ec.europa.eu; vicarian@paho.org; FOLEFACK TENGOMO, Gervais Leon; ZIG-Assistenz@rki.de; SALIO, Flavio; PAPOWITZ, Heather Eve; ALLAIN IOOS, Sophie; AF RGO/WHE EMO; AF RGO/OUTBREAK AFRO; DIAZ, Janet Victoria; kerriganm@nicd.ac.za; awimmer@iom.int; marii@unicef.org; k.hamilton@oie.int; rekpini@unicef.org; AROlogistics; raraj@globalhealthdev.org; cnavarrocolorado@unicef.org; YAO, N'da Konan Michel; FORMENTY, Pierre B.h.; BALDE, Thierno; eoc@ecdc.europa.eu; olivier.lepolain@phe.gov.uk; olaolu.aderinola@ncdc.gov.ng; rapid.deployments@phe.gov.uk; VAN DE WEERDT, Reinhilde; panu.saaristo@ifrc.org; RYAN, Michael J.; PESIGAN, Arturo; peter.horby@ndm.ox.ac.uk; QUEYRAS, Guillaume; SLATTERY, Raphael James; Daniel.Bausch@phe.gov.uk; ROSEWELL, Alexander Edmund; support@ecdc.europa.eu; lee.lior@canada.ca; HAROUNA DJINGAREY, Mamoudou; ROVIRA VILAPLANA, Jose; ALI AHMED, Yahaya; tina.endericks@phe.gov.uk; DOULL, Linda; PENDERGAST, Scott Douglas; LEECH, Louise Jocelyn; GRAAFF, Peter Jan; KENNEY, Erin Maura; outbreak; ALBERTI, Kathryn; LEGROS, Dominique; OLSON, David; AZE, Jean-christophe; paul.effler@health.wa.gov.au; mdcfda@nus.edu.sg; aldighsy@paho.org; YOTI, Zabulon; STOROZHENKO, Oleg Nikolayevich; FALL, Ibrahima Soce; BARBOZA, Philippe; MORGAN, Oliver; HUGONNET, Stéphane Alexandre Louis; CHRISTENSEN, Renee; DRURY, Patrick Anthony; SURI, Sameera; UMALI DALANGIN, Khristeen; Amadou.SALL@pasteur.sn; Gail.carson@ndm.ox.ac.uk; fvogt@itg.be; januszp@nicd.ac.za; jean-claude.manuguerra@pasteur.fr; myriam.henkens@msf.org; namusisiolivia@afenet.net; brian.mccloskey@phe.gov.uk; poh_lian_lim@ttsh.com.sg; rca8@cdc.gov; jwleduc@utmb.edu; nidx@chinacdc.cn; emohsni@globalhealthdev.org; BEJTULLAHU, Armand; zhangyp@chinacdc.cn; LEE, Chin-kei; salmon (b)(6) (b)(6)
Cc: goarn
Subject: GOARN Weekly Ops call: 2020-01-23
When: Thursday, January 23, 2020 2:00 PM-3:00 PM (UTC+01:00) Brussels, Copenhagen, Madrid, Paris.
Where: Upper SHOC / WebEx

Dear colleagues,

You are kindly invited to the GOARN Weekly Operations Call on **Thursday, 23 January 2020** at **14:00 – 15:00 (Geneva time).**

Agenda:

- EVD, DRC

  - Find daily WHO Situation updates posted on the Knowledge Platform (*Operations* > *Ebola Virus Disease, Democratic Republic of the Congo (North Kivu), 2018* > Updates (on the right side))
- Novel Coronavirus (nCoV), China
- AoB

Please see below dial-in details:
IMPORTANT: All participants must enter full name and institution name when joining the WebEx call.

Click here to join the meeting by Webex
1. Enter your full name and institution.
2. Enter the meeting access code: (b)(6)

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GOARN Operational Support Team

Global Outbreak Alert and Response Network (GOARN)
Division of Emergency Response (WRE)
WHO Health Emergencies Programme (WHE)
World Health Organization
Avenue Appia 20
1211 Geneva 27, Switzerland

E-mail: goarn@who.int

NOTE: Please note that this WebEx service allows audio and other information sent during the session to be recorded. By joining this session, you automatically consent to such recordings. If you do not consent to being recorded, discuss your concerns with the host or do not join the session. The recording is used for the purpose of minutes.

From: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP)
Sent: Mon, 27 Jan 2020 11:13:23 +0000
To: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP);Beach, Michael J. (CDC/DDID/NCEZID/DFWED);Bunga, Sudhir (CDC state.gov);Clarke, Kevin R. (CDC/DDPHSIS/CGH/DGHP);Dahl, Benjamin A. (CDC/DDPHSIS/CGH/GID);Damon, Inger K. (CDC/DDID/NCEZID/DHCPP);EOC IM;Fox, LeAnne M. (CDC/DDID/NCIRD/DBD);GDD-OUTBREAK (CDC);Geissler, Aimee L. (CDC/DDID/NCEZID/DFWED);Greene, Carolyn M. (CDC/DDID/NCIRD/ID);Helfand, Rita (CDC/DDID/NCEZID/OD);Henao, Olga (CDC/DDPHSIS/CGH/DGHP);Hyde, Terri (CDC/DDPHSIS/CGH/GID);Kaiser, Reinhard (CDC/DDPHSIS/CGH/DGHP);Klena, John D. (CDC/DDID/NCEZID/DHCPP);Knight, Nancy (CDC/DDPHSIS/CGH/DGHP);Kolwaite, Amy R. (CDC/DDID/NCEZID/DHQP);Lessa, Fernanda (CDC/DDID/NCEZID/DHQP);McQuiston, Jennifer H. (CDC/DDID/NCEZID/DHCPP);Neatherlin, John C. (CDC/DDPHSIS/CGH/DGHP);Nelson, Lisa J. (CDC/DDPHSIS/CGH/DGHT);Nichol, Stuart T. (CDC/DDID/NCEZID/DHCPP);OConnor, John (CDC/DDID/NCEZID/OD);Park, Benjamin (CDC/DDID/NCEZID/DHQP);Patel, Anita (CDC/DDID/NCIRD/OD);Pesik, Nicki (CDC/DDID/NCEZID/OD);Prue, Christine (CDC/DDID/NCEZID/OD);Raghunathan, Pratima (CDC/DDPHSIS/CGH/OD);Roohi, Shahrokh (CDC/DDID/NCEZID/DGMQ);Rotz, Lisa (CDC/DDID/NCEZID/DGMQ);Rouse, Edward N. (CDC/DDPHSIS/CPR/DEO);Simonds, R. J. (CDC/DDPHSIS/CGH/OD);Smith, Rachel M. (CDC/DDID/NCEZID/DHQP);Soke, Gnakub (Norbert) (CDC/DDPHSIS/CGH/GID);Spath (CDC);Williams, Seymour (CDC/DDPHSIS/CGH/DGHP)
Subject: FW: GOARN Weekly Ops call: Monday 27 January (08:00 Atlanta) / Latest sitrep
Attachments: 20200126_SitRep-6-2019- nCoV.PDF

The GOARN call is this morning at 08:00. Please note below the password that is required to access the call.

Thanks.
Ray

From: goarn <goarn@who.int>
Sent: Monday, January 27, 2020 3:13 AM
Subject: GOARN Weekly Ops call: Monday 27 January (14:00 Geneva) / Latest sitrep

Dear colleagues,

In preparation for the GOARN Weekly Ops call today at 14:00 Geneva time, please find attached latest sitrep for the Novel Coronavirus (2019-nCoV).

Best regards

GOARN Operational Support Team

Global Outbreak Alert and Response Network (GOARN)
Division of Emergency Response (WRE)
WHO Health Emergencies Programme (WHE)
World Health Organization
Avenue Appia 20
1211 Geneva 27, Switzerland

E-mail: goarn@who.int

Dear colleagues,

You are kindly invited to the GOARN Coordination Conference Call on **Monday, 27 January 2020** at **14:00 – 15:00 (Geneva time).**

Draft Agenda:

1. EVD, DRC

2. Novel Coronavirus (nCoV)
   Update / WHO and Partners
   Global Strategic Response Outline

   https://www.who.int/emergencies/diseases/novel-coronavirus-2019/situation-reports/

3. AoB

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2. Enter the meeting access code: (b)(6)
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- *Mute your microphone* unless *speaking.*

GOARN Operational Support Team

Global Outbreak Alert and Response Network (GOARN)
Division of Emergency Response (WRE)
WHO Health Emergencies Programme (WHE)
World Health Organization
Avenue Appia 20
1211 Geneva 27, Switzerland

E-mail: goarn@who.int

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(b)(4)

From: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP)
Sent: Tue, 28 Jan 2020 17:50:39 +0000
To: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP);Beach, Michael J. (CDC/DDID/NCEZID/DFWED);Bunga, Sudhir (CDC state.gov);Clarke, Kevin R. (CDC/DDPHSIS/CGH/DGHP);Dahl, Benjamin A. (CDC/DDPHSIS/CGH/GID);Damon, Inger K. (CDC/DDID/NCEZID/DHCPP);EOC IM;Fox, LeAnne M. (CDC/DDID/NCIRD/DBD);GDD-OUTBREAK (CDC);Geissler, Aimee L. (CDC/DDID/NCEZID/DFWED);Greene, Carolyn M. (CDC/DDID/NCIRD/ID);Helfand, Rita (CDC/DDID/NCEZID/OD);Henao, Olga (CDC/DDPHSIS/CGH/DGHP);Hyde, Terri (CDC/DDPHSIS/CGH/GID);Kaiser, Reinhard (CDC/DDPHSIS/CGH/DGHP);Klena, John D. (CDC/DDID/NCEZID/DHCPP);Knight, Nancy (CDC/DDPHSIS/CGH/DGHP);Kolwaite, Amy R. (CDC/DDID/NCEZID/DHQP);Lessa, Fernanda (CDC/DDID/NCEZID/DHQP);Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM);McQuiston, Jennifer H. (CDC/DDID/NCEZID/DHCPP);Neatherlin, John C. (CDC/DDPHSIS/CGH/DGHP);Nelson, Lisa J. (CDC/DDPHSIS/CGH/DGHT);Nichol, Stuart T. (CDC/DDID/NCEZID/DHCPP);OConnor, John (CDC/DDID/NCEZID/OD);Park, Benjamin (CDC/DDID/NCEZID/DHQP);Patel, Anita (CDC/DDID/NCIRD/OD);Pesik, Nicki (CDC/DDID/NCEZID/OD);Prue, Christine (CDC/DDID/NCEZID/OD);Raghunathan, Pratima (CDC/DDPHSIS/CGH/OD);Roohi, Shahrokh (CDC/DDID/NCEZID/DGMQ);Rotz, Lisa (CDC/DDID/NCEZID/DGMQ);Rouse, Edward N. (CDC/DDPHSIS/CPR/DEO);Simonds, R. J. (CDC/DDPHSIS/CGH/OD);Smith, Rachel M. (CDC/DDID/NCEZID/DHQP);Soke, Gnakub (Norbert) (CDC/DDPHSIS/CGH/GID);Spath (CDC);Williams, Seymour (CDC/DDPHSIS/CGH/DGHP)
Subject: FW: GOARN weekly ops call Thursday 30 Jan. 08:00 EST
Attachments: GOARN weekly ops call 2020-01-30

Dear colleagues,

You are kindly invited to the GOARN Weekly Operations Call on **Thursday, 30 January 2020** at **14:00 – 15:00 (Geneva time).**

Agenda:

- EVD, DRC
    - Find daily WHO Situation updates posted on the Knowledge Platform > Operations > Ebola Virus Disease, Democratic Republic of the Congo (North Kivu), 2018 > Updates (on the right side)
- 2019-nCoV
- Other business

Please see below dial-in details:
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From: goarn
Sent: Tue, 28 Jan 2020 16:41:10 +0000
To: acicero@jhu.edu
Bcc: ??
Subject: GOARN weekly ops call 2020-01-30
Importance: High

Dear colleagues,

You are kindly invited to the GOARN Weekly Operations Call on **Thursday, 30 January 2020** at **14:00 – 15:00 (Geneva time).**

Agenda:

- EVD, DRC
    - Find daily WHO Situation updates posted on the Knowledge Platform > Operations > Ebola Virus Disease, Democratic Republic of the Congo (North Kivu), 2018 > Updates (on the right side)
- 2019-nCoV
- Other business

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IMPORTANT: All participants must enter full name and institution name when joining the WebEx call.

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From: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP)
Sent: Wed, 29 Jan 2020 22:36:41 +0000
To: SURI, Sameera
Cc: Dale Fisher
Subject: RE: Having trouble joining from home

Thanks Sam. I was finally able to connect via phone about 15 min after the hour. In addition to the call notes, please send the slides.

I wanted to compliment you on your response (b)(6)
(b)(6)
However, I suggest that we still follow up with Carlos.

My Friday calendar has a Webex with the same subject as today's. Is there another call?

Best,
Ray

From: SURI, Sameera <suris@who.int>
Sent: Wednesday, January 29, 2020 9:04 AM
To: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP) <rca8@cdc.gov>
Subject: RE: Having trouble joining from home

Hi Ray
I hope you managed to hear us. Julia was on the call as well. I will have meeting notes out soon to the group as well.
If you have any questions please feel free to email me anytime.
Best
Sam

From: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP) <rca8@cdc.gov>
Sent: Wednesday, January 29, 2020 1:12 PM
To: DRURY, Patrick Anthony <druryp@who.int>; SURI, Sameera <suris@who.int>
Subject: Having trouble joining from home

Ray R. Arthur, PhD
Lead, Global Disease Detection Operations Center
Emergency Response and Recovery Branch

Division of Global Health Protection
Center for Global Health
Centers for Disease Control and Prevention

1600 Clifton Road, NE

MS: H21-9
Atlanta, GA 30329
Phone: 404-639-3855
Mobile: (b)(6)
rarthur@cdc.gov

From: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP)
Sent: Thu, 30 Jan 2020 11:48:28 +0000
To: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP);Beach, Michael J. (CDC/DDID/NCEZID/DFWED);Bunga, Sudhir (CDC state.gov);Clarke, Kevin R. (CDC/DDPHSIS/CGH/DGHP);Dahl, Benjamin A. (CDC/DDPHSIS/CGH/GID);Damon, Inger K. (CDC/DDID/NCEZID/DHCPP);EOC IM;Fox, LeAnne M. (CDC/DDID/NCIRD/DBD);GDD-OUTBREAK (CDC);Geissler, Aimee L. (CDC/DDID/NCEZID/DFWED);Greene, Carolyn M. (CDC/DDID/NCIRD/ID);Helfand, Rita (CDC/DDID/NCEZID/OD);Henao, Olga (CDC/DDPHSIS/CGH/DGHP);Hyde, Terri (CDC/DDPHSIS/CGH/GID);Kaiser, Reinhard (CDC/DDPHSIS/CGH/DGHP);Klena, John D. (CDC/DDID/NCEZID/DHCPP);Knight, Nancy (CDC/DDPHSIS/CGH/DGHP);Kolwaite, Amy R. (CDC/DDID/NCEZID/DHQP);Lessa, Fernanda (CDC/DDID/NCEZID/DHQP);Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM);McQuiston, Jennifer H. (CDC/DDID/NCEZID/DHCPP);Neatherlin, John C. (CDC/DDPHSIS/CGH/DGHP);Nelson, Lisa J. (CDC/DDPHSIS/CGH/DGHT);Nichol, Stuart T. (CDC/DDID/NCEZID/DHCPP);OConnor, John (CDC/DDID/NCEZID/OD);Park, Benjamin (CDC/DDID/NCEZID/DHQP);Patel, Anita (CDC/DDID/NCIRD/OD);Pesik, Nicki (CDC/DDID/NCEZID/OD);Prue, Christine (CDC/DDID/NCEZID/OD);Raghunathan, Pratima (CDC/DDPHSIS/CGH/OD);Roohi, Shahrokh (CDC/DDID/NCEZID/DGMQ);Rotz, Lisa (CDC/DDID/NCEZID/DGMQ);Rouse, Edward N. (CDC/DDPHSIS/CPR/DEO);Simonds, R. J. (CDC/DDPHSIS/CGH/OD);Smith, Rachel M. (CDC/DDID/NCEZID/DHQP);Soke, Gnakub (Norbert) (CDC/DDPHSIS/CGH/GID);Spath (CDC);Williams, Seymour (CDC/DDPHSIS/CGH/DGHP)
Subject: GOARN weekly ops call postponed to Friday 31 Jan. 08:00 EST

The call has been rescheduled for Friday because the IHR Emergency Committee is meeting today.

Ray

Dear colleagues,

You are kindly invited to the GOARN Weekly Operations Call on **Thursday, 30 January 2020** at **14:00 – 15:00 (Geneva time).**

Agenda:

- EVD, DRC
    - Find daily WHO Situation updates posted on the Knowledge Platform > Operations > Ebola Virus Disease, Democratic Republic of the Congo (North Kivu), 2018 > Updates (on the right side)
- 2019-nCoV
- Other business

Please see below dial-in details:
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From: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP)
Sent: Wed, 5 Feb 2020 14:24:18 +0000
To: Beach, Michael J. (CDC/DDID/NCEZID/DFWED);Bresee, Joseph (CDC/DDID/NCIRD/ID);Bunga, Sudhir (CDC state.gov);Clarke, Kevin R. (CDC/DDPHSIS/CGH/DGHP);Dahl, Benjamin A. (CDC/DDPHSIS/CGH/GID);Damon, Inger K. (CDC/DDID/NCEZID/DHCPP);EOC IM;Fox, LeAnne M. (CDC/DDID/NCIRD/DBD);GDD-OUTBREAK (CDC);Geissler, Aimee L. (CDC/DDID/NCEZID/DFWED);Greene, Carolyn M. (CDC/DDID/NCIRD/ID);Helfand, Rita (CDC/DDID/NCEZID/OD);Henao, Olga (CDC/DDPHSIS/CGH/DGHP);Hyde, Terri (CDC/DDPHSIS/CGH/GID);Kaiser, Reinhard (CDC/DDPHSIS/CGH/DGHP);Klena, John D. (CDC/DDID/NCEZID/DHCPP);Knight, Nancy (CDC/DDPHSIS/CGH/DGHP);Kolwaite, Amy R. (CDC/DDID/NCEZID/DHQP);Lessa, Fernanda (CDC/DDID/NCEZID/DHQP);Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM);McQuiston, Jennifer H. (CDC/DDID/NCEZID/DHCPP);Moolenaar, Ronald L. (CDC/DDPHSIS/CGH/DGHP);Neatherlin, John C. (CDC/DDPHSIS/CGH/DGHP);Nelson, Lisa J. (CDC/DDPHSIS/CGH/DGHT);Nichol, Stuart T. (CDC/DDID/NCEZID/DHCPP);OConnor, John (CDC/DDID/NCEZID/OD);Park, Benjamin (CDC/DDID/NCEZID/DHQP);Patel, Anita (CDC/DDID/NCIRD/OD);Pesik, Nicki (CDC/DDID/NCEZID/OD);Prue, Christine (CDC/DDID/NCEZID/OD);Raghunathan, Pratima (CDC/DDPHSIS/CGH/OD);Roohi, Shahrokh (CDC/DDID/NCEZID/DGMQ);Rotz, Lisa (CDC/DDID/NCEZID/DGMQ);Rouse, Edward N. (CDC/DDPHSIS/CPR/DEO);Simonds, R. J. (CDC/DDPHSIS/CGH/OD);Smith, Rachel M. (CDC/DDID/NCEZID/DHQP);Soke, Gnakub (Norbert) (CDC/DDPHSIS/CGH/GID);Spath (CDC)
Subject: FW: GOARN weekly ops call 6 Feb. 08:00 EST
Attachments: GOARN weekly ops call 2020-02-06

Dear colleagues,

You are kindly invited to the GOARN Weekly Operations Call on **Thursday, 06 February 2020** at **14:00 – 15:00 (Geneva time).**

Agenda:

- EVD, DRC
    - Find daily WHO Situation updates posted on the Knowledge Platform > Operations > Ebola Virus Disease, Democratic Republic of the Congo (North Kivu), 2018 > Updates (on the right side)
- 2019-nCoV
- Other business

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- *Mute your microphone* unless *speaking.*

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World Health Organization
Avenue Appia 20
1211 Geneva 27, Switzerland

E-mail: goarn@who.int

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From: goarn
Sent: Wed, 5 Feb 2020 08:19:27 +0000
To: acicero@jhu.edu
Bcc: ??
Subject: GOARN weekly ops call 2020-02-06
Importance: High

Dear colleagues,

You are kindly invited to the GOARN Weekly Operations Call on **Thursday, 06 February 2020** at **14:00 – 15:00 (Geneva time).**

Agenda:

- EVD, DRC
    - Find daily WHO Situation updates posted on the Knowledge Platform > Operations > Ebola Virus Disease, Democratic Republic of the Congo (North Kivu), 2018 > Updates (on the right side)
- 2019-nCoV
- Other business

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2. Enter the meeting access code: (b)(6)

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1211 Geneva 27, Switzerland

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From: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP)
Sent: Wed, 12 Feb 2020 16:29:53 +0000
To: Beach, Michael J. (CDC/DDID/NCEZID/DFWED);Bresee, Joseph (CDC/DDID/NCIRD/ID);Bunga, Sudhir (CDC state.gov);Clarke, Kevin R. (CDC/DDPHSIS/CGH/DGHP);Dahl, Benjamin A. (CDC/DDPHSIS/CGH/GID);Damon, Inger K. (CDC/DDID/NCEZID/DHCPP);EOC IM;Fox, LeAnne M. (CDC/DDID/NCIRD/DBD);GDD-OUTBREAK (CDC);Geissler, Aimee L. (CDC/DDID/NCEZID/DFWED);Greene, Carolyn M. (CDC/DDID/NCIRD/ID);Helfand, Rita (CDC/DDID/NCEZID/OD);Henao, Olga (CDC/DDPHSIS/CGH/DGHP);Hyde, Terri (CDC/DDPHSIS/CGH/GID);Kaiser, Reinhard (CDC/DDPHSIS/CGH/DGHP);Klena, John D. (CDC/DDID/NCEZID/DHCPP);Knight, Nancy (CDC/DDPHSIS/CGH/DGHP);Kolwaite, Amy R. (CDC/DDID/NCEZID/DHQP);Lessa, Fernanda (CDC/DDID/NCEZID/DHQP);Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM);McQuiston, Jennifer H. (CDC/DDID/NCEZID/DHCPP);Moolenaar, Ronald L. (CDC/DDPHSIS/CGH/DGHP);Neatherlin, John C. (CDC/DDPHSIS/CGH/DGHP);Nelson, Lisa J. (CDC/DDPHSIS/CGH/DGHT);Nichol, Stuart T. (CDC/DDID/NCEZID/DHCPP);OConnor, John (CDC/DDID/NCEZID/OD);Park, Benjamin (CDC/DDID/NCEZID/DHQP);Patel, Anita (CDC/DDID/NCIRD/OD);Pesik, Nicki (CDC/DDID/NCEZID/OD);Prue, Christine (CDC/DDID/NCEZID/OD);Raghunathan, Pratima (CDC/DDPHSIS/CGH/OD);Roohi, Shahrokh (CDC/DDID/NCEZID/DGMQ);Rotz, Lisa (CDC/DDID/NCEZID/DGMQ);Rouse, Edward N. (CDC/DDPHSIS/CPR/DEO);Simonds, R. J. (CDC/DDPHSIS/CGH/OD);Smith, Rachel M. (CDC/DDID/NCEZID/DHQP);Soke, Gnakub (Norbert) (CDC/DDPHSIS/CGH/GID);Spath (CDC)
Subject: GOARN Wkly Ops Call 13 Feb. 08:00 EST

Dear colleagues,

You are kindly invited to the GOARN Weekly Operations Call on **Thursday, 13 February 2020** at **14:00 – 15:00 (Geneva time).**

Agenda:

- EVD, DRC
    - Find daily WHO Situation updates posted on the Knowledge Platform > Operations > Ebola Virus Disease, Democratic Republic of the Congo (North Kivu), 2018 > Updates (on the right side)
- COVID-19
- Other business

Please see below dial-in details:
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- *Mute your microphone* unless *speaking.*
- *press the hand button in webex if you want to speak.*

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Avenue Appia 20
1211 Geneva 27, Switzerland

Ray R. Arthur, PhD
Lead, Global Disease Detection Operations Center
Emergency Response and Recovery Branch

Division of Global Health Protection
Center for Global Health
Centers for Disease Control and Prevention

1600 Clifton Road, NE
MS: H21-9
Atlanta, GA 30329
Phone: 404-639-3855
Mobile: (b)(6)
rarthur@cdc.gov

From: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP)
Sent: Thu, 16 Apr 2020 09:52:21 +0000
To: Armstrong, Gregory (CDC/DDID/NCEZID/OD);Beach, Michael J. (CDC/DDID/NCEZID/DFWED);Bennett, Sarah D. (CDC/DDPHSIS/CGH/GID);Bresee, Joseph (CDC/DDID/NCIRD/ID);Bunga, Sudhir (CDC state.gov);Clarke, Kevin R. (CDC/DDPHSIS/CGH/DGHP);Dahl, Benjamin A. (CDC/DDPHSIS/CGH/GID);Damon, Inger K. (CDC/DDID/NCEZID/DHCPP);Dawood, Fatimah S. (CDC/DDID/NCIRD/ID);EOC IM;Fox, LeAnne M. (CDC/DDID/NCIRD/DBD);GDD-OUTBREAK (CDC);Geissler, Aimee L. (CDC/DDID/NCEZID/DFWED);Greene, Carolyn M. (CDC/DDID/NCIRD/ID);Helfand, Rita (CDC/DDID/NCEZID/OD);Henao, Olga (CDC/DDPHSIS/CGH/DGHP);Hyde, Terri (CDC/DDPHSIS/CGH/GID);Kaiser, Reinhard (CDC/DDPHSIS/CGH/DGHP);Klena, John D. (CDC/DDID/NCEZID/DHCPP);Knight, Nancy (CDC/DDPHSIS/CGH/DGHP);Kolwaite, Amy R. (CDC/DDID/NCEZID/DHQP);Lessa, Fernanda (CDC/DDID/NCEZID/DHQP);Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM);McCarron, Margaret (Meg) (CDC/DDID/NCIRD/ID);McQuiston, Jennifer H. (CDC/DDID/NCEZID/DHCPP);Montandon, Michele (CDC/DDPHSIS/CGH/DGHT);Moolenaar, Ronald L. (CDC/DDPHSIS/CGH/DGHP);Neatherlin, John C. (CDC/DDPHSIS/CGH/DGHP);Nelson, Lisa J. (CDC/DDPHSIS/CGH/DGHT);Nichol, Stuart T. (CDC/DDID/NCEZID/DHCPP);OConnor, John (CDC/DDID/NCEZID/OD);Park, Benjamin (CDC/DDID/NCEZID/DHQP);Patel, Anita (CDC/DDID/NCIRD/OD);Pesik, Nicki (CDC/DDID/NCEZID/OD);Prue, Christine (CDC/DDID/NCEZID/OD);Raghunathan, Pratima (CDC/DDPHSIS/CGH/OD);Roohi, Shahrokh (CDC/DDID/NCEZID/DGMQ);Rotz, Lisa (CDC/DDID/NCEZID/DGMQ);Rouse, Edward N. (CDC/DDPHSIS/CPR/DEO);Simonds, R. J. (CDC/DDPHSIS/CGH/OD);Smith, Rachel M. (CDC/DDID/NCEZID/DHQP);Soke, Gnakub (Norbert) (CDC/DDPHSIS/CGH/GID);Spath (CDC)
Subject: GOARN Weekly Ops Call Thurs 16 April 8 am EDT

Dear Colleagues,

I just received the call info for the weekly ops call. I will also send a calendar invitation. Please join if you are available.

Agenda:

1. EVD
2. COVID-19
3. AOB

Join Zoom Meeting
(b)(6)
Meeting ID: (b)(6)

Dial by your location

(b)(6)	Switzerland
(b)(6)	Switzerland Toll-free
	Switzerland Toll-free
(b)(6)	US
(b)(6)	US Toll-free
	US Toll-free
	France Toll-free
	France Toll-free

Meeting ID: (b)(6)
Find your local number: (b)(6)

Join by SIP
(b)(6)

Join by Skype for Business
(b)(6)

Best,
Ray

Ray R. Arthur, PhD
Lead, Global Disease Detection Operations Center
Emergency Response and Recovery Branch

Division of Global Health Protection
Center for Global Health
Centers for Disease Control and Prevention

1600 Clifton Road, NE
MS: H21-9
Atlanta, GA 30329
Phone: 404-639-3855
Mobile: (b)(6)
rarthur@cdc.gov

From: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP)
Sent: Sat, 23 May 2020 13:57:51 +0000
To: Damon, Inger K. (CDC/DDID/NCEZID/DHCPP)
Subject: RE: GOARN website

Inger, I will ask Danny Harley to set up an account on the GOARN Knowledge Portal for you. No need to return the cold pack. Feel free to call at any time. Best, Ray

---

From: Damon, Inger K. (CDC/DDID/NCEZID/DHCPP) <iad7@cdc.gov>
Sent: Thursday, May 14, 2020 8:46 AM
To: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP) <rca8@cdc.gov>
Subject: GOARN website

Ray – Couple of questions. How do I request access to the GOARN website? Also, I wanted to talk with you about the IDweek meeting – and planning for a "COVID19 day" – wanted to get some suggestions for who to reach out to at WHO.

Also – I still have a cold pack from you (came with fish.) – How should I get it back to you?

Thanks

Inger

From: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP)
Sent: Fri, 3 Jan 2020 18:44:41 +0000
To: Damon, Inger K. (CDC/DDID/NCEZID/DHCPP)
Subject: RE: Ebola DRC_Data Pack - 3 January 2020

Just got a similar question from Athalia. I have not seen what Sheny prepared. I'll try to get the protocol from Janet on Monday. (b)(5)

(b)(5)

Happy New Year!
Ray

From: Damon, Inger K. (CDC/DDID/NCEZID/DHCPP) <iad7@cdc.gov>
Sent: Friday, January 3, 2020 1:39 PM
To: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP) <rca8@cdc.gov>
Subject: Re: Ebola DRC_Data Pack - 3 January 2020

(b)(5)

Inger K Damon MD PhD
Director, Division of High Consequence Pathogens and Pathology
NCEZID
CDC

From: Arthur, Ray (CDC/DDPHSIS/CGH/DGHP) <rca8@cdc.gov>
Sent: Friday, January 3, 2020 7:25:05 PM
To: Anderson, Mark (CDC/DDPHSIS/CGH/DGHP) <mea6@cdc.gov>; Arthur, Ray (CDC/DDPHSIS/CGH/DGHP) <rca8@cdc.gov>; Baggett, Kip (CDC/DDPHSIS/CGH/DGHP) <hfb8@cdc.gov>; Beach, Michael J. (CDC/DDID/NCEZID/DFWED) <mjb3@cdc.gov>; Blaney, David (CDC/DDID/NCEZID/DHCPP) <znr5@cdc.gov>; Brown, Vance R. (CDC/DDPHSIS/CGH/DGHP) <vhu7@cdc.gov>; CDC IMS Ebola Response EPI Team <eocevent176@cdc.gov>; Christie, Athalia (CDC/DDPHSIS/CGH/OD) <akc9@cdc.gov>; Damon, Inger K. (CDC/DDID/NCEZID/DHCPP) <iad7@cdc.gov>; Dietz, Patty (CDC/DDNID/NCBDDD/DHDD) <pad8@cdc.gov>; Fitter, David L. (CDC/DDPHSIS/CGH/GID) <vid3@cdc.gov>; Fox, Kimberley (CDC/DDID/NCIRD/DBD) <kaf6@cdc.gov>; Gallaway, Michael (Shayne) (CDC/DDNID/NCCDPHP/DPH) <lnx7@cdc.gov>; Geissler, Aimee L. (CDC/DDID/NCEZID/DFWED) <ihq5@cdc.gov>; Gilbert, Sherry (CDC/DDNID/NCCDPHP/DPH) <vgy8@cdc.gov>; Helfand, Rita (CDC/DDID/NCEZID/OD) <rzh7@cdc.gov>; Hyde, Terri (CDC/DDPHSIS/CGH/GID) <tkh4@cdc.gov>; Knicely, Kimberly (CDC/DDPHSS/CSELS/OD) <khl5@cdc.gov>; Martin, Michael (CDC/DDPHSIS/CGH/DGHT) <znd9@cdc.gov>; Meltzer, Martin I. (CDC/DDID/NCEZID/DPEI) <qzm4@cdc.gov>; Merrill, Rebecca D. (CDC/DDID/NCEZID/DGMQ) <xdf6@cdc.gov>; Montgomery, Joel M. (CDC/DDID/NCEZID/DHCPP) <ztq9@cdc.gov>; Neatherlin, John C. (CDC/DDPHSIS/CGH/DGHP) <jjn6@cdc.gov>; Nichol, Stuart T. (CDC/DDID/NCEZID/DHCPP) <stn1@cdc.gov>; OConnor, John (CDC/DDID/NCEZID/OD) <jpo2@cdc.gov>; Prue, Christine (CDC/DDID/NCEZID/OD) <cep9@cdc.gov>; Rao, Carol (CDC/DDPHSIS/CGH/DGHP) <cnr3@cdc.gov>; Roohi, Shahrokh (CDC/DDID/NCEZID/DGMQ) <snr2@cdc.gov>; RwandaEVD_CoordTem (CDC) <rwandaevd_coordteam@cdc.gov>; RwandaEVD_Surv (CDC) <RwandaEVD_Surv@cdc.gov>; Sami,

Samira (CDC/DDID/NCHHSTP/DHPSE) <iuw6@cdc.gov>; Shapiro, Craig (CDC/DDPHSIS/CPR/DEO) <cns1@cdc.gov>; Walke, Henry (CDC/DDID/NCEZID/DPEI) <hfw3@cdc.gov>; Wilson, Katie (CDC/DDID/NCEZID/DHQP) <vvd6@cdc.gov>; Young, Cathy (CDC/DDID/NCEZID/OD) <cay2@cdc.gov>
Subject: FW: Ebola DRC_Data Pack - 3 January 2020

- Concerns raised by WHO during today's IMST meeting:

(b)(5)

Ray

From: emergencypmo
Sent: Friday, January 3, 2020 12:12 PM
To: GHEBREYESUS, Tedros Adhanom <drtedros@who.int>
Cc: RYAN, Michael J. <ryanm@who.int>; YAO, N'da Konan Michel <yaom@who.int>; FALL, Ibrahima Soce <socef@who.int>; SCHWARTLANDER, Bernhard F. <schwartlanderb@who.int>; HERNANDEZ, Lindsey Caroline <hernandezl@who.int>; BENNETT, Simeon <simeonb@who.int>; AF RGO/OUTBREAK AFRO <afrooutbreak@who.int>; KABIR, Sophia <kabirso@who.int>; BRENNAN, Richard John <brennanr@who.int>; GREIN, Thomas <greint@who.int>; AZE, Jean-christophe <azej@who.int>
Subject: Ebola DRC_Data Pack - 3 January 2020

Dear Dr. Tedros,

Kindly find attached the EVD update for the response in North Kivu. Please let us know if you have any questions or require further information.

Best regards,

Jessica Kolmer

HQ Project Management Pillar, DRC EVD North Kivu Response | WHO Health Emergencies Programme (WHE)
Emergencypmo@who.int



From: docmohw
Sent: Mon, 2 Mar 2020 22:11:06 +0000
To: AYLWARD, Raymond Bruce J.;Alexander SEMENOV (alexvsemeno;Chikwe IHEKWEAZU (chikwe.ihekw;Clifford LANE (cliff.lane@nih.;Zhou, Weigong (CDC/DDID/NCIRD/ID);Dale FISHER (mdcfda@nus.edu.sg;Dr Hitoshi TAKAHASHI (takajin@;Natalia PSHENICHNAYA (natalia-;Tim ECKMANNS (EckmannsT@rki.de;XING, Jun;gmleung
Cc: Dr VAN KERKHOVE, Maria;Zunyou Wu;(SPmig) LEI ZHOU (b)(6) ;liangwn@nhc.gov.cn; (b)(6)
Subject: RE: Possible SPAM detected: RE: WITH ATTACHMENTS: WHO-China Joint Mission on COVID-19

Absolutely
Joint mission observation is very helpful for Korea to go a right way to win the war

JK

삼성 갤럭시 스마트폰에서 보냈습니다.

-------- 원본 이메일 --------
발신: "AYLWARD, Raymond Bruce J." <aylwardb@who.int>
날짜: 20/3/3 04:32 (GMT+09:00)
받은 사람: docmohw@snu.ac.kr, "Alexander SEMENOV (alexvsemeno" (b)(6) "Chikwe IHEKWEAZU (chikwe.ihekw" <chikwe.ihekweazu@ncdc.gov.ng>, "Clifford LANE (cliff.lane@nih." <cliff.lane@nih.gov>, "Zhou Weigong (CDC/DDID/NCIRD/" <waz6@cdc.gov>, "Dale FISHER (mdcfda@nus.edu.sg" <mdcfda@nus.edu.sg>, "Dr Hitoshi TAKAHASHI (takajin@" <takajin@nih.go.jp>, "Natalia PSHENICHNAYA (natalia-" <natalia-pshenichnaya@yandex.ru>, "Tim ECKMANNS (EckmannsT@rki.de" <EckmannsT@rki.de>, "XING, Jun" <xingj@who.int>, gmleung <gmleung@hku.hk>
참조: "Dr VAN KERKHOVE, Maria" <vankerkhovem@who.int>, Zunyou Wu (b)(6) , "(SPmig) LEI ZHOU" <zhoulei@chinacdc.cn> (b)(6) liangwn@nhc.gov.cn, (b)(6)
제목: RE: Possible SPAM detected: RE: WITH ATTACHMENTS: WHO-China Joint Mission on COVID-19

Dear Jong-Koo – really helpful to have this further information and insights on the Korea situation. Thank you so much. B

From: docmohw@snu.ac.kr <docmohw@snu.ac.kr>
Sent: Monday, March 2, 2020 00:53

To: AYLWARD, Raymond Bruce J. <aylwardb@who.int>; "Alexander SEMENOV (alexvsemeno" (b)(6) "Chikwe IHEKWEAZU (chikwe.ihekw" <chikwe.ihekweazu@ncdc.gov.ng>; "Clifford LANE (cliff.lane@nih." <cliff.lane@nih.gov>; "Zhou Weigong (CDC/DDID/NCIRD/" <waz6@cdc.gov>; "Dale FISHER (mdcfda@nus.edu.sg" <mdcfda@nus.edu.sg>; "Dr Hitoshi TAKAHASHI (takajin@" <takajin@nih.go.jp>; "LEE Jong-Koo (docmohw@snu.ac.k" <docmohw@snu.ac.kr>; "Natalia PSHENICHNAYA (natalia-" <natalia-pshenichnaya@yandex.ru>; "Tim ECKMANNS (EckmannsT@rki.de" <EckmannsT@rki.de>; XING, Jun <xingj@who.int>; gmleung <gmleung@hku.hk>
Cc: Dr VAN KERKHOVE, Maria <vankerkhovem@who.int>; Zunyou Wu (b)(6) (SPmig) LEI ZHOU <zhoulei@chinacdc.cn>; (b)(6) (b)(6) "liangwn@nhc.gov.cn" <liangwn@nhc.gov.cn>; " (b)(6) (b)(6)
Subject: Possible SPAM detected: RE: WITH ATTACHMENTS: WHO-China Joint Mission on COVID-19

Dear All

By the our report and experience of joint mission observation, we can accelerate the measures against outbreak of Republic Korea
I have contacted high level policymaker during Guangzhou in just time, Maria advised me

Outbreak of our country is progressing and evolving,
and we find that outbreak is associate with close contact history in relative close space in church and they are passionate, shoulder to shoulder and hand to hand, and outbreak in chronic mental health hospital we did not confirm relationship between church and hospital, but church peoples went to hospital due to funeral ceremony, dead of pneumonia case(aspiration?) of relative of church January.

I attach summery of press briefing and informal contact of KCDC staffs for your understanding only

Thanks for your advice and WHO colleagues

Jong-koo LEE MD, MPH, PhD

Director, Center for Healthy Society and Education

Professor, Department of Family Medicine

Seoul National University College of Medicine

Ihwajang-gil 71, Jongno-gu, Seoul, 110-810, Republic of Korea

Tel +82-2-740-8867, +82-2-3668-7350

Fax +82-2-766-1185

email : docmohw@snu.ac.kr; (b)(6)

---------- 원본 메일 ----------

보낸사람 : "AYLWARD, Raymond Bruce J." <aylwardb@who.int>

받는사람 : "Alexander SEMENOV (alexvsemeno" (b)(6) "Chikwe IHEKWEAZU (chikwe.ihekw" <chikwe.ihekweazu@ncdc.gov.ng>, "Clifford LANE (cliff.lane@nih." <cliff.lane@nih.gov>, "Zhou, Weigong (CDC/DDID/NCIRD/" <waz6@cdc.gov>, "Dale FISHER (mdcfda@nus.edu.sg" <mdcfda@nus.edu.sg>, "Dr Hitoshi TAKAHASHI (takajin@" <takajin@nih.go.jp>, "LEE Jong-Koo (docmohw@snu.ac.k" <docmohw@snu.ac.kr>, "Natalia PSHENICHNAYA (natalia-" <natalia-pshenichnaya@yandex.ru>, "Tim ECKMANNS (EckmannsT@rki.de" <EckmannsT@rki.de>, "XING, Jun" <xingj@who.int>, gmleung <gmleung@hku.hk>

참조 : "Dr VAN KERKHOVE, Maria" <vankerkhovem@who.int>, Zunyou Wu (b)(6), "(SPmig) LEI ZHOU" <zhoulei@chinacdc.cn>, (b)(6) >, "liangwn@nhc.gov.cn" <liangwn@nhc.gov.cn> (b)(6) (b)(6)

받은날짜 : 2020-03-02 (월) 03:44:04

제목 : WITH ATTACHMENTS: WHO-China Joint Mission on COVID-19

Dear International Members of the Joint Mission,

Clearly I need to get more sleep! Maria just pointed out that I had forgotten to send the attachments – please find the message/attachments again here:

I trust (hope!) that everyone remains in good health as you approach Day 7 since your departures from China. I have now had a 2nd test here in Geneva and am – of course – negative (thanks to the good care of our Chinese hosts).

Congratulations to those of you who have been on the frontlines of managing new cases and importations such as Chikwe in Nigeria.

I'm writing tonight to share with you three things:

1. the official **Chinese version of the Joint Mission report** that WHO received from the National Health Commission and which will be posted on our site;

2. the **WHO website links for the English version** of the report in case helpful:
    - in the section of WHO Coronavirus page: https://www.who.int/emergencies/diseases/novel-coronavirus-2019
    - direct link to the report in English: https://www.who.int/docs/default-source/coronaviruse/who-china-joint-mission-on-covid-19-final-report.pdf

3. a **short overview presentation** I quickly put together to share some of the key findings of the report in a VC with RD/WPRO and the WPRO Ministers of Health on Friday morning.

Please note, **I have added 3 slides on 'key epi/technical insights'** from our Mission to the end of the presentation. Maria and I put these together and WU Zunyou did a quick check/correction of them earlier this evening for us. **I would be most grateful if you might have a look at the 3 'technical insight' slides and provide any thoughts/corrections from your side**. I am not trying to be comprehensive but just to find a few key points that are important to understanding the evolving epi and containment impact in China.

I have also cc'd Dr LIANG, Dr WANG Bin, Dr Wu Zunyou and Dr Zhou Lei so that they can 'hear' the conversation (where all of them remain in quarantine at the Presidential Hotel in Beijing….).

With very best regards to all,

Bruce

From: AYLWARD, Raymond Bruce J.
Sent: Friday, February 28, 2020 10:58
To: GHEBREYESUS, Tedros Adhanom <drtedros@who.int>
Cc: KASAI, Takeshi <kasait@who.int>; GALEA, Gauden <galeag@who.int>; (b)(6); liangwn@nhc.gov.cn; liangwn@nhc.gov.cn; (b)(6) LI Juan (lijuan@nhc.gov.cn) <lijuan@nhc.gov.cn>; zhangyang@nhc.gov.cn; Alexander SEMENOV (b)(6) (b)(6) Chikwe IHEKWEAZU (chikwe.ihekweazu@ncdc.gov.ng) <chikwe.ihekweazu@ncdc.gov.ng>; Clifford LANE (cliff.lane@nih.gov) <cliff.lane@nih.gov>; Zhou, Weigong (CDC/DDID/NCIRD/ID) <waz6@cdc.gov>; Dale FISHER (mdcfda@nus.edu.sg) <mdcfda@nus.edu.sg>; Dr Hitoshi TAKAHASHI (takajin@nih.go.jp) <takajin@nih.go.jp>; LEE Jong-Koo (docmohw@snu.ac.kr) <docmohw@snu.ac.kr>; Natalia PSHENICHNAYA (natalia-pshenichnaya@yandex.ru) <natalia-pshenichnaya@yandex.ru>; Tim ECKMANNS (EckmannsT@rki.de) <EckmannsT@rki.de>; XING, Jun <xingj@who.int>; gmleung <gmleung@hku.hk>; Dr VAN KERKHOVE, Maria <vankerkhovem@who.int>; RYAN, Michael J. <ryanm@who.int>; SCHWARTLANDER, Bernhard F. <schwartlanderb@who.int>; MINHAS, Raman <minhasr@who.int>; SNIDER, Paige Anne <sniderp@who.int>; ALEXANDER, Nyka <alexandern@who.int>; STERN, Gabriella <sterng@who.int>
Subject: NEW - FOR PUBLIC RELEASE: WHO-China Joint Mission on COVID-19
Importance: High

Dr Tedros & colleagues,

Our eagle-eyed counterparts spotted a tiny edit I had inadvertently overlooked in the version just sent (an updated section now has six sub-sections but I had forgotten to say ‘6’ instead of ‘5’ in the preambular para).

I would be most grateful if the attached version be used as the ‘final final’ (with time stamp of 1100hr in the file name).

Apologies to all for any inconvenience.

Bruce

From: AYLWARD, Raymond Bruce J.
Sent: Friday, February 28, 2020 10:22
To: GHEBREYESUS, Tedros Adhanom <drtedros@who.int>
Cc: KASAI, Takeshi <kasait@who.int>; (b)(6) liangwn@nhc.gov.cn; liangwn@nhc.gov.cn; (b)(6); LI Juan (lijuan@nhc.gov.cn) <lijuan@nhc.gov.cn>; zhangyang@nhc.gov.cn; Alexander SEMENOV (b)(6) (b)(6) Chikwe IHEKWEAZU (chikwe.ihekweazu@ncdc.gov.ng) <chikwe.ihekweazu@ncdc.gov.ng>; Clifford LANE (cliff.lane@nih.gov) <cliff.lane@nih.gov>; Zhou, Weigong (CDC/DDID/NCIRD/ID) <waz6@cdc.gov>; Dale FISHER (mdcfda@nus.edu.sg) <mdcfda@nus.edu.sg>; Dr Hitoshi TAKAHASHI (takajin@nih.go.jp) <takajin@nih.go.jp>; LEE Jong-Koo (docmohw@snu.ac.kr) <docmohw@snu.ac.kr>; Natalia PSHENICHNAYA (natalia-pshenichnaya@yandex.ru) <natalia-pshenichnaya@yandex.ru>; Tim ECKMANNS (EckmannsT@rki.de) <EckmannsT@rki.de>; XING, Jun <xingj@who.int>; gmleung <gmleung@hku.hk>; Dr VAN KERKHOVE, Maria <vankerkhovem@who.int>; RYAN, Michael J. <ryanm@who.int>; SCHWARTLANDER, Bernhard F. <schwartlanderb@who.int>; MINHAS, Raman <minhasr@who.int>; SNIDER, Paige Anne <sniderp@who.int>; ALEXANDER, Nyka <alexandern@who.int>; STERN, Gabriella <sterng@who.int>
Subject: FOR PUBLIC RELEASE: WHO-China Joint Mission on COVID-19
Importance: High

Dear Dr Tedros,

It is my honor to share with you the attached, final version of the ***Report of the WHO-China Joint Mission on COVID-19***, on behalf of myself, my Co-Lead Dr LIANG Wannian, our Deputy Team Leader Dr WANG Bin, and the entire Joint Team of Chinese national and international members.

I am pleased to inform you that in the 24 hours since sharing a preliminary version of this report, the China and international members have fully aligned the language of the English and Chinese versions, allowing the release of both versions today.

It is agreed with our Chinese counterparts that the English version can be released immediately, given the urgency of sharing these findings with the international community. The Honorable Minister of Health, Dr MA Xiaowei, will release the Chinese version within hours.

In closing, I would like to reiterate my personal gratitude to Dr LIANG for his deep experience and guidance as we consolidated our findings, and to the entire Team for their tremendous contributions throughout. As you and I have discussed, this was truly a Joint Mission and the quality of this report reflects the world-class expertise of all team members, both national and international. The attached findings and recommendations reflect the collective opinion of the entire team, all of whom have been closely engaged in its writing and finalization.

It is our common hope and belief that the findings contained herein can inform the global work you are leading to stem the ongoing international spread of COVID-19.

Regards

Bruce

From: AYLWARD, Raymond Bruce J.
Sent: Mon, 2 Mar 2020 19:32:18 +0000
To: docmohw@snu.ac.kr;Alexander SEMENOV (alexvsemeno;Chikwe IHEKWEAZU (chikwe.ihekw;Clifford LANE (cliff.lane@nih.;Zhou, Weigong (CDC/DDID/NCIRD/ID);Dale FISHER (mdcfda@nus.edu.sg;Dr Hitoshi TAKAHASHI (takajin@;Natalia PSHENICHNAYA (natalia-;Tim ECKMANNS (EckmannsT@rki.de;XING, Jun;gmleung
Cc: Dr VAN KERKHOVE, Maria;Zunyou Wu;(SPmig) LEI ZHOU;wsjkwlwn@163.com;liangwn@nhc.gov.cr (b)(6)
Subject: RE: Possible SPAM detected: RE: WITH ATTACHMENTS: WHO-China Joint Mission on COVID-19

Dear Jong-Koo – really helpful to have this further information and insights on the Korea situation. Thank you so much. B

From: docmohw@snu.ac.kr <docmohw@snu.ac.kr>
Sent: Monday, March 2, 2020 00:53
To: AYLWARD, Raymond Bruce J. <aylwardb@who.int>; "Alexander SEMENOV (alexvsemeno" (b)(6) "Chikwe IHEKWEAZU (chikwe.ihekw" <chikwe.ihekweazu@ncdc.gov.ng>; "Clifford LANE (cliff.lane@nih." <cliff.lane@nih.gov>; "Zhou Weigong (CDC/DDID/NCIRD/" <waz6@cdc.gov>; "Dale FISHER (mdcfda@nus.edu.sg" <mdcfda@nus.edu.sg>; "Dr Hitoshi TAKAHASHI (takajin@" <takajin@nih.go.jp>; "LEE Jong-Koo (docmohw@snu.ac.k" <docmohw@snu.ac.kr>; "Natalia PSHENICHNAYA (natalia-" <natalia-pshenichnaya@yandex.ru>; "Tim ECKMANNS (EckmannsT@rki.de" <EckmannsT@rki.de>; XING, Jun <xingj@who.int>; gmleung <gmleung@hku.hk>
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I attach summery of press briefing and informal contact of KCDC staffs for your understanding only

Thanks for your advice and WHO colleagues

Jong-koo LEE MD, MPH, PhD

Director, Center for Healthy Society and Education
Professor, Department of Family Medicine
Seoul National University College of Medicine
Ihwajang-gil 71, Jongno-gu, Seoul, 110-810, Republic of Korea
Tel +82-2-740-8867, +82-2-3668-7350
Fax +82-2-766-1185
email : docmohw@snu.ac.kr; (b)(6) @gmail.com

---------- 원본 메일 ----------

보낸사람 : "AYLWARD, Raymond Bruce J." <aylwardb@who.int>

받는사람 : "Alexander SEMENOV (alexvsemeno" (b)(6) "Chikwe IHEKWEAZU (chikwe.ihekw" <chikwe.ihekweazu@ncdc.gov.ng>, "Clifford LANE (cliff.lane@nih." <cliff.lane@nih.gov>, "Zhou, Weigong (CDC/DDID/NCIRD/" <waz6@cdc.gov>, "Dale FISHER (mdcfda@nus.edu.sg" <mdcfda@nus.edu.sg>, "Dr Hitoshi TAKAHASHI (takajin@" <takajin@nih.go.jp>, "LEE Jong-Koo (docmohw@snu.ac.k" <docmohw@snu.ac.kr>, "Natalia PSHENICHNAYA (natalia-" <natalia-pshenichnaya@yandex.ru>, "Tim ECKMANNS (EckmannsT@rki.de" <EckmannsT@rki.de>, "XING, Jun" <xingj@who.int>, gmleung <gmleung@hku.hk>

참조 : "Dr VAN KERKHOVE, Maria" <vankerkhovem@who.int>, Zunyou Wu (b)(6), "(SPmig) LEI ZHOU" <zhoulei@chinacdc.cn>, (b)(6) (b)(6), "liangwn@nhc.gov.cn" <liangwn@nhc.gov.cn>, (b)(6) (b)(6)

받은날짜 : 2020-03-02 (월) 03:44:04

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Sent: Friday, February 28, 2020 10:58
To: GHEBREYESUS, Tedros Adhanom <drtedros@who.int>
Cc: KASAI, Takeshi <kasait@who.int>; GALEA, Gauden <galeag@who.int>; (b)(6) liangwn@nhc.gov.cn; liangwn@nhc.gov.cn; (b)(6) LI Juan (lijuan@nhc.gov.cn) <lijuan@nhc.gov.cn>; zhangyang@nhc.gov.cn; Alexander SEMENOV (b)(6) (b)(6) Chikwe IHEKWEAZU (chikwe.ihekweazu@ncdc.gov.ng) <chikwe.ihekweazu@ncdc.gov.ng>; Clifford LANE (cliff.lane@nih.gov) <cliff.lane@nih.gov>; Zhou, Weigong (CDC/DDID/NCIRD/ID) <waz6@cdc.gov>; Dale FISHER (mdcfda@nus.edu.sg) <mdcfda@nus.edu.sg>; Dr Hitoshi TAKAHASHI (takajin@nih.go.jp) <takajin@nih.go.jp>; LEE Jong-Koo (docmohw@snu.ac.kr) <docmohw@snu.ac.kr>; Natalia PSHENICHNAYA (natalia-pshenichnaya@yandex.ru) <natalia-pshenichnaya@yandex.ru>; Tim ECKMANNS (EckmannsT@rki.de) <EckmannsT@rki.de>; XING, Jun <xingj@who.int>; gmleung <gmleung@hku.hk>; Dr VAN KERKHOVE, Maria <vankerkhovem@who.int>; RYAN, Michael J. <ryanm@who.int>; SCHWARTLANDER, Bernhard F. <schwartlanderb@who.int>; MINHAS, Raman <minhasr@who.int>; SNIDER, Paige Anne <sniderp@who.int>; ALEXANDER, Nyka <alexandern@who.int>; STERN, Gabriella <sterng@who.int>
Subject: NEW - FOR PUBLIC RELEASE: WHO-China Joint Mission on COVID-19
Importance: High

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Bruce

From: AYLWARD, Raymond Bruce J.
Sent: Friday, February 28, 2020 10:22
To: GHEBREYESUS, Tedros Adhanom <drtedros@who.int>
Cc: KASAI, Takeshi <kasait@who.int>; (b)(6) iangwn@nhc.gov.cn; liangwn@nhc.gov.cn; (b)(6) I Juan (lijuan@nhc.gov.cn) <lijuan@nhc.gov.cn>; zhangyang@nhc.gov.cn; Alexander SEMENOV (b)(6) (b)(6) Chikwe IHEKWEAZU (chikwe.ihekweazu@ncdc.gov.ng) <chikwe.ihekweazu@ncdc.gov.ng>; Clifford LANE (cliff.lane@nih.gov) <cliff.lane@nih.gov>; Zhou, Weigong (CDC/DDID/NCIRD/ID) <waz6@cdc.gov>; Dale FISHER (mdcfda@nus.edu.sg) <mdcfda@nus.edu.sg>; Dr Hitoshi TAKAHASHI (takajin@nih.go.jp) <takajin@nih.go.jp>; LEE Jong-Koo (docmohw@snu.ac.kr) <docmohw@snu.ac.kr>; Natalia PSHENICHNAYA (natalia-pshenichnaya@yandex.ru) <natalia-pshenichnaya@yandex.ru>; Tim ECKMANNS (EckmannsT@rki.de) <EckmannsT@rki.de>; XING, Jun <xingj@who.int>; gmleung <gmleung@hku.hk>; Dr VAN KERKHOVE, Maria <vankerkhovem@who.int>; RYAN, Michael J. <ryanm@who.int>; SCHWARTLANDER, Bernhard F. <schwartlanderb@who.int>; MINHAS, Raman <minhasr@who.int>; SNIDER, Paige Anne <sniderp@who.int>; ALEXANDER, Nyka <alexandern@who.int>; STERN, Gabriella <sterng@who.int>
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It is our common hope and belief that the findings contained herein can inform the global work you are leading to stem the ongoing international spread of COVID-19.

Regards

Bruce

From: AYLWARD, Raymond Bruce J.
Sent: Mon, 2 Mar 2020 19:30:49 +0000
To: gmleung;Dr VAN KERKHOVE, Maria
Cc: Alexander Semenov;Lane, Cliff (NIH/NIAID) [E];Chikwe IHEKWEAZU (chikwe.ihekweazu@ncdc.gov.ng);Zhou, Weigong (CDC/DDID/NCIRD/ID);Dale FISHER (mdcfda@nus.edu.sg);Dr Hitoshi TAKAHASHI (takajin@nih.go.jp);LEE Jong-Koo (docmohw@snu.ac.kr);Natalia PSHENICHNAYA (natalia-pshenichnaya@yandex.ru);Tim ECKMANNS (EckmannsT@rki.de);XING, Jun;Zunyou Wu;(SPmig) LEI (b)(6) m;liangwn@nhc.gov.cn (b)(6) (b)(6)
Subject: RE: WITH ATTACHMENTS: WHO-China Joint Mission on COVID-19

Indeed – good point, esp for planning.

But the milds also require isolation.

B

From: Gabriel Leung <gmleung@hku.hk>
Sent: Monday, March 2, 2020 02:15
To: Dr VAN KERKHOVE, Maria <vankerkhovem@who.int>
Cc: Alexander Semenov (b)(6) Lane, Cliff (NIH/NIAID) [E] <clane@niaid.nih.gov>; AYLWARD, Raymond Bruce J. <aylwardb@who.int>; Chikwe IHEKWEAZU (chikwe.ihekweazu@ncdc.gov.ng) <chikwe.ihekweazu@ncdc.gov.ng>; Zhou, Weigong (CDC/DDID/NCIRD/ID) <waz6@cdc.gov>; Dale FISHER (mdcfda@nus.edu.sg) <mdcfda@nus.edu.sg>; Dr Hitoshi TAKAHASHI (takajin@nih.go.jp) <takajin@nih.go.jp>; LEE Jong-Koo (docmohw@snu.ac.kr) <docmohw@snu.ac.kr>; Natalia PSHENICHNAYA (natalia-pshenichnaya@yandex.ru) <natalia-pshenichnaya@yandex.ru>; Tim ECKMANNS (EckmannsT@rki.de) <EckmannsT@rki.de>; XING, Jun <xingj@who.int> (b)(6) >; (SPmig) LEI ZHOU <zhoulei@chinacdc.cn>; (b)(6) cn; (b)(6)
Subject: Re: WITH ATTACHMENTS: WHO-China Joint Mission on COVID-19

This version looks fine to me, except perhaps we should distinguish further between mild and moderate rather than lumping them together as 80%. Moderate actually refers to those with pneumonia, which require hospitalisation as opposed to truly mild cases.

Gabriel

Gabriel M Leung 梁卓偉
Dean of Medicine
Helen and Francis Zimmern Professor in Population Health

T +852 3917 9210 | F +852 2818 7562
6/F, William MW Mong Block, 21 Sassoon Road, Pokfulam, Hong Kong

HKU Med LKS Faculty of Medicine
The University of Hong Kong
香港大學李嘉誠醫學院

On Mon, 2 Mar 2020 at 05:47, Dr VAN KERKHOVE, Maria <vankerkhovem@who.int> wrote:

Dear colleagues,

Some minor edits in the attached for consideration.

Thanks,
Maria

From: Alexander Semenov (b)(6)
Date: Sunday, 1 March 2020 at 20:48
To: Maria Van Kerkhove <vankerkhovem@who.int>
Cc: Cliff Lane <clane@niaid.nih.gov>, "AYLWARD, Raymond Bruce J." <aylwardb@who.int>, "chikwe.ihekweazu@ncdc.gov.ng" <chikwe.ihekweazu@ncdc.gov.ng>, "Zhou, Weigong (CDC/DDID/NCIRD/ID)" <waz6@CDC.GOV>, Dale Fisher <mdcfda@nus.edu.sg>, "Dr Hitoshi TAKAHASHI (takajin@nih.go.jp)" <takajin@nih.go.jp>, "LEE Jong-Koo (docmohw@snu.ac.kr)" <docmohw@snu.ac.kr>, "Natalia PSHENICHNAYA (natalia-pshenichnaya@yandex.ru)" <natalia-pshenichnaya@yandex.ru>, "eckmannst@rki.de" <EckmannsT@rki.de>, "XING, Jun" <xingj@who.int>, Gabriel Leung <gmleung@hku.hk>, Zunyou Wu (b)(6) t>, "(SPmig) LEI ZHOU" <zhoulei@chinacdc.cn>, " (b)(6) , "liangwn@nhc.gov.cn" <liangwn@nhc.gov.cn>, (b)(6)
< (b)(6)
Subject: Re: WITH ATTACHMENTS: WHO-China Joint Mission on COVID-19

Dear all,
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вс, 1 мар. 2020 г., 22:44 Dr VAN KERKHOVE, Maria <vankerkhovem@who.int>:

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The question I have is :

1) on the one hand, what we heard was that 1.2% of cases were asymptomatic at the time of reporting, but that many (up to 75%?) developed symptoms within a few days, so truly asymptomatic cases are rare.

2) on the other hand, without serologic surveys, we do not know the extent of asymptomatic/sub-clinical infection.

What do others think?

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On 1 Mar 2020, at 20:36, Lane, Cliff (NIH/NIAID) [E] <clane@niaid.nih.gov> wrote:

Bruce,

All looks good.

My only suggestion would be to (b)(5)

(b)(5)

Cliff

From: Bruce Aylward <aylwardb@who.int>
Date: Sunday, March 1, 2020 at 1:42 PM
To: Alexander SEMENOV (b)(6) "Chikwe IHEKWEAZU (chikwe.ihekweazu@ncdc.gov.ng)" <chikwe.ihekweazu@ncdc.gov.ng>, "Lane, Cliff (NIH/NIAID) [E]" <clane@niaid.nih.gov>, "Zhou, Weigong (CDC/DDID/NCIRD/ID)" <waz6@CDC.GOV>, "Dale FISHER (mdcfda@nus.edu.sg)" <mdcfda@nus.edu.sg>, "Dr Hitoshi TAKAHASHI (takajin@nih.go.jp)" <takajin@nih.go.jp>, Jong-koo Lee <docmohw@snu.ac.kr>, "Natalia PSHENICHNAYA (natalia-pshenichnaya@yandex.ru)" <natalia-pshenichnaya@yandex.ru>, "Tim ECKMANNS (EckmannsT@rki.de)" <EckmannsT@rki.de>, "XING, Jun" <xingj@who.int>, gmleung <gmleung@hku.hk>
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I have also cc'd Dr LIANG, Dr WANG Bin, Dr Wu Zunyou and Dr Zhou Lei so that they can 'hear' the conversation (where all of them remain in quarantine at the Presidential Hotel in Beijing….).

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To: Dr VAN KERKHOVE, Maria;Alexander Semenov
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Subject: RE: WITH ATTACHMENTS: WHO-China Joint Mission on COVID-19

Thanks all these are helpful

From: Dr VAN KERKHOVE, Maria <vankerkhovem@who.int>
Sent: Monday, 2 March 2020 5:46 AM
To: Alexander Semenov (b)(6)
Cc: Lane, Cliff (NIH/NIAID) [E] <clane@niaid.nih.gov>; AYLWARD, Raymond Bruce J. <aylwardb@who.int>; Chikwe IHEKWEAZU (chikwe.ihekweazu@ncdc.gov.ng) <chikwe.ihekweazu@ncdc.gov.ng>; Zhou, Weigong (CDC/DDID/NCIRD/ID) <waz6@CDC.GOV>; Dale Fisher <mdcfda@nus.edu.sg>; Dr Hitoshi TAKAHASHI (takajin@nih.go.jp) <takajin@nih.go.jp>; LEE Jong-Koo (docmohw@snu.ac.kr) <docmohw@snu.ac.kr>; Natalia PSHENICHNAYA (natalia-pshenichnaya@yandex.ru) <natalia-pshenichnaya@yandex.ru>; Tim ECKMANNS (EckmannsT@rki.de) <EckmannsT@rki.de>; XING, Jun <xingj@who.int>; gmleung <gmleung@hku.hk>; Zunyou Wu (b)(6) >; (SPmig) LEI ZHOU <zhoulei@chinacdc.cn>; (b)(6) liangwn@nhc.gov.cn; (b)(6)
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Bruce

From: AYLWARD, Raymond Bruce J.
Sent: Friday, February 28, 2020 10:58
To: GHEBREYESUS, Tedros Adhanom <drtedros@who.int>
Cc: KASAI, Takeshi <kasait@who.int>; GALEA, Gauden <galeag@who.int>; (b)(6); liangwn@nhc.gov.cn; liangwn@nhc.gov.cn; (b)(6); LI Juan (lijuan@nhc.gov.cn) <lijuan@nhc.gov.cn>; zhangyang@nhc.gov.cn; Alexander SEMENOV (b)(6) (b)(6) Chikwe IHEKWEAZU (chikwe.ihekweazu@ncdc.gov.ng) <chikwe.ihekweazu@ncdc.gov.ng>; Clifford LANE (cliff.lane@nih.gov) <cliff.lane@nih.gov>; Zhou, Weigong (CDC/DDID/NCIRD/ID) <waz6@cdc.gov>; Dale FISHER (mdcfda@nus.edu.sg) <mdcfda@nus.edu.sg>; Dr Hitoshi TAKAHASHI (takajin@nih.go.jp) <takajin@nih.go.jp>; LEE Jong-Koo (docmohw@snu.ac.kr) <docmohw@snu.ac.kr>; Natalia PSHENICHNAYA (natalia-pshenichnaya@yandex.ru) <natalia-pshenichnaya@yandex.ru>; Tim ECKMANNS (EckmannsT@rki.de) <EckmannsT@rki.de>; XING, Jun <xingj@who.int>; gmleung <gmleung@hku.hk>; Dr VAN KERKHOVE, Maria <vankerkhovem@who.int>; RYAN, Michael J. <ryanm@who.int>; SCHWARTLANDER, Bernhard F. <schwartlanderb@who.int>; MINHAS, Raman <minhasr@who.int>; SNIDER, Paige Anne <sniderp@who.int>; ALEXANDER, Nyka <alexandern@who.int>; STERN, Gabriella <sterng@who.int>
Subject: NEW - FOR PUBLIC RELEASE: WHO-China Joint Mission on COVID-19
Importance: High

Dr Tedros & colleagues,

Our eagle-eyed counterparts spotted a tiny edit I had inadvertently overlooked in the version just sent (an updated section now has six sub-sections but I had forgotten to say '6' instead of '5' in the preambular para).

I would be most grateful if the attached version be used as the 'final final' (with time stamp of 1100hr in the file name).

Apologies to all for any inconvenience.

Bruce

From: AYLWARD, Raymond Bruce J.
Sent: Friday, February 28, 2020 10:22
To: GHEBREYESUS, Tedros Adhanom <drtedros@who.int>
Cc: KASAI, Takeshi <kasait@who.int>; (b)(6) liangwn@nhc.gov.cn; liangwn@nhc.gov.cn; (b)(6) LI Juan (lijuan@nhc.gov.cn) <lijuan@nhc.gov.cn>; zhangyang@nhc.gov.cn; Alexander SEMENOV (b)(6) (b)(6) Chikwe IHEKWEAZU (chikwe.ihekweazu@ncdc.gov.ng) <chikwe.ihekweazu@ncdc.gov.ng>; Clifford LANE (cliff.lane@nih.gov) <cliff.lane@nih.gov>; Zhou, Weigong (CDC/DDID/NCIRD/ID) <waz6@cdc.gov>; Dale FISHER (mdcfda@nus.edu.sg) <mdcfda@nus.edu.sg>; Dr Hitoshi TAKAHASHI (takajin@nih.go.jp) <takajin@nih.go.jp>; LEE Jong-Koo (docmohw@snu.ac.kr) <docmohw@snu.ac.kr>; Natalia PSHENICHNAYA (natalia-pshenichnaya@yandex.ru) <natalia-pshenichnaya@yandex.ru>; Tim ECKMANNS (EckmannsT@rki.de) <EckmannsT@rki.de>; XING, Jun <xingj@who.int>; gmleung <gmleung@hku.hk>; Dr VAN KERKHOVE, Maria <vankerkhovem@who.int>; RYAN, Michael J. <ryanm@who.int>; SCHWARTLANDER, Bernhard F. <schwartlanderb@who.int>; MINHAS, Raman <minhasr@who.int>; SNIDER, Paige Anne <sniderp@who.int>; ALEXANDER, Nyka <alexandern@who.int>; STERN, Gabriella <sterng@who.int>
Subject: FOR PUBLIC RELEASE: WHO-China Joint Mission on COVID-19
Importance: High

Dear Dr Tedros,

It is my honor to share with you the attached, final version of the ***Report of the WHO-China Joint Mission on COVID-19***, on behalf of myself, my Co-Lead Dr LIANG Wannian, our Deputy Team Leader Dr WANG Bin, and the entire Joint Team of Chinese national and international members.

I am pleased to inform you that in the 24 hours since sharing a preliminary version of this report, the China and international members have fully aligned the language of the English and Chinese versions, allowing the release of both versions today.

It is agreed with our Chinese counterparts that the English version can be released immediately, given the urgency of sharing these findings with the international community. The Honorable Minister of Health, Dr MA Xiaowei, will release the Chinese version within hours.

In closing, I would like to reiterate my personal gratitude to Dr LIANG for his deep experience and guidance as we consolidated our findings, and to the entire Team for their tremendous contributions throughout. As you and I have discussed, this was truly a Joint Mission and the quality of this report reflects the world-class expertise of all team members, both national and international. The attached findings and recommendations reflect the collective opinion of the entire team, all of whom have been closely engaged in its writing and finalization.

It is our common hope and belief that the findings contained herein can inform the global work you are leading to stem the ongoing international spread of COVID-19.

Regards

Bruce

Important: This email is confidential and may be privileged. If you are not the intended recipient, please delete it and notify us immediately; you should not copy or use it for any purpose, nor disclose its contents to any other person. Thank you.

From: Igboh, Ledor (CDC/DDID/NCIRD/ID)
Sent: Tue, 31 Mar 2020 13:55:49 +0000
To: Azziz-Baumgartner, Eduardo (CDC/DDID/NCIRD/ID);Veguilla, Vic (CDC/DDID/NCIRD/ID)
Cc: McCarron, Margaret (Meg) (CDC/DDID/NCIRD/ID);Davis, William (CDC/DDID/NCIRD/ID);Fowlkes, Ashley C. (CDC/DDID/NCIRD/ID);Lafond, Kathryn (Katie) (CDC/DDID/NCIRD/ID);Arriola, Carmen Sofia (CDC/DDID/NCIRD/ID);Zhou, Weigong (CDC/DDID/NCIRD/ID);Zureick, Kinda (CDC/DDID/NCIRD/ID);Weatherspoon, Vashonia (CDC/DDID/NCIRD/ID)
Subject: RE: Confidential WHO Situation Report, Tuesday, 31 March 2020

Yes we get them from the situational awareness team on the Epi ITF.

From: Azziz-Baumgartner, Eduardo (CDC/DDID/NCIRD/ID) <eha9@cdc.gov>
Sent: Tuesday, March 31, 2020 9:47 AM
To: Veguilla, Vic (CDC/DDID/NCIRD/ID) <dhu3@cdc.gov>; Igboh, Ledor (CDC/DDID/NCIRD/ID) <ymq4@cdc.gov>
Cc: McCarron, Margaret (Meg) (CDC/DDID/NCIRD/ID) <dme8@cdc.gov>; Davis, William (CDC/DDID/NCIRD/ID) <lyo0@cdc.gov>; Fowlkes, Ashley C. (CDC/DDID/NCIRD/ID) <ahl4@cdc.gov>; Lafond, Kathryn (Katie) (CDC/DDID/NCIRD/ID) <gmj3@cdc.gov>; Arriola, Carmen Sofia (CDC/DDID/NCIRD/ID) <wus3@cdc.gov>; Zhou, Weigong (CDC/DDID/NCIRD/ID) <waz6@cdc.gov>; Zureick, Kinda (CDC/DDID/NCIRD/ID) <kpf1@cdc.gov>; Weatherspoon, Vashonia (CDC/DDID/NCIRD/ID) <vdw8@cdc.gov>
Subject: FW: Confidential WHO Situation Report, Tuesday, 31 March 2020

Vic, Ledor,

Do you get these? Note they are confidential (please do not forward).

E

From: McFarland, Jeffrey (CDC/DDPHSIS/CGH/GID) <jwm5@cdc.gov>
Sent: Tuesday, March 31, 2020 4:46 AM
To: Bennett, Sarah D. (CDC/DDPHSIS/CGH/GID) <iyk3@cdc.gov>; Arthur, Ray (CDC/DDPHSIS/CGH/DGHP) <rca8@cdc.gov>; Montandon, Michele (CDC/DDPHSIS/CGH/DGHT) <nkf3@cdc.gov>; Vitek, Charles (CDC/DDPHSIS/CGH/DGHT) <cxv3@cdc.gov>
Cc: Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM) <bxm5@cdc.gov>; Williams, Ian (CDC/DDID/NCEZID/DFWED) <iaw3@cdc.gov>; Armstrong, Gregory (CDC/DDID/NCEZID/OD) <gca3@cdc.gov>; Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM) <bxm5@cdc.gov>; Dirlikov, Emilio (CDC/DDPHSIS/CGH/DGHT) <klt9@cdc.gov>; Ghiselli, Margherita (CDC/DDPHSIS/CGH/GID) <wkz8@cdc.gov>; MOEN, Ann <moena@who.int>; Martin, Rebecca (CDC/DDPHSIS/CGH/OD) <rtm4@cdc.gov>; Jernigan, Daniel B. (CDC/DDID/NCIRD/ID) <dbj0@cdc.gov>; Fry, Alicia (CDC/DDID/NCIRD/ID) <agf1@cdc.gov>; GDD-OUTBREAK (CDC) <GDDOUTBREAK@cdc.gov>; Greene, Carolyn M. (CDC/DDID/NCIRD/ID) <cqg4@cdc.gov>; Bresee, Joseph (CDC/DDID/NCIRD/ID) <jsb6@cdc.gov>; Azziz-Baumgartner, Eduardo (CDC/DDID/NCIRD/ID) <eha9@cdc.gov>; Schluter, W. William (CDC/DDPHSIS/CGH/GID) <wbs8@cdc.gov>; Millman, Alexander J. (CDC/DDID/NCIRD/ID)

<irm6@cdc.gov>; Simonds, R. J. (CDC/DDPHSIS/CGH/OD) <rxs5@cdc.gov>; Lynch, Michael (CDC/DDPHSIS/CGH/GID) <wzl4@cdc.gov>
Subject: Confidential WHO Situation Report, Tuesday, 31 March 2020

Tuesday, 31 March 2020

Confidential WHO Situation Report, Monday, 30 March 2020

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From: McFarland, Jeffrey (CDC/DDPHSIS/CGH/GID)
Sent: Monday, March 30, 2020 11:41 AM
To: Bennett, Sarah D. (CDC/DDPHSIS/CGH/GID) <iyk3@cdc.gov>; Arthur, Ray (CDC/DDPHSIS/CGH/DGHP) <rca8@cdc.gov>; Montandon, Michele (CDC/DDPHSIS/CGH/DGHT) <nkf3@cdc.gov>; Vitek, Charles (CDC/DDPHSIS/CGH/DGHT) <cxv3@cdc.gov>
Cc: Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM) <bxm5@cdc.gov>; Williams, Ian (CDC/DDID/NCEZID/DFWED) <iaw3@cdc.gov>; Armstrong, Gregory (CDC/DDID/NCEZID/OD) <gca3@cdc.gov>; Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM) <bxm5@cdc.gov>; Dirlikov, Emilio (CDC/DDPHSIS/CGH/DGHT) <klt9@cdc.gov>; Ghiselli, Margherita (CDC/DDPHSIS/CGH/GID) <wkz8@cdc.gov>; MOEN, Ann <moena@who.int>; Martin, Rebecca (CDC/DDPHSIS/CGH/OD) <rtm4@cdc.gov>; Jernigan, Daniel B. (CDC/DDID/NCIRD/ID) <dbj0@cdc.gov>; Fry, Alicia (CDC/DDID/NCIRD/ID) <agf1@cdc.gov>; GDD-OUTBREAK (CDC) <GDDOUTBREAK@cdc.gov>; Greene, Carolyn M. (CDC/DDID/NCIRD/ID) <cqg4@cdc.gov>; Bresee, Joseph (CDC/DDID/NCIRD/ID) <jsb6@cdc.gov>; Azziz-Baumgartner, Eduardo (CDC/DDID/NCIRD/ID) <eha9@cdc.gov>; Schluter, W. William (CDC/DDPHSIS/CGH/GID) <wbs8@cdc.gov>; Millman, Alexander J. (CDC/DDID/NCIRD/ID) <irm6@cdc.gov>; Simonds, R. J. (CDC/DDPHSIS/CGH/OD) <rxs5@cdc.gov>; Lynch, Michael (CDC/DDPHSIS/CGH/GID) <wzl4@cdc.gov>
Subject: Confidential WHO Situation Report, Monday, 30 March 2020

Monday, 30 March 2020

Confidential WHO Situation Report, Monday, 30 March 2020

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From: McFarland, Jeffrey (CDC/DDPHSIS/CGH/GID)
Sent: Sunday, March 29, 2020 11:29 AM
To: Bennett, Sarah D. (CDC/DDPHSIS/CGH/GID) <iyk3@cdc.gov>; Arthur, Ray (CDC/DDPHSIS/CGH/DGHP) <rca8@cdc.gov>; Montandon, Michele (CDC/DDPHSIS/CGH/DGHT) <nkf3@cdc.gov>; Vitek, Charles (CDC/DDPHSIS/CGH/DGHT) <cxv3@cdc.gov>
Cc: Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM) <bxm5@cdc.gov>; Williams, Ian (CDC/DDID/NCEZID/DFWED) <iaw3@cdc.gov>; Armstrong, Gregory (CDC/DDID/NCEZID/OD) <gca3@cdc.gov>; Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM) <bxm5@cdc.gov>; Dirlikov, Emilio (CDC/DDPHSIS/CGH/DGHT) <klt9@cdc.gov>; Ghiselli, Margherita (CDC/DDPHSIS/CGH/GID) <wkz8@cdc.gov>; MOEN, Ann <moena@who.int>; Martin, Rebecca (CDC/DDPHSIS/CGH/OD) <rtm4@cdc.gov>; Jernigan, Daniel B. (CDC/DDID/NCIRD/ID) <dbj0@cdc.gov>; Fry, Alicia (CDC/DDID/NCIRD/ID) <agf1@cdc.gov>; GDD-OUTBREAK (CDC) <GDDOUTBREAK@cdc.gov>; Greene, Carolyn M. (CDC/DDID/NCIRD/ID) <cqg4@cdc.gov>; Bresee, Joseph (CDC/DDID/NCIRD/ID) <jsb6@cdc.gov>; Azziz-Baumgartner, Eduardo (CDC/DDID/NCIRD/ID) <eha9@cdc.gov>; Schluter, W. William (CDC/DDPHSIS/CGH/GID) <wbs8@cdc.gov>; Millman, Alexander J. (CDC/DDID/NCIRD/ID) <irm6@cdc.gov>; Simonds, R. J. (CDC/DDPHSIS/CGH/OD) <rxs5@cdc.gov>; Lynch, Michael (CDC/DDPHSIS/CGH/GID) <wzl4@cdc.gov>
Subject: Confidential WHO Situation Report, Sunday, 29 March 2020

Sunday, 29 March 2020

Confidential WHO Situation Report, Sunday, 29 March 2020

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From: McFarland, Jeffrey (CDC/DDPHSIS/CGH/GID)
Sent: Saturday, March 28, 2020 10:44 AM
To: Bennett, Sarah D. (CDC/DDPHSIS/CGH/GID) <iyk3@cdc.gov>; Arthur, Ray (CDC/DDPHSIS/CGH/DGHP) <rca8@cdc.gov>; Montandon, Michele (CDC/DDPHSIS/CGH/DGHT) <nkf3@cdc.gov>; Vitek, Charles (CDC/DDPHSIS/CGH/DGHT) <cxv3@cdc.gov>
Cc: Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM) <bxm5@cdc.gov>; Williams, Ian (CDC/DDID/NCEZID/DFWED) <iaw3@cdc.gov>; Armstrong, Gregory (CDC/DDID/NCEZID/OD) <gca3@cdc.gov>; Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM) <bxm5@cdc.gov>; Dirlikov, Emilio (CDC/DDPHSIS/CGH/DGHT) <klt9@cdc.gov>; Ghiselli, Margherita (CDC/DDPHSIS/CGH/GID) <wkz8@cdc.gov>; MOEN, Ann <moena@who.int>; Martin, Rebecca (CDC/DDPHSIS/CGH/OD) <rtm4@cdc.gov>; Jernigan, Daniel B. (CDC/DDID/NCIRD/ID) <dbj0@cdc.gov>; Fry, Alicia (CDC/DDID/NCIRD/ID) <agf1@cdc.gov>; GDD-OUTBREAK (CDC) <GDDOUTBREAK@cdc.gov>; Greene, Carolyn M. (CDC/DDID/NCIRD/ID) <cqg4@cdc.gov>; Bresee, Joseph (CDC/DDID/NCIRD/ID) <jsb6@cdc.gov>; Azziz-Baumgartner, Eduardo (CDC/DDID/NCIRD/ID) <eha9@cdc.gov>; Schluter, W. William (CDC/DDPHSIS/CGH/GID) <wbs8@cdc.gov>; Millman, Alexander J. (CDC/DDID/NCIRD/ID) <irm6@cdc.gov>; Simonds, R. J. (CDC/DDPHSIS/CGH/OD) <rxs5@cdc.gov>
Subject: Confidential WHO Situation Report, Saturday, 28 March 2020

Saturday, 28 March 2020

Confidential WHO Situation Report, Saturday, 28 March 2020

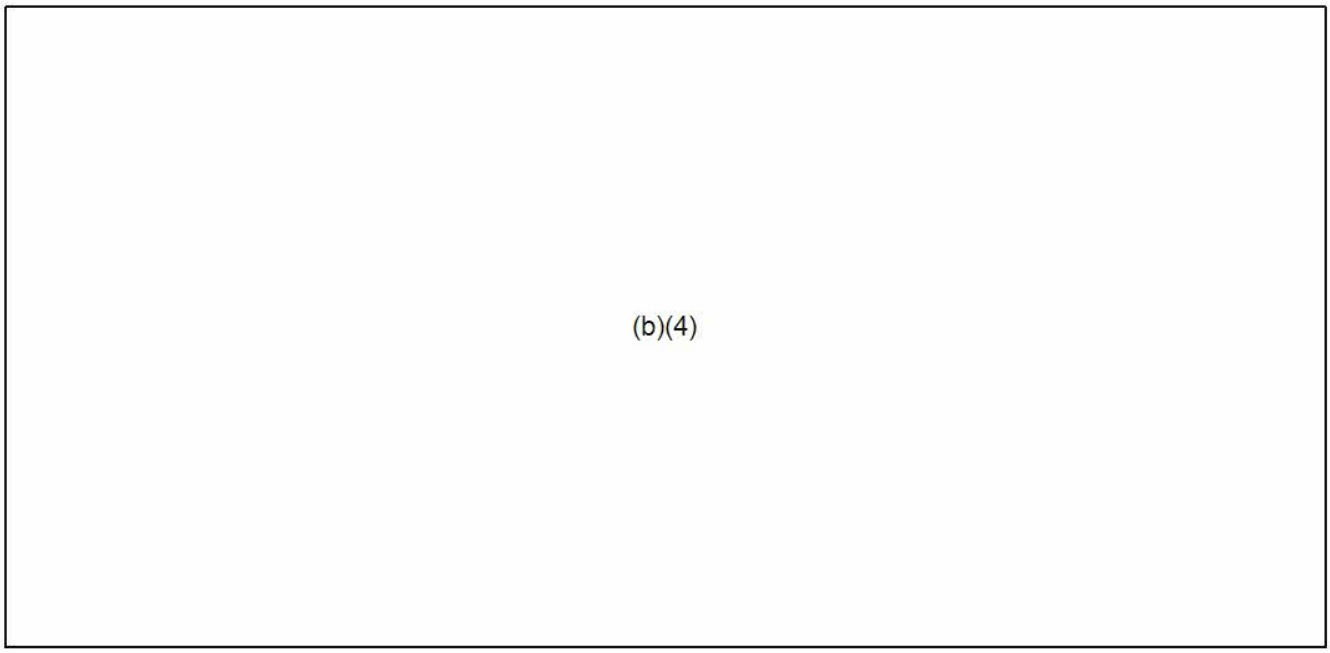
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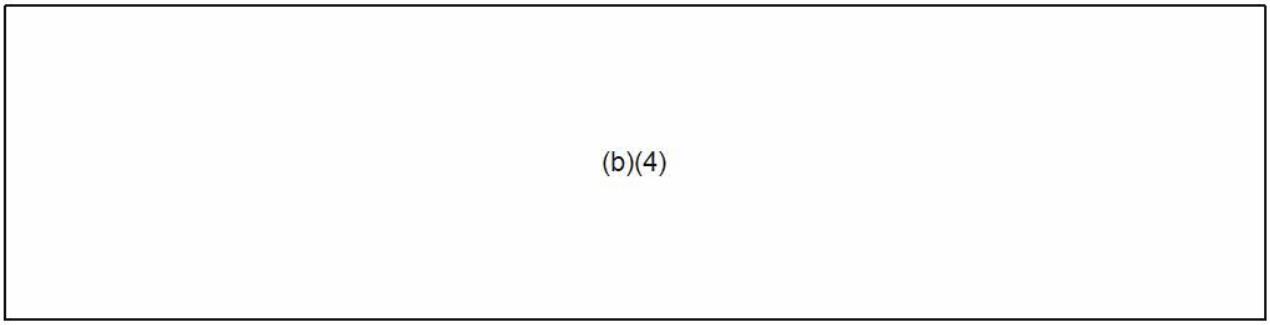
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From: McFarland, Jeffrey (CDC/DDPHSIS/CGH/GID)
Sent: Friday, March 27, 2020 11:22 AM
To: Bennett, Sarah D. (CDC/DDPHSIS/CGH/GID) <iyk3@cdc.gov>; Arthur, Ray (CDC/DDPHSIS/CGH/DGHP) <rca8@cdc.gov>; Montandon, Michele (CDC/DDPHSIS/CGH/DGHT) <nkf3@cdc.gov>; Vitek, Charles (CDC/DDPHSIS/CGH/DGHT) <cxv3@cdc.gov>
Cc: Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM) <bxm5@cdc.gov>; Williams, Ian (CDC/DDID/NCEZID/DFWED) <iaw3@cdc.gov>; Armstrong, Gregory (CDC/DDID/NCEZID/OD) <gca3@cdc.gov>; Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM) <bxm5@cdc.gov>; Dirlikov, Emilio (CDC/DDPHSIS/CGH/DGHT) <klt9@cdc.gov>; Ghiselli, Margherita (CDC/DDPHSIS/CGH/GID) <wkz8@cdc.gov>; MOEN, Ann <moena@who.int>; Martin, Rebecca (CDC/DDPHSIS/CGH/OD) <rtm4@cdc.gov>; Jernigan, Daniel B. (CDC/DDID/NCIRD/ID) <dbj0@cdc.gov>; Fry, Alicia (CDC/DDID/NCIRD/ID) <agf1@cdc.gov>; GDD-OUTBREAK (CDC) <GDDOUTBREAK@cdc.gov>; Greene, Carolyn M. (CDC/DDID/NCIRD/ID) <cqg4@cdc.gov>; Bresee, Joseph (CDC/DDID/NCIRD/ID) <jsb6@cdc.gov>; Azziz-Baumgartner, Eduardo (CDC/DDID/NCIRD/ID) <eha9@cdc.gov>; Schluter, W. William (CDC/DDPHSIS/CGH/GID) <wbs8@cdc.gov>; Millman, Alexander J. (CDC/DDID/NCIRD/ID) <irm6@cdc.gov>; Simonds, R. J. (CDC/DDPHSIS/CGH/OD) <rxs5@cdc.gov>
Subject: Confidential WHO Situation Report, Friday, 27 March 2020

Friday, 27 March 2020

Confidential WHO Situation Report, 27 March 2020



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Juliette Unwin, Robert Verity, Michaela Vollmer, Caroline Walters, Hao Wei Wang, Yuanrong Wang, Peter Winskill, Xiaoyue Xi, Neil M Ferguson1, Azra C Ghani1
On behalf of the Imperial College COVID-19 Response Team
WHO Collaborating Centre for Infectious Disease Modelling MRC Centre for Global Infectious Disease Analysis Abdul Latif Jameel Institute for Disease and Emergency Analytics Imperial College London
*Contributed equally
Correspondence: a.ghani@imperial.ac.uk

From: McFarland, Jeffrey (CDC/DDPHSIS/CGH/GID)
Sent: Thursday, March 26, 2020 11:38 AM
To: Bennett, Sarah D. (CDC/DDPHSIS/CGH/GID) <iyk3@cdc.gov>; Arthur, Ray (CDC/DDPHSIS/CGH/DGHP) <rca8@cdc.gov>; Montandon, Michele (CDC/DDPHSIS/CGH/DGHT) <nkf3@cdc.gov>; Vitek, Charles (CDC/DDPHSIS/CGH/DGHT) <cxv3@cdc.gov>
Cc: Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM) <bxm5@cdc.gov>; Williams, Ian (CDC/DDID/NCEZID/DFWED) <iaw3@cdc.gov>; Armstrong, Gregory (CDC/DDID/NCEZID/OD) <gca3@cdc.gov>; Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM) <bxm5@cdc.gov>; Dirlikov, Emilio (CDC/DDPHSIS/CGH/DGHT) <klt9@cdc.gov>; Ghiselli, Margherita (CDC/DDPHSIS/CGH/GID) <wkz8@cdc.gov>; MOEN, Ann <moena@who.int>; Martin, Rebecca (CDC/DDPHSIS/CGH/OD) <rtm4@cdc.gov>; Jernigan, Daniel B. (CDC/DDID/NCIRD/ID) <dbj0@cdc.gov>; Fry, Alicia (CDC/DDID/NCIRD/ID) <agf1@cdc.gov>; GDD-OUTBREAK (CDC) <GDDOUTBREAK@cdc.gov>; Greene, Carolyn M. (CDC/DDID/NCIRD/ID) <cqg4@cdc.gov>; Bresee, Joseph (CDC/DDID/NCIRD/ID) <jsb6@cdc.gov>; Azziz-Baumgartner, Eduardo (CDC/DDID/NCIRD/ID) <eha9@cdc.gov>; Schluter, W. William (CDC/DDPHSIS/CGH/GID) <wbs8@cdc.gov>; Millman, Alexander J. (CDC/DDID/NCIRD/ID) <irm6@cdc.gov>; Simonds, R. J. (CDC/DDPHSIS/CGH/OD) <rxs5@cdc.gov>
Subject: Confidential WHO Situation Report, Thursday, 26 March 2020

Thursday, 26 March 2020

Confidential WHO Situation Report, Thursday, 26 March 2020

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From: McFarland, Jeffrey (CDC/DDPHSIS/CGH/GID)
Sent: Wednesday, March 25, 2020 11:31 AM

To: Bennett, Sarah D. (CDC/DDPHSIS/CGH/GID) <iyk3@cdc.gov>; Arthur, Ray (CDC/DDPHSIS/CGH/DGHP) <rca8@cdc.gov>; Montandon, Michele (CDC/DDPHSIS/CGH/DGHT) <nkf3@cdc.gov>; Vitek, Charles (CDC/DDPHSIS/CGH/DGHT) <cxv3@cdc.gov>
Cc: Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM) <bxm5@cdc.gov>; Williams, Ian (CDC/DDID/NCEZID/DFWED) <iaw3@cdc.gov>; Armstrong, Gregory (CDC/DDID/NCEZID/OD) <gca3@cdc.gov>; Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM) <bxm5@cdc.gov>; Dirlikov, Emilio (CDC/DDPHSIS/CGH/DGHT) <klt9@cdc.gov>; Ghiselli, Margherita (CDC/DDPHSIS/CGH/GID) <wkz8@cdc.gov>; MOEN, Ann <moena@who.int>; Martin, Rebecca (CDC/DDPHSIS/CGH/OD) <rtm4@cdc.gov>; Jernigan, Daniel B. (CDC/DDID/NCIRD/ID) <dbj0@cdc.gov>; Fry, Alicia (CDC/DDID/NCIRD/ID) <agf1@cdc.gov>; GDD-OUTBREAK (CDC) <GDDOUTBREAK@cdc.gov>; Greene, Carolyn M. (CDC/DDID/NCIRD/ID) <cqg4@cdc.gov>; Bresee, Joseph (CDC/DDID/NCIRD/ID) <jsb6@cdc.gov>; Azziz-Baumgartner, Eduardo (CDC/DDID/NCIRD/ID) <eha9@cdc.gov>; Schluter, W. William (CDC/DDPHSIS/CGH/GID) <wbs8@cdc.gov>; Millman, Alexander J. (CDC/DDID/NCIRD/ID) <irm6@cdc.gov>; Simonds, R. J. (CDC/DDPHSIS/CGH/OD) <rxs5@cdc.gov>
Subject: Confidential WHO Situation Report, Wednesday, 25 March 2020

Wednesday, 25 March 2020

Confidential WHO Situation Report, Wednesday, 25 March 2020

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From: McFarland, Jeffrey (CDC/DDPHSIS/CGH/GID)
Sent: Tuesday, March 24, 2020 11:16 AM
To: Bennett, Sarah D. (CDC/DDPHSIS/CGH/GID) <iyk3@cdc.gov>; Arthur, Ray (CDC/DDPHSIS/CGH/DGHP) <rca8@cdc.gov>; Montandon, Michele (CDC/DDPHSIS/CGH/DGHT) <nkf3@cdc.gov>; Vitek, Charles (CDC/DDPHSIS/CGH/DGHT) <cxv3@cdc.gov>
Cc: Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM) <bxm5@cdc.gov>; Williams, Ian (CDC/DDID/NCEZID/DFWED) <iaw3@cdc.gov>; Armstrong, Gregory (CDC/DDID/NCEZID/OD) <gca3@cdc.gov>; Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM) <bxm5@cdc.gov>; Dirlikov, Emilio (CDC/DDPHSIS/CGH/DGHT) <klt9@cdc.gov>; Ghiselli, Margherita (CDC/DDPHSIS/CGH/GID) <wkz8@cdc.gov>; MOEN, Ann <moena@who.int>; Martin, Rebecca (CDC/DDPHSIS/CGH/OD) <rtm4@cdc.gov>; Jernigan, Daniel B. (CDC/DDID/NCIRD/ID) <dbj0@cdc.gov>; Fry, Alicia (CDC/DDID/NCIRD/ID) <agf1@cdc.gov>; GDD-OUTBREAK (CDC) <GDDOUTBREAK@cdc.gov>; Greene, Carolyn M. (CDC/DDID/NCIRD/ID) <cqg4@cdc.gov>; Bresee, Joseph (CDC/DDID/NCIRD/ID) <jsb6@cdc.gov>; Azziz-Baumgartner, Eduardo (CDC/DDID/NCIRD/ID) <eha9@cdc.gov>; Schluter, W. William (CDC/DDPHSIS/CGH/GID) <wbs8@cdc.gov>; Millman, Alexander J. (CDC/DDID/NCIRD/ID) <irm6@cdc.gov>; Simonds, R. J. (CDC/DDPHSIS/CGH/OD) <rxs5@cdc.gov>
Subject: Confidential WHO Situation Report, Tuesday, 24 March 2020

Tuesday, 24 March 2020

Confidential WHO Situation Report, Tuesday, 24 March 2020

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From: McFarland, Jeffrey (CDC/DDPHSIS/CGH/GID)
Sent: Monday, March 23, 2020 11:19 AM
To: Bennett, Sarah D. (CDC/DDPHSIS/CGH/GID) <iyk3@cdc.gov>; Arthur, Ray (CDC/DDPHSIS/CGH/DGHP) <rca8@cdc.gov>; Montandon, Michele (CDC/DDPHSIS/CGH/DGHT) <nkf3@cdc.gov>; Vitek, Charles (CDC/DDPHSIS/CGH/DGHT) <cxv3@cdc.gov>
Cc: Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM) <bxm5@cdc.gov>; Williams, Ian (CDC/DDID/NCEZID/DFWED) <iaw3@cdc.gov>; Armstrong, Gregory (CDC/DDID/NCEZID/OD) <gca3@cdc.gov>; Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM) <bxm5@cdc.gov>; Dirlikov, Emilio (CDC/DDPHSIS/CGH/DGHT) <klt9@cdc.gov>; Ghiselli, Margherita (CDC/DDPHSIS/CGH/GID) <wkz8@cdc.gov>; MOEN, Ann <moena@who.int>; Martin, Rebecca (CDC/DDPHSIS/CGH/OD) <rtm4@cdc.gov>; Jernigan, Daniel B. (CDC/DDID/NCIRD/ID) <dbj0@cdc.gov>; Fry, Alicia (CDC/DDID/NCIRD/ID) <agf1@cdc.gov>; GDD-OUTBREAK (CDC) <GDDOUTBREAK@cdc.gov>; Greene, Carolyn M. (CDC/DDID/NCIRD/ID) <cqg4@cdc.gov>; Bresee, Joseph (CDC/DDID/NCIRD/ID) <jsb6@cdc.gov>; Azziz-Baumgartner, Eduardo (CDC/DDID/NCIRD/ID) <eha9@cdc.gov>; Schluter, W. William (CDC/DDPHSIS/CGH/GID) <wbs8@cdc.gov>; Millman, Alexander J. (CDC/DDID/NCIRD/ID) <irm6@cdc.gov>; Simonds, R. J. (CDC/DDPHSIS/CGH/OD) <rxs5@cdc.gov>
Subject: Confidential WHO Situation Report, Monday, 23 March 2020

Monday, 23 March 2020

Confidential WHO Situation Report, Monday, 23 March 2020

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From: McFarland, Jeffrey (CDC/DDPHSIS/CGH/GID)
Sent: Sunday, March 22, 2020 11:37 AM
To: Bennett, Sarah D. (CDC/DDPHSIS/CGH/GID) <iyk3@cdc.gov>; Arthur, Ray (CDC/DDPHSIS/CGH/DGHP) <rca8@cdc.gov>; Montandon, Michele (CDC/DDPHSIS/CGH/DGHT) <nkf3@cdc.gov>; Vitek, Charles (CDC/DDPHSIS/CGH/DGHT) <cxv3@cdc.gov>
Cc: Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM) <bxm5@cdc.gov>; Williams, Ian (CDC/DDID/NCEZID/DFWED) <iaw3@cdc.gov>; Armstrong, Gregory (CDC/DDID/NCEZID/OD) <gca3@cdc.gov>; Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM) <bxm5@cdc.gov>; Dirlikov, Emilio (CDC/DDPHSIS/CGH/DGHT) <klt9@cdc.gov>; Ghiselli, Margherita (CDC/DDPHSIS/CGH/GID) <wkz8@cdc.gov>; MOEN, Ann <moena@who.int>; Martin, Rebecca (CDC/DDPHSIS/CGH/OD) <rtm4@cdc.gov>; Jernigan, Daniel B. (CDC/DDID/NCIRD/ID) <dbj0@cdc.gov>; Fry, Alicia (CDC/DDID/NCIRD/ID) <agf1@cdc.gov>; GDD-OUTBREAK (CDC) <GDDOUTBREAK@cdc.gov>; Greene, Carolyn M. (CDC/DDID/NCIRD/ID) <cqg4@cdc.gov>; Bresee, Joseph (CDC/DDID/NCIRD/ID) <jsb6@cdc.gov>; Azziz-Baumgartner, Eduardo (CDC/DDID/NCIRD/ID) <eha9@cdc.gov>; Schluter, W. William (CDC/DDPHSIS/CGH/GID) <wbs8@cdc.gov>; Millman, Alexander J. (CDC/DDID/NCIRD/ID) <irm6@cdc.gov>; Simonds, R. J. (CDC/DDPHSIS/CGH/OD) <rxs5@cdc.gov>
Subject: With Attachments RE: Confidential WHO Situation Report, Sunday, 22 March 2020

From: McFarland, Jeffrey (CDC/DDPHSIS/CGH/GID)
Sent: Sunday, March 22, 2020 11:35 AM
To: Bennett, Sarah D. (CDC/DDPHSIS/CGH/GID) <iyk3@cdc.gov>; Arthur, Ray (CDC/DDPHSIS/CGH/DGHP) <rca8@cdc.gov>; Montandon, Michele (CDC/DDPHSIS/CGH/DGHT) <nkf3@cdc.gov>; Vitek, Charles (CDC/DDPHSIS/CGH/DGHT) <cxv3@cdc.gov>
Cc: Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM) <bxm5@cdc.gov>; Williams, Ian (CDC/DDID/NCEZID/DFWED) <iaw3@cdc.gov>; Armstrong, Gregory (CDC/DDID/NCEZID/OD)

<gca3@cdc.gov>; Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM) <bxm5@cdc.gov>; Dirlikov, Emilio (CDC/DDPHSIS/CGH/DGHT) <klt9@cdc.gov>; Ghiselli, Margherita (CDC/DDPHSIS/CGH/GID) <wkz8@cdc.gov>; 'MOEN, Ann' <moena@who.int>; Martin, Rebecca (CDC/DDPHSIS/CGH/OD) <rtm4@cdc.gov>; Jernigan, Daniel B. (CDC/DDID/NCIRD/ID) <dbj0@cdc.gov>; Fry, Alicia (CDC/DDID/NCIRD/ID) <agf1@cdc.gov>; GDD-OUTBREAK (CDC) <GDDOUTBREAK@cdc.gov>; Greene, Carolyn M. (CDC/DDID/NCIRD/ID) <cqg4@cdc.gov>; Bresee, Joseph (CDC/DDID/NCIRD/ID) <jsb6@cdc.gov>; Azziz-Baumgartner, Eduardo (CDC/DDID/NCIRD/ID) <eha9@cdc.gov>; Schluter, W. William (CDC/DDPHSIS/CGH/GID) <wbs8@cdc.gov>; Millman, Alexander J. (CDC/DDID/NCIRD/ID) <irm6@cdc.gov>; Simonds, R. J. (CDC/DDPHSIS/CGH/OD) <rxs5@cdc.gov>
Subject: Confidential WHO Situation Report, Sunday, 22 March 2020

Sunday, 22 March 2020
Confidential WHO Situation Report, Sunday, 22 March 2020

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From: McFarland, Jeffrey (CDC/DDPHSIS/CGH/GID)
Sent: Saturday, March 21, 2020 10:54 AM
To: Bennett, Sarah D. (CDC/DDPHSIS/CGH/GID) <iyk3@cdc.gov>; Arthur, Ray (CDC/DDPHSIS/CGH/DGHP)

<rca8@cdc.gov>; Montandon, Michele (CDC/DDPHSIS/CGH/DGHT) <nkf3@cdc.gov>; Vitek, Charles (CDC/DDPHSIS/CGH/DGHT) <cxv3@cdc.gov>
Cc: Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM) <bxm5@cdc.gov>; Williams, Ian (CDC/DDID/NCEZID/DFWED) <iaw3@cdc.gov>; Armstrong, Gregory (CDC/DDID/NCEZID/OD) <gca3@cdc.gov>; Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM) <bxm5@cdc.gov>; Dirlikov, Emilio (CDC/DDPHSIS/CGH/DGHT) <klt9@cdc.gov>; Ghiselli, Margherita (CDC/DDPHSIS/CGH/GID) <wkz8@cdc.gov>; MOEN, Ann <moena@who.int>; Martin, Rebecca (CDC/DDPHSIS/CGH/OD) <rtm4@cdc.gov>; Jernigan, Daniel B. (CDC/DDID/NCIRD/ID) <dbj0@cdc.gov>; Fry, Alicia (CDC/DDID/NCIRD/ID) <agf1@cdc.gov>; GDD-OUTBREAK (CDC) <GDDOUTBREAK@cdc.gov>; Greene, Carolyn M. (CDC/DDID/NCIRD/ID) <cqg4@cdc.gov>; Bresee, Joseph (CDC/DDID/NCIRD/ID) <jsb6@cdc.gov>; Azziz-Baumgartner, Eduardo (CDC/DDID/NCIRD/ID) <eha9@cdc.gov>; Schluter, W. William (CDC/DDPHSIS/CGH/GID) <wbs8@cdc.gov>; Millman, Alexander J. (CDC/DDID/NCIRD/ID) <irm6@cdc.gov>; Simonds, R. J. (CDC/DDPHSIS/CGH/OD) <rxs5@cdc.gov>
Subject: Confidential WHO Situation Report, Saturday, 21 March 2020

Saturday, 21 March 2020

Confidential WHO Situation Report, Saturday, 21 March 2020

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From: McFarland, Jeffrey (CDC/DDPHSIS/CGH/GID)
Sent: Friday, March 20, 2020 11:32 AM
To: Bennett, Sarah D. (CDC/DDPHSIS/CGH/GID) <iyk3@cdc.gov>; Arthur, Ray (CDC/DDPHSIS/CGH/DGHP) <rca8@cdc.gov>; Montandon, Michele (CDC/DDPHSIS/CGH/DGHT) <nkf3@cdc.gov>; Vitek, Charles (CDC/DDPHSIS/CGH/DGHT) <cxv3@cdc.gov>
Cc: Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM) <bxm5@cdc.gov>; Williams, Ian (CDC/DDID/NCEZID/DFWED) <iaw3@cdc.gov>; Armstrong, Gregory (CDC/DDID/NCEZID/OD)

<gca3@cdc.gov>; Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM) <bxm5@cdc.gov>; Dirlikov, Emilio (CDC/DDPHSIS/CGH/DGHT) <klt9@cdc.gov>; Ghiselli, Margherita (CDC/DDPHSIS/CGH/GID) <wkz8@cdc.gov>; MOEN, Ann <moena@who.int>; Martin, Rebecca (CDC/DDPHSIS/CGH/OD) <rtm4@cdc.gov>; Jernigan, Daniel B. (CDC/DDID/NCIRD/ID) <dbj0@cdc.gov>; Fry, Alicia (CDC/DDID/NCIRD/ID) <agf1@cdc.gov>; GDD-OUTBREAK (CDC) <GDDOUTBREAK@cdc.gov>; Greene, Carolyn M. (CDC/DDID/NCIRD/ID) <cqg4@cdc.gov>; Bresee, Joseph (CDC/DDID/NCIRD/ID) <jsb6@cdc.gov>; Azziz-Baumgartner, Eduardo (CDC/DDID/NCIRD/ID) <eha9@cdc.gov>; Schluter, W. William (CDC/DDPHSIS/CGH/GID) <wbs8@cdc.gov>; Millman, Alexander J. (CDC/DDID/NCIRD/ID) <irm6@cdc.gov>; Simonds, R. J. (CDC/DDPHSIS/CGH/OD) <rxs5@cdc.gov>
Subject: Confidential WHO Situation Report, Friday, 20 March 2020

Friday, 20 March 2020

Confidential WHO Situation Report, Friday, 20 March 2020

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From: McFarland, Jeffrey (CDC/DDPHSIS/CGH/GID)
Sent: Thursday, March 19, 2020 11:28 AM
To: Bennett, Sarah D. (CDC/DDPHSIS/CGH/GID) <iyk3@cdc.gov>; Arthur, Ray (CDC/DDPHSIS/CGH/DGHP) <rca8@cdc.gov>; Montandon, Michele (CDC/DDPHSIS/CGH/DGHT) <nkf3@cdc.gov>; Vitek, Charles (CDC/DDPHSIS/CGH/DGHT) <cxv3@cdc.gov>
Cc: Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM) <bxm5@cdc.gov>; Williams, Ian (CDC/DDID/NCEZID/DFWED) <iaw3@cdc.gov>; Armstrong, Gregory (CDC/DDID/NCEZID/OD) <gca3@cdc.gov>; Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM) <bxm5@cdc.gov>; MOEN, Ann <moena@who.int>; Martin, Rebecca (CDC/DDPHSIS/CGH/OD) <rtm4@cdc.gov>; Jernigan, Daniel B. (CDC/DDID/NCIRD/ID) <dbj0@cdc.gov>; Fry, Alicia (CDC/DDID/NCIRD/ID) <agf1@cdc.gov>; GDD-OUTBREAK (CDC) <GDDOUTBREAK@cdc.gov>; Greene, Carolyn M. (CDC/DDID/NCIRD/ID) <cqg4@cdc.gov>; Bresee, Joseph (CDC/DDID/NCIRD/ID) <jsb6@cdc.gov>; Azziz-Baumgartner, Eduardo (CDC/DDID/NCIRD/ID) <eha9@cdc.gov>; Schluter, W. William (CDC/DDPHSIS/CGH/GID) <wbs8@cdc.gov>
Subject: Confidential WHO Situation Report, Thursday, 19 March 2020

Thursday 19 March 2020

Confidential WHO Situation Report, Thursday, 19MAR2020

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From: McFarland, Jeffrey (CDC/DDPHSIS/CGH/GID)
Sent: Wednesday, March 18, 2020 11:11 AM
To: Bennett, Sarah D. (CDC/DDPHSIS/CGH/GID) <iyk3@cdc.gov>; Arthur, Ray (CDC/DDPHSIS/CGH/DGHP) <rca8@cdc.gov>; Montandon, Michele (CDC/DDPHSIS/CGH/DGHT) <nkf3@cdc.gov>; Vitek, Charles (CDC/DDPHSIS/CGH/DGHT) <cxv3@cdc.gov>
Cc: Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM) <bxm5@cdc.gov>; Williams, Ian (CDC/DDID/NCEZID/DFWED) <iaw3@cdc.gov>; Armstrong, Gregory (CDC/DDID/NCEZID/OD) <gca3@cdc.gov>; Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM) <bxm5@cdc.gov>; MOEN, Ann <moena@who.int>; Martin, Rebecca (CDC/DDPHSIS/CGH/OD) <rtm4@cdc.gov>; Jernigan, Daniel B. (CDC/DDID/NCIRD/ID) <dbj0@cdc.gov>; Fry, Alicia (CDC/DDID/NCIRD/ID) <agf1@cdc.gov>; GDD-OUTBREAK (CDC) <GDDOUTBREAK@cdc.gov>; Greene, Carolyn M. (CDC/DDID/NCIRD/ID) <cqg4@cdc.gov>; Bresee, Joseph (CDC/DDID/NCIRD/ID) <jsb6@cdc.gov>; Azziz-Baumgartner, Eduardo

(CDC/DDID/NCIRD/ID) <eha9@cdc.gov>; Schluter, W. William (CDC/DDPHSIS/CGH/GID) <wbs8@cdc.gov>
Subject: Confidential WHO Situation Report, Wednesday, 18 March 2020

Wednesday 18 March 2020

Confidential WHO Situation Report, Wednesday, 18MAR2020

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From: McFarland, Jeffrey (CDC/DDPHSIS/CGH/GID)
Sent: Tuesday, March 17, 2020 10:57 AM
To: Bennett, Sarah D. (CDC/DDPHSIS/CGH/GID) <iyk3@cdc.gov>; Arthur, Ray (CDC/DDPHSIS/CGH/DGHP) <rca8@cdc.gov>; Montandon, Michele (CDC/DDPHSIS/CGH/DGHT) <nkf3@cdc.gov>; Vitek, Charles (CDC/DDPHSIS/CGH/DGHT) <cxv3@cdc.gov>
Cc: Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM) <bxm5@cdc.gov>; Williams, Ian (CDC/DDID/NCEZID/DFWED) <iaw3@cdc.gov>; Armstrong, Gregory (CDC/DDID/NCEZID/OD) <gca3@cdc.gov>; Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM) <bxm5@cdc.gov>; MOEN, Ann <moena@who.int>; Martin, Rebecca (CDC/DDPHSIS/CGH/OD) <rtm4@cdc.gov>; Jernigan, Daniel B. (CDC/DDID/NCIRD/ID) <dbj0@cdc.gov>; Fry, Alicia (CDC/DDID/NCIRD/ID) <agf1@cdc.gov>; Greene, Carolyn M. (CDC/DDID/NCIRD/ID) <cqg4@cdc.gov>; Bresee, Joseph (CDC/DDID/NCIRD/ID) <jsb6@cdc.gov>; Azziz-Baumgartner, Eduardo (CDC/DDID/NCIRD/ID) <eha9@cdc.gov>; Schluter, W. William (CDC/DDPHSIS/CGH/GID) <wbs8@cdc.gov>
Subject: Confidential WHO Situation Report, Tuesday, 17 March 2020

Tuesday 17 March 2020

Confidential WHO Situation Report, Monday, 16MAR2020

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From: McFarland, Jeffrey (CDC/DDPHSIS/CGH/GID)
Sent: Monday, March 16, 2020 11:20 AM
To: Bennett, Sarah D. (CDC/DDPHSIS/CGH/GID) <iyk3@cdc.gov>; Arthur, Ray (CDC/DDPHSIS/CGH/DGHP) <rca8@cdc.gov>; Montandon, Michele (CDC/DDPHSIS/CGH/DGHT) <nkf3@cdc.gov>; Vitek, Charles (CDC/DDPHSIS/CGH/DGHT) <cxv3@cdc.gov>
Cc: Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM) <bxm5@cdc.gov>; Williams, Ian

(CDC/DDID/NCEZID/DFWED) <iaw3@cdc.gov>; Armstrong, Gregory (CDC/DDID/NCEZID/OD) <gca3@cdc.gov>; Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM) <bxm5@cdc.gov>; 'MOEN, Ann' <moena@who.int>; Martin, Rebecca (CDC/DDPHSIS/CGH/OD) <rtm4@cdc.gov>; Jernigan, Daniel B. (CDC/DDID/NCIRD/ID) <dbj0@cdc.gov>; Fry, Alicia (CDC/DDID/NCIRD/ID) <agf1@cdc.gov>; Greene, Carolyn M. (CDC/DDID/NCIRD/ID) <cqg4@cdc.gov>; Bresee, Joseph (CDC/DDID/NCIRD/ID) <jsb6@cdc.gov>; Azziz-Baumgartner, Eduardo (CDC/DDID/NCIRD/ID) <eha9@cdc.gov>; Schluter, W. William (CDC/DDPHSIS/CGH/GID) <wbs8@cdc.gov>
Subject: Confidential WHO Situation Report, Monday, 16 March 2020

Monday 16 March 2020

Confidential WHO Situation Report, Monday, 16MAR2020

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From: McFarland, Jeffrey (CDC/DDPHSIS/CGH/GID)
Sent: Sunday, March 15, 2020 11:21 AM
To: Bennett, Sarah D. (CDC/DDPHSIS/CGH/GID) <iyk3@cdc.gov>; Arthur, Ray (CDC/DDPHSIS/CGH/DGHP) <rca8@cdc.gov>; Montandon, Michele (CDC/DDPHSIS/CGH/DGHT) <nkf3@cdc.gov>; Vitek, Charles (CDC/DDPHSIS/CGH/DGHT) <cxv3@cdc.gov>
Cc: Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM) <bxm5@cdc.gov>; Williams, Ian (CDC/DDID/NCEZID/DFWED) <iaw3@cdc.gov>; Armstrong, Gregory (CDC/DDID/NCEZID/OD) <gca3@cdc.gov>; Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM) <bxm5@cdc.gov>; MOEN, Ann <moena@who.int>; Martin, Rebecca (CDC/DDPHSIS/CGH/OD) <rtm4@cdc.gov>; Jernigan, Daniel B. (CDC/DDID/NCIRD/ID) <dbj0@cdc.gov>; Fry, Alicia (CDC/DDID/NCIRD/ID) <agf1@cdc.gov>; Greene, Carolyn M. (CDC/DDID/NCIRD/ID) <cqg4@cdc.gov>; Bresee, Joseph (CDC/DDID/NCIRD/ID) <jsb6@cdc.gov>; GDD-OUTBREAK (CDC) <GDDOUTBREAK@cdc.gov>; Azziz-Baumgartner, Eduardo (CDC/DDID/NCIRD/ID) <eha9@cdc.gov>; Schluter, W. William (CDC/DDPHSIS/CGH/GID) <wbs8@cdc.gov>
Subject: Confidential WHO Situation Report, Sunday, 15 March 2020

Sunday 15 March 2020

Confidential WHO Situation Report, Sunday, 15MAR2020

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From: McFarland, Jeffrey (CDC/DDPHSIS/CGH/GID)
Sent: Saturday, March 14, 2020 11:17 AM
To: Bennett, Sarah D. (CDC/DDPHSIS/CGH/GID) <iyk3@cdc.gov>; Arthur, Ray (CDC/DDPHSIS/CGH/DGHP) <rca8@cdc.gov>; Montandon, Michele (CDC/DDPHSIS/CGH/DGHT) <nkf3@cdc.gov>; Vitek, Charles (CDC/DDPHSIS/CGH/DGHT) <cxv3@cdc.gov>
Cc: Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM) <bxm5@cdc.gov>; Williams, Ian (CDC/DDID/NCEZID/DFWED) <iaw3@cdc.gov>; Armstrong, Gregory (CDC/DDID/NCEZID/OD) <gca3@cdc.gov>; Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM) <bxm5@cdc.gov>; MOEN, Ann <moena@who.int>; Martin, Rebecca (CDC/DDPHSIS/CGH/OD) <rtm4@cdc.gov>; Jernigan, Daniel B.

(CDC/DDID/NCIRD/ID) <dbj0@cdc.gov>; Fry, Alicia (CDC/DDID/NCIRD/ID) <agf1@cdc.gov>; Greene, Carolyn M. (CDC/DDID/NCIRD/ID) <cqg4@cdc.gov>; Bresee, Joseph (CDC/DDID/NCIRD/ID) <jsb6@cdc.gov>; GDD-OUTBREAK (CDC) <GDDOUTBREAK@cdc.gov>; Azziz-Baumgartner, Eduardo (CDC/DDID/NCIRD/ID) <eha9@cdc.gov>
Subject: Confidential WHO Situation Report, Saturday, 14 March 2020

Saturday 14 March 2020

Confidential WHO Situation Report, Saturday, 14MAR2020

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From: McFarland, Jeffrey (CDC/DDPHSIS/CGH/GID)
Sent: Friday, March 13, 2020 11:31 AM
To: Bennett, Sarah D. (CDC/DDPHSIS/CGH/GID) <iyk3@cdc.gov>; Arthur, Ray (CDC/DDPHSIS/CGH/DGHP) <rca8@cdc.gov>; Montandon, Michele (CDC/DDPHSIS/CGH/DGHT) <nkf3@cdc.gov>; Vitek, Charles (CDC/DDPHSIS/CGH/DGHT) <cxv3@cdc.gov>
Cc: Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM) <bxm5@cdc.gov>; Williams, Ian (CDC/DDID/NCEZID/DFWED) <iaw3@cdc.gov>; Armstrong, Gregory (CDC/DDID/NCEZID/OD) <gca3@cdc.gov>; Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM) <bxm5@cdc.gov>; MOEN, Ann <moena@who.int>; Martin, Rebecca (CDC/DDPHSIS/CGH/OD) <rtm4@cdc.gov>; Jernigan, Daniel B. (CDC/DDID/NCIRD/ID) <dbj0@cdc.gov>; Fry, Alicia (CDC/DDID/NCIRD/ID) <agf1@cdc.gov>; Greene, Carolyn M. (CDC/DDID/NCIRD/ID) <cqg4@cdc.gov>; Bresee, Joseph (CDC/DDID/NCIRD/ID) <jsb6@cdc.gov>; GDD-OUTBREAK (CDC) <GDDOUTBREAK@cdc.gov>; Azziz-Baumgartner, Eduardo (CDC/DDID/NCIRD/ID) <eha9@cdc.gov>
Subject: Confidential WHO Situation Report, Friday, 13 March 2020

Friday 13 March 2020

Confidential WHO Situation Report, Friday, 13MAR2020

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From: McFarland, Jeffrey (CDC/DDPHSIS/CGH/GID)
Sent: Thursday, March 12, 2020 11:02 AM
To: Bennett, Sarah D. (CDC/DDPHSIS/CGH/GID) <iyk3@cdc.gov>; Arthur, Ray (CDC/DDPHSIS/CGH/DGHP) <rca8@cdc.gov>; Montandon, Michele (CDC/DDPHSIS/CGH/DGHT) <nkf3@cdc.gov>; Vitek, Charles (CDC/DDPHSIS/CGH/DGHT) <cxv3@cdc.gov>
Cc: Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM) <bxm5@cdc.gov>; Williams, Ian (CDC/DDID/NCEZID/DFWED) <iaw3@cdc.gov>; Armstrong, Gregory (CDC/DDID/NCEZID/OD) <gca3@cdc.gov>; Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM) <bxm5@cdc.gov>; 'MOEN, Ann' <moena@who.int>; Martin, Rebecca (CDC/DDPHSIS/CGH/OD) <rtm4@cdc.gov>; Jernigan, Daniel B. (CDC/DDID/NCIRD/ID) <dbj0@cdc.gov>; Fry, Alicia (CDC/DDID/NCIRD/ID) <agf1@cdc.gov>; Greene, Carolyn M. (CDC/DDID/NCIRD/ID) <cqg4@cdc.gov>; Bresee, Joseph (CDC/DDID/NCIRD/ID) <jsb6@cdc.gov>; GDD-OUTBREAK (CDC) <GDDOUTBREAK@cdc.gov>; Azziz-Baumgartner, Eduardo (CDC/DDID/NCIRD/ID) <eha9@cdc.gov>
Subject: Confidential WHO Situation Report, Thursday, 12 March 2020

Thursday 12 March 2020

Confidential WHO Situation Report, Thursday, 12MAR2020

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From: McFarland, Jeffrey (CDC/DDPHSIS/CGH/GID)
Sent: Wednesday, March 11, 2020 11:05 AM
To: Bennett, Sarah D. (CDC/DDPHSIS/CGH/GID) <iyk3@cdc.gov>; Arthur, Ray (CDC/DDPHSIS/CGH/DGHP) <rca8@cdc.gov>; Montandon, Michele (CDC/DDPHSIS/CGH/DGHT) <nkf3@cdc.gov>; Vitek, Charles (CDC/DDPHSIS/CGH/DGHT) <cxv3@cdc.gov>
Cc: Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM) <bxm5@cdc.gov>; Williams, Ian (CDC/DDID/NCEZID/DFWED) <iaw3@cdc.gov>; Armstrong, Gregory (CDC/DDID/NCEZID/OD) <gca3@cdc.gov>; Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM) <bxm5@cdc.gov>; MOEN, Ann <moena@who.int>; Martin, Rebecca (CDC/DDPHSIS/CGH/OD) <rtm4@cdc.gov>; Jernigan, Daniel B. (CDC/DDID/NCIRD/ID) <dbj0@cdc.gov>; Fry, Alicia (CDC/DDID/NCIRD/ID) <agf1@cdc.gov>; Greene, Carolyn M. (CDC/DDID/NCIRD/ID) <cqg4@cdc.gov>; Bresee, Joseph (CDC/DDID/NCIRD/ID) <jsb6@cdc.gov>; GDD-OUTBREAK (CDC) <GDDOUTBREAK@cdc.gov>; Azziz-Baumgartner, Eduardo (CDC/DDID/NCIRD/ID) <eha9@cdc.gov>
Subject: Confidential WHO Situation Report, Wednesday, 11 March 2020

Wednesday 11 March 2020

Confidential WHO Situation Report, Wednesday, 11MAR2020

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From: McFarland, Jeffrey (CDC/DDPHSIS/CGH/GID)
Sent: Tuesday, March 10, 2020 11:15 AM
To: Bennett, Sarah D. (CDC/DDPHSIS/CGH/GID) <iyk3@cdc.gov>; Arthur, Ray (CDC/DDPHSIS/CGH/DGHP) <rca8@cdc.gov>; Montandon, Michele (CDC/DDPHSIS/CGH/DGHT) <nkf3@cdc.gov>; Vitek, Charles (CDC/DDPHSIS/CGH/DGHT) <cxv3@cdc.gov>
Cc: Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM) <bxm5@cdc.gov>; Williams, Ian (CDC/DDID/NCEZID/DFWED) <iaw3@cdc.gov>; Armstrong, Gregory (CDC/DDID/NCEZID/OD) <gca3@cdc.gov>; Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM) <bxm5@cdc.gov>; MOEN, Ann

<moena@who.int>; Martin, Rebecca (CDC/DDPHSIS/CGH/OD) <rtm4@cdc.gov>; Jernigan, Daniel B. (CDC/DDID/NCIRD/ID) <dbj0@cdc.gov>; Fry, Alicia (CDC/DDID/NCIRD/ID) <agf1@cdc.gov>; Greene, Carolyn M. (CDC/DDID/NCIRD/ID) <cqg4@cdc.gov>; Bresee, Joseph (CDC/DDID/NCIRD/ID) <jsb6@cdc.gov>; GDD-OUTBREAK (CDC) <GDDOUTBREAK@cdc.gov>; Azziz-Baumgartner, Eduardo (CDC/DDID/NCIRD/ID) <eha9@cdc.gov>
Subject: Confidential WHO Situation Report, Tuesday, 10 March 2020

Tuesday, 10 March 2020

Confidential WHO Situation Report, Tuesday, 10MAR2020

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From: McFarland, Jeffrey (CDC/DDPHSIS/CGH/GID)
Sent: Monday, March 9, 2020 11:04 AM
To: Bennett, Sarah D. (CDC/DDPHSIS/CGH/GID) <iyk3@cdc.gov>; Arthur, Ray (CDC/DDPHSIS/CGH/DGHP) <rca8@cdc.gov>; Montandon, Michele (CDC/DDPHSIS/CGH/DGHT) <nkf3@cdc.gov>
Cc: Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM) <bxm5@cdc.gov>; Williams, Ian (CDC/DDID/NCEZID/DFWED) <iaw3@cdc.gov>; Armstrong, Gregory (CDC/DDID/NCEZID/OD) <gca3@cdc.gov>; Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM) <bxm5@cdc.gov>; MOEN, Ann <moena@who.int>; Martin, Rebecca (CDC/DDPHSIS/CGH/OD) <rtm4@cdc.gov>; Jernigan, Daniel B. (CDC/DDID/NCIRD/ID) <dbj0@cdc.gov>; Fry, Alicia (CDC/DDID/NCIRD/ID) <agf1@cdc.gov>; Greene, Carolyn M. (CDC/DDID/NCIRD/ID) <cqg4@cdc.gov>; Bresee, Joseph (CDC/DDID/NCIRD/ID) <jsb6@cdc.gov>; GDD-OUTBREAK (CDC) <GDDOUTBREAK@cdc.gov>; Azziz-Baumgartner, Eduardo (CDC/DDID/NCIRD/ID) <eha9@cdc.gov>
Subject: Confidential WHO Situation Report, Monday, 09 March 2020

Monday, 09 March 2020

Confidential WHO Situation Report, Monday, 09MAR2020

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From: McFarland, Jeffrey (CDC/DDPHSIS/CGH/GID)
Sent: Sunday, March 8, 2020 11:06 AM
To: Bennett, Sarah D. (CDC/DDPHSIS/CGH/GID) <iyk3@cdc.gov>; Arthur, Ray (CDC/DDPHSIS/CGH/DGHP) <rca8@cdc.gov>; Montandon, Michele (CDC/DDPHSIS/CGH/DGHT) <nkf3@cdc.gov>
Cc: Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM) <bxm5@cdc.gov>; Williams, Ian

(CDC/DDID/NCEZID/DFWED) <iaw3@cdc.gov>; Armstrong, Gregory (CDC/DDID/NCEZID/OD) <gca3@cdc.gov>; Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM) <bxm5@cdc.gov>; MOEN, Ann <moena@who.int>; Martin, Rebecca (CDC/DDPHSIS/CGH/OD) <rtm4@cdc.gov>; Jernigan, Daniel B. (CDC/DDID/NCIRD/ID) <dbj0@cdc.gov>; Fry, Alicia (CDC/DDID/NCIRD/ID) <agf1@cdc.gov>; Greene, Carolyn M. (CDC/DDID/NCIRD/ID) <cqg4@cdc.gov>; Bresee, Joseph (CDC/DDID/NCIRD/ID) <jsb6@cdc.gov>; GDD-OUTBREAK (CDC) <GDDOUTBREAK@cdc.gov>; Azziz-Baumgartner, Eduardo (CDC/DDID/NCIRD/ID) <eha9@cdc.gov>
Subject: RE: Confidential WHO Situation Report, Sunday, 08 March 2020

Sunday, 08 March 2020

Confidential WHO Situation Report, Sunday, 08MAR2020

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From: McFarland, Jeffrey (CDC/DDPHSIS/CGH/GID)
Sent: Saturday, March 7, 2020 11:46 AM
To: Bennett, Sarah D. (CDC/DDPHSIS/CGH/GID) <iyk3@cdc.gov>; Arthur, Ray (CDC/DDPHSIS/CGH/DGHP) <rca8@cdc.gov>
Cc: Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM) <bxm5@cdc.gov>; Williams, Ian

(CDC/DDID/NCEZID/DFWED) <iaw3@cdc.gov>; Armstrong, Gregory (CDC/DDID/NCEZID/OD) <gca3@cdc.gov>; Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM) <bxm5@cdc.gov>; MOEN, Ann <moena@who.int>; Martin, Rebecca (CDC/DDPHSIS/CGH/OD) <rtm4@cdc.gov>; Jernigan, Daniel B. (CDC/DDID/NCIRD/ID) <dbj0@cdc.gov>; Fry, Alicia (CDC/DDID/NCIRD/ID) <agf1@cdc.gov>; Greene, Carolyn M. (CDC/DDID/NCIRD/ID) <cqg4@cdc.gov>; Bresee, Joseph (CDC/DDID/NCIRD/ID) <jsb6@cdc.gov>; GDD-OUTBREAK (CDC) <GDDOUTBREAK@cdc.gov>; Azziz-Baumgartner, Eduardo (CDC/DDID/NCIRD/ID) <eha9@cdc.gov>
Subject: RE: Confidential WHO Situation Report, Saturday, 07 March 2020

Saturday, 07 March 2020

Confidential WHO Situation Report, Saturday, 07MAR2020

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From: McFarland, Jeffrey (CDC/DDPHSIS/CGH/GID)
Sent: Friday, March 6, 2020 12:12 PM
To: Bennett, Sarah D. (CDC/DDPHSIS/CGH/GID) <iyk3@cdc.gov>; Arthur, Ray (CDC/DDPHSIS/CGH/DGHP) <rca8@cdc.gov>
Cc: Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM) <bxm5@cdc.gov>; Williams, Ian (CDC/DDID/NCEZID/DFWED) <iaw3@cdc.gov>; Armstrong, Gregory (CDC/DDID/NCEZID/OD) <gca3@cdc.gov>; Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM) <bxm5@cdc.gov>; MOEN, Ann <moena@who.int>; Martin, Rebecca (CDC/DDPHSIS/CGH/OD) <rtm4@cdc.gov>; Jernigan, Daniel B. (CDC/DDID/NCIRD/ID) <dbj0@cdc.gov>; Fry, Alicia (CDC/DDID/NCIRD/ID) <agf1@cdc.gov>; Greene, Carolyn M. (CDC/DDID/NCIRD/ID) <cqg4@cdc.gov>; Bresee, Joseph (CDC/DDID/NCIRD/ID) <jsb6@cdc.gov>; GDD-OUTBREAK (CDC) <GDDOUTBREAK@cdc.gov>; Azziz-Baumgartner, Eduardo (CDC/DDID/NCIRD/ID) <eha9@cdc.gov>
Subject: RE: Confidential WHO Situation Report, Wednesday, 04 March 2020

Friday, 06 March 2020

Confidential WHO Situation Report, Friday, 05MAR2020

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Please note that the graph and numbers are in the attached EXCEL.

From: McFarland, Jeffrey (CDC/DDPHSIS/CGH/GID)
Sent: Thursday, March 5, 2020 11:58 AM
To: Bennett, Sarah D. (CDC/DDPHSIS/CGH/GID) <iyk3@cdc.gov>; Arthur, Ray (CDC/DDPHSIS/CGH/DGHP) <rca8@cdc.gov>
Cc: Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM) <bxm5@cdc.gov>; Williams, Ian (CDC/DDID/NCEZID/DFWED) <iaw3@cdc.gov>; Armstrong, Gregory (CDC/DDID/NCEZID/OD) <gca3@cdc.gov>; Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM) <bxm5@cdc.gov>; MOEN, Ann <moena@who.int>; Martin, Rebecca (CDC/DDPHSIS/CGH/OD) <rtm4@cdc.gov>; Jernigan, Daniel B. (CDC/DDID/NCIRD/ID) <dbj0@cdc.gov>; Fry, Alicia (CDC/DDID/NCIRD/ID) <agf1@cdc.gov>; Greene, Carolyn M. (CDC/DDID/NCIRD/ID) <cqg4@cdc.gov>; Bresee, Joseph (CDC/DDID/NCIRD/ID) <jsb6@cdc.gov>; GDD-OUTBREAK (CDC) <GDDOUTBREAK@cdc.gov>; Azziz-Baumgartner, Eduardo (CDC/DDID/NCIRD/ID) <eha9@cdc.gov>
Subject: RE: Confidential WHO Situation Report, Wednesday, 04 March 2020

Thursday, 05MAR2020
Confidential WHO Situation Report, Thursday, 05MAR2020

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From: McFarland, Jeffrey (CDC/DDPHSIS/CGH/GID)
Sent: Wednesday, March 4, 2020 12:11 PM
To: Bennett, Sarah D. (CDC/DDPHSIS/CGH/GID) <iyk3@cdc.gov>; Arthur, Ray (CDC/DDPHSIS/CGH/DGHP) <rca8@cdc.gov>
Cc: Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM) <bxm5@cdc.gov>; Williams, Ian (CDC/DDID/NCEZID/DFWED) <iaw3@cdc.gov>; Armstrong, Gregory (CDC/DDID/NCEZID/OD) <gca3@cdc.gov>; Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM) <bxm5@cdc.gov>; MOEN, Ann <moena@who.int>; Martin, Rebecca (CDC/DDPHSIS/CGH/OD) <rtm4@cdc.gov>; Jernigan, Daniel B. (CDC/DDID/NCIRD/ID) <dbj0@cdc.gov>; Fry, Alicia (CDC/DDID/NCIRD/ID) <agf1@cdc.gov>; Greene, Carolyn M. (CDC/DDID/NCIRD/ID) <cqg4@cdc.gov>; Bresee, Joseph (CDC/DDID/NCIRD/ID) <jsb6@cdc.gov>; GDD-OUTBREAK (CDC) <GDDOUTBREAK@cdc.gov>; Azziz-Baumgartner, Eduardo (CDC/DDID/NCIRD/ID) <eha9@cdc.gov>
Subject: Confidential WHO Situation Report, Wednesday, 04 March 2020

Wednesday, 04 March 2020

Confidential WHO Situation Report Wednesday, 04MAR2020

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From: McFarland, Jeffrey (CDC/DDPHSIS/CGH/GID)
Sent: Tuesday, March 3, 2020 12:07 PM
To: Bennett, Sarah D. (CDC/DDPHSIS/CGH/GID) <iyk3@cdc.gov>; Arthur, Ray (CDC/DDPHSIS/CGH/DGHP) <rca8@cdc.gov>
Cc: Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM) <bxm5@cdc.gov>; Williams, Ian (CDC/DDID/NCEZID/DFWED) <iaw3@cdc.gov>; Armstrong, Gregory (CDC/DDID/NCEZID/OD) <gca3@cdc.gov>; Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM) <bxm5@cdc.gov>; MOEN, Ann <moena@who.int>; Martin, Rebecca (CDC/DDPHSIS/CGH/OD) <rtm4@cdc.gov>; Jernigan, Daniel B. (CDC/DDID/NCIRD/ID) <dbj0@cdc.gov>; Fry, Alicia (CDC/DDID/NCIRD/ID) <agf1@cdc.gov>; Greene, Carolyn M. (CDC/DDID/NCIRD/ID) <cqg4@cdc.gov>; Bresee, Joseph (CDC/DDID/NCIRD/ID) <jsb6@cdc.gov>; GDD-OUTBREAK (CDC) <GDDOUTBREAK@cdc.gov>; Azziz-Baumgartner, Eduardo

(CDC/DDID/NCIRD/ID) <eha9@cdc.gov>
Subject: RE: Confidential WHO Situation Report, Sunday, 01 March 2020

Tuesday, 03 March 2020
Confidential WHO Situation Report Monday, 02MAR2020

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From: McFarland, Jeffrey (CDC/DDPHSIS/CGH/GID)
Sent: Monday, March 2, 2020 11:57 AM
To: Bennett, Sarah D. (CDC/DDPHSIS/CGH/GID) <iyk3@cdc.gov>; Arthur, Ray (CDC/DDPHSIS/CGH/DGHP) <rca8@cdc.gov>
Cc: Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM) <bxm5@cdc.gov>; Williams, Ian (CDC/DDID/NCEZID/DFWED) <iaw3@cdc.gov>; Armstrong, Gregory (CDC/DDID/NCEZID/OD) <gca3@cdc.gov>; Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM) <bxm5@cdc.gov>; MOEN, Ann <moena@who.int>; Martin, Rebecca (CDC/DDPHSIS/CGH/OD) <rtm4@cdc.gov>; Jernigan, Daniel B. (CDC/DDID/NCIRD/ID) <dbj0@cdc.gov>; Fry, Alicia (CDC/DDID/NCIRD/ID) <agf1@cdc.gov>; Greene, Carolyn M. (CDC/DDID/NCIRD/ID) <cqg4@cdc.gov>; Bresee, Joseph (CDC/DDID/NCIRD/ID) <jsb6@cdc.gov>; GDD-OUTBREAK (CDC) <GDDOUTBREAK@cdc.gov>; Azziz-Baumgartner, Eduardo (CDC/DDID/NCIRD/ID) <eha9@cdc.gov>
Subject: RE: Confidential WHO Situation Report, Sunday, 01 March 2020

Confidential WHO Situation Report Monday, 02MAR2020

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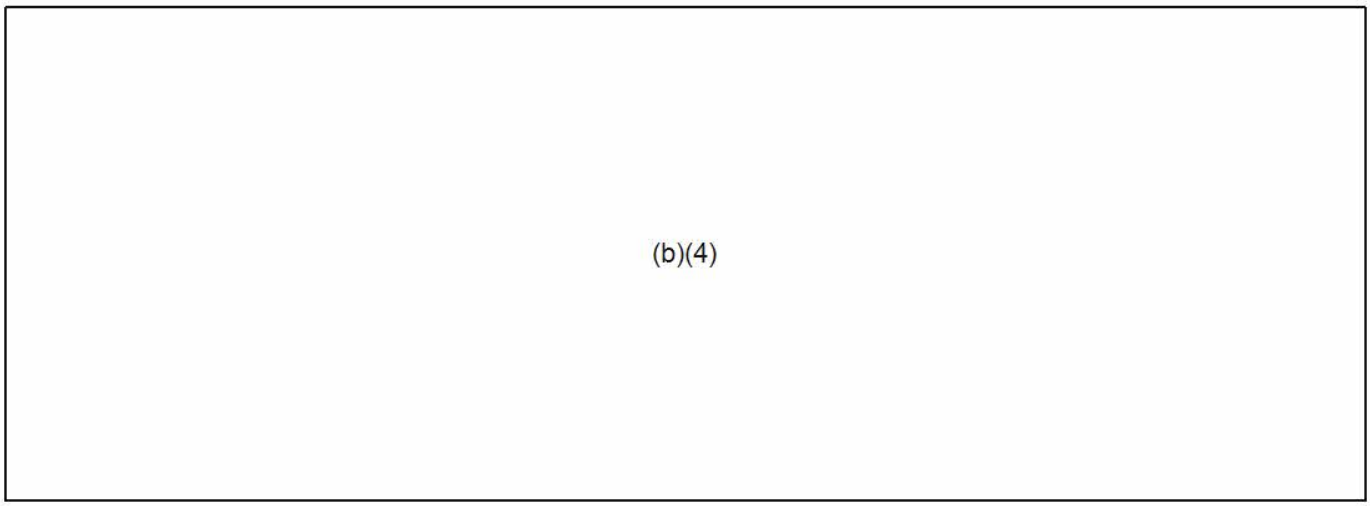
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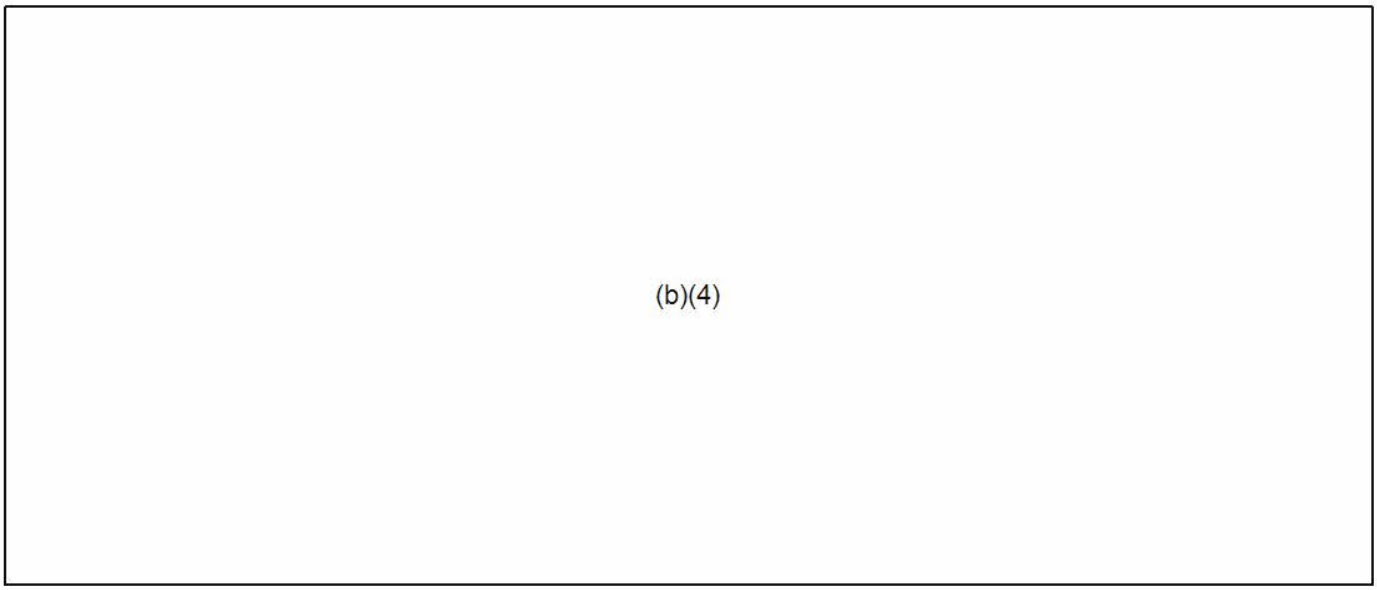
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Please note that the graph and numbers are in the attached EXCEL.

From: McFarland, Jeffrey (CDC/DDPHSIS/CGH/GID)
Sent: Sunday, March 1, 2020 11:51 AM
To: Bennett, Sarah D. (CDC/DDPHSIS/CGH/GID) <iyk3@cdc.gov>; Arthur, Ray (CDC/DDPHSIS/CGH/DGHP) <rca8@cdc.gov>
Cc: Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM) <bxm5@cdc.gov>; Williams, Ian (CDC/DDID/NCEZID/DFWED) <iaw3@cdc.gov>; Armstrong, Gregory (CDC/DDID/NCEZID/OD) <gca3@cdc.gov>; Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM) <bxm5@cdc.gov>; MOEN, Ann <moena@who.int>; Martin, Rebecca (CDC/DDPHSIS/CGH/OD) <rtm4@cdc.gov>; Jernigan, Daniel B. (CDC/DDID/NCIRD/ID) <dbj0@cdc.gov>; Fry, Alicia (CDC/DDID/NCIRD/ID) <agf1@cdc.gov>; Greene, Carolyn M. (CDC/DDID/NCIRD/ID) <cqg4@cdc.gov>; Bresee, Joseph (CDC/DDID/NCIRD/ID) <jsb6@cdc.gov>; GDD-OUTBREAK (CDC) <GDDOUTBREAK@cdc.gov>
Subject: Confidential WHO Situation Report, Sunday, 01 March 2020

Confidential WHO Situation Report, Sunday, 01 March 2020



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Please note that the graph and numbers are in the attached EXCEL.

From: McFarland, Jeffrey (CDC/DDPHSIS/CGH/GID)
Sent: Saturday, February 29, 2020 11:56 AM
To: Bennett, Sarah D. (CDC/DDPHSIS/CGH/GID) <iyk3@cdc.gov>; Arthur, Ray (CDC/DDPHSIS/CGH/DGHP) <rca8@cdc.gov>
Cc: Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM) <bxm5@cdc.gov>; Williams, Ian (CDC/DDID/NCEZID/DFWED) <iaw3@cdc.gov>; Armstrong, Gregory (CDC/DDID/NCEZID/OD) <gca3@cdc.gov>; Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM) <bxm5@cdc.gov>; MOEN, Ann <moena@who.int>; Martin, Rebecca (CDC/DDPHSIS/CGH/OD) <rtm4@cdc.gov>; Jernigan, Daniel B. (CDC/DDID/NCIRD/ID) <dbj0@cdc.gov>; Fry, Alicia (CDC/DDID/NCIRD/ID) <agf1@cdc.gov>; Greene, Carolyn M. (CDC/DDID/NCIRD/ID) <cqg4@cdc.gov>; Bresee, Joseph (CDC/DDID/NCIRD/ID) <jsb6@cdc.gov>; GDD-OUTBREAK (CDC) <GDDOUTBREAK@cdc.gov>
Subject: Confidential WHO Situation Report, Saturday, 29FEB2020

Confidential WHO Situation Report Saturday, 29FEB2020

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From: McFarland, Jeffrey (CDC/DDPHSIS/CGH/GID)
Sent: Friday, February 28, 2020 12:04 PM
To: Bennett, Sarah D. (CDC/DDPHSIS/CGH/GID) <iyk3@cdc.gov>; Arthur, Ray (CDC/DDPHSIS/CGH/DGHP) <rca8@cdc.gov>
Cc: Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM) <bxm5@cdc.gov>; Williams, Ian (CDC/DDID/NCEZID/DFWED) <iaw3@cdc.gov>; Greene, Carolyn M. (CDC/DDID/NCIRD/ID) <cqg4@cdc.gov>; Fry, Alicia (CDC/DDID/NCIRD/ID) <agf1@cdc.gov>; Jernigan, Daniel B. (CDC/DDID/NCIRD/ID) <dbj0@cdc.gov>; MOEN, Ann <moena@who.int>; Martin, Rebecca (CDC/DDPHSIS/CGH/OD) <rtm4@cdc.gov>; Armstrong, Gregory (CDC/DDID/NCEZID/OD) <gca3@cdc.gov>; Bresee, Joseph (CDC/DDID/NCIRD/ID) <jsb6@cdc.gov>; Azziz-Baumgartner, Eduardo (CDC/DDID/NCIRD/ID) <eha9@cdc.gov>; GDD-OUTBREAK (CDC) <GDDOUTBREAK@cdc.gov>
Subject: Confidential WHO Situation Report 28FEB2020

Confidential WHO Situation Report 28FEB2020

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From: Jong-koo Lee
Sent: Mon, 2 Mar 2020 04:08:37 +0000
To: AYLWARD Raymond Bruce J.;Alexander SEMENOV (alexvsemeno;Chikwe IHEKWEAZU (chikwe.ihekw;Clifford LANE (cliff.lane@nih.;Zhou, Weigong (CDC/DDID/NCIRD/ID);Dale FISHER (mdcfda@nus.edu.sg;Dr Hitoshi TAKAHASHI (takajin@;LEE Jong-Koo (docmohw@snu.ac.k;Natalia PSHENICHNAYA (natalia-;Tim ECKMANNS (EckmannsT@rki.de;XING Jun;gmleung
Cc: Dr VAN KERKHOVE Maria;Zunyou Wu;(SPmig) LEI ZHOU (b)(6) ;liangwn@nhc.gov.cn (b)(6)
Subject: RE: WITH ATTACHMENTS: WHO-China Joint Mission on COVID-19

Dear International Members

We must mention about different in case fatality in cities and in periods, do not ignore health care system impact including patient care delivery system induced by surge of patents

Jong-koo LEE

---------- 원본 메일 ----------

보낸사람 : "AYLWARD, Raymond Bruce J." <aylwardb@who.int>

받는사람 : "Alexander SEMENOV (alexvsemeno" (b)(6) "Chikwe IHEKWEAZU (chikwe.ihekw" <chikwe.ihekweazu@ncdc.gov.ng>, "Clifford LANE (cliff.lane@nih." <cliff.lane@nih.gov>, "Zhou, Weigong (CDC/DDID/NCIRD/" <waz6@cdc.gov>, "Dale FISHER (mdcfda@nus.edu.sg" <mdcfda@nus.edu.sg>, "Dr Hitoshi TAKAHASHI (takajin@" <takajin@nih.go.jp>, "LEE Jong-Koo (docmohw@snu.ac.k" <docmohw@snu.ac.kr>, "Natalia PSHENICHNAYA (natalia-" <natalia-pshenichnaya@yandex.ru>, "Tim ECKMANNS (EckmannsT@rki.de" <EckmannsT@rki.de>, "XING, Jun" <xingj@who.int>, gmleung <gmleung@hku.hk>

참조 : "Dr VAN KERKHOVE, Maria" <vankerkhovem@who.int>, Zunyou Wu (b)(6) , "(SPmig) LEI ZHOU" <zhoulei@chinacdc.cn> (b)(6) (b)(6) , "liangwn@nhc.gov.cn" <liangwn@nhc.gov.cn>, (b)(6) < (b)(6) >

받은날짜 : 2020-03-02 (월) 03:44:04

제목 : WITH ATTACHMENTS: WHO-China Joint Mission on COVID-19

Dear International Members of the Joint Mission,

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I trust (hope!) that everyone remains in good health as you approach Day 7 since your departures from China. I have now had a 2nd test here in Geneva and am – of course – negative (thanks to the good care of our Chinese hosts).

Congratulations to those of you who have been on the frontlines of managing new cases and importations such as Chikwe in Nigeria.

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2. the **WHO website links for the English version** of the report in case helpful:
   - in the section of WHO Coronavirus page: https://www.who.int/emergencies/diseases/novel-coronavirus-2019
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I have also cc'd Dr LIANG, Dr WANG Bin, Dr Wu Zunyou and Dr Zhou Lei so that they can 'hear' the conversation (where all of them remain in quarantine at the Presidential Hotel in Beijing….).

With very best regards to all,

Bruce

From: AYLWARD, Raymond Bruce J.
Sent: Friday, February 28, 2020 10:58
To: GHEBREYESUS, Tedros Adhanom <drtedros@who.int>
Cc: KASAI, Takeshi <kasait@who.int>; GALEA, Gauden <galeag@who.int>; (b)(6) liangwn@nhc.gov.cn; liangwn@nhc.gov.cn; (b)(6) LI Juan (lijuan@nhc.gov.cn) <lijuan@nhc.gov.cn>; zhangyang@nhc.gov.cn; Alexander SEMENOV

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It is our common hope and belief that the findings contained herein can inform the global work you are leading to stem the ongoing international spread of COVID-19.

Regards

Bruce

From: Zhou, Weigong (CDC/DDID/NCIRD/ID)
Sent: Wed, 26 Feb 2020 20:53:40 +0000
To: Dr VAN KERKHOVE, Maria
Cc: Alexander SEMENOV (b)(6) IHEKWEAZU (chikwe.ihekweazu@ncdc.gov.ng);Clifford LANE (cliff.lane@nih.gov);Dale FISHER (mdcfda@nus.edu.sg);AYLWARD, Raymond Bruce J.;Dr Hitoshi TAKAHASHI (takajin@nih.go.jp);LEE Jong-Koo (docmohw@snu.ac.kr);Natalia PSHENICHNAYA (natalia-pshenichnaya@yandex.ru);Tim ECKMANNS (EckmannsT@rki.de);XING, (b)(6) Gauden;LEE, Chin-kei;SCANO, Fabio;gmleung
Subject: RE: Thank you and safe travels
Attachments: WHO-China Joint Mission - DRAFT REPORT V5_wz.docx

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Draft report v5~~v4~~

WHO-China Joint Mission on COVID-19
Draft Report

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From: Gabriel Leung
Sent: Mon, 2 Mar 2020 01:14:44 +0000
To: Dr VAN KERKHOVE, Maria
Cc: Alexander Semenov;Lane, Cliff (NIH/NIAID) [E];AYLWARD, Raymond Bruce J.;Chikwe IHEKWEAZU (chikwe.ihekweazu@ncdc.gov.ng);Zhou, Weigong (CDC/DDID/NCIRD/ID);Dale FISHER (mdcfda@nus.edu.sg);Dr Hitoshi TAKAHASHI (takajin@nih.go.jp);LEE Jong-Koo (docmohw@snu.ac.kr);Natalia PSHENICHNAYA (natalia-pshenichnaya@yandex.ru);Tim ECKMANNS (EckmannsT@rki.de);XING, Jun;Zunyou Wu;(SPmig) LEI ZHOU (b)(6);liangwn@nhc.gov.cn; (b)(6)
Subject: Re: WITH ATTACHMENTS: WHO-China Joint Mission on COVID-19

This version looks fine to me, except perhaps we should distinguish further between mild and moderate rather than lumping them together as 80%. Moderate actually refers to those with pneumonia, which require hospitalisation as opposed to truly mild cases.

Gabriel

Gabriel M Leung 梁卓偉
Dean of Medicine
Helen and Francis Zimmern Professor in Population Health

T +852 3917 9210 | F +852 2818 7562
6/F, William MW Mong Block, 21 Sassoon Road, Pokfulam, Hong Kong

HKU Med LKS Faculty of Medicine
The University of Hong Kong
香港大學李嘉誠醫學院

On Mon, 2 Mar 2020 at 05:47, Dr VAN KERKHOVE, Maria <vankerkhovem@who.int> wrote:

> Dear colleagues,
>
> Some minor edits in the attached for consideration.
>
> Thanks,
>
> Maria

From: Alexander Semenov (b)(6)
Date: Sunday, 1 March 2020 at 20:48
To: Maria Van Kerkhove <vankerkhovem@who.int>
Cc: Cliff Lane <clane@niaid.nih.gov>, "AYLWARD, Raymond Bruce J." <aylwardb@who.int>, "chikwe.ihekweazu@ncdc.gov.ng" <chikwe.ihekweazu@ncdc.gov.ng>, "Zhou, Weigong (CDC/DDID/NCIRD/ID)" <waz6@CDC.GOV>, Dale Fisher <mdcfda@nus.edu.sg>, "Dr Hitoshi TAKAHASHI (takajin@nih.go.jp)" <takajin@nih.go.jp>, "LEE Jong-Koo (docmohw@snu.ac.kr)" <docmohw@snu.ac.kr>, "Natalia PSHENICHNAYA (natalia-pshenichnaya@yandex.ru)" <natalia-pshenichnaya@yandex.ru>, "eckmannst@rki.de" <EckmannsT@rki.de>, "XING, Jun" <xingj@who.int>, Gabriel Leung <gmleung@hku.hk>, Zunyou Wu <(b)(6)>, "(SPmig) LEI ZHOU" <zhoulei@chinacdc.cn>, (b)(6) (b)(6), "liangwn@nhc.gov.cn" <liangwn@nhc.gov.cn>, (b)(6)
Subject: Re: WITH ATTACHMENTS: WHO-China Joint Mission on COVID-19

Dear all,

Absolutely agree with Maria. Let's wait for any serosurvey results. After that will be reasonableto make some concussions about real asymptomatic careers.

вс, 1 мар. 2020 г., 22:44 Dr VAN KERKHOVE, Maria <vankerkhovem@who.int>:

> Hi everyone,
>
> Dear Cliff, I actually sent a message to Bruce about this!
>
> The question I have is :
>
> 1) on the one hand, what we heard was that 1.2% of cases were asymptomatic at the time of reporting, but that many (up to 75%?) developed symptoms within a few days, so truly asymptomatic cases are rare.
>
> 2) on the other hand, without serologic surveys, we do not know the extent of asymptomatic/sub-clinical infection.

(b)(5)

Thanks,

Maria

On 1 Mar 2020, at 20:36, Lane, Cliff (NIH/NIAID) [E] <clane@niaid.nih.gov> wrote:

Bruce,

All looks good.

My only suggestion would be (b)(5)

(b)(5)

Cliff

From: Bruce Aylward <aylwardb@who.int>
Date: Sunday, March 1, 2020 at 1:42 PM
To: Alexander SEMENOV (b)(6) "Chikwe IHEKWEAZU (chikwe.ihekweazu@ncdc.gov.ng)" <chikwe.ihekweazu@ncdc.gov.ng>, "Lane, Cliff (NIH/NIAID) [E]" <clane@niaid.nih.gov>, "Zhou, Weigong (CDC/DDID/NCIRD/ID)" <waz6@CDC.GOV>, "Dale FISHER (mdcfda@nus.edu.sg)" <mdcfda@nus.edu.sg>, "Dr Hitoshi TAKAHASHI (takajin@nih.go.jp)" <takajin@nih.go.jp>, Jong-koo Lee <docmohw@snu.ac.kr>, "Natalia PSHENICHNAYA (natalia-pshenichnaya@yandex.ru)" <natalia-pshenichnaya@yandex.ru>, "Tim ECKMANNS (EckmannsT@rki.de)"

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Sent: Sun, 1 Mar 2020 23:52:49 +0000
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Cc: Dr VAN KERKHOVE Maria;Zunyou Wu;(SPmig) LEI ZHOU (b)(6) ;liangwn@nhc.gov.cn; (b)(6)
Subject: RE: WITH ATTACHMENTS: WHO-China Joint Mission on COVID-19
Attachments: Korea 0301.docx

Dear All

By the our report and experience of joint mission observation, we can accelerate the measures against outbreak of Republic Korea
I have contacted high level policymaker during Guangzhou in just time, Maria advised me

Outbreak of our country is progressing and evolving,
and we find that outbreak is associate with close contact history in relative close space in church and they are passionate, shoulder to shoulder and hand to hand, and outbreak in chronic mental health hospital we did not confirm relationship between church and hospital, but church peoples went to hospital due to funeral ceremony, dead of pneumonia case(aspiration?) of relative of church January.

I attach summery of press briefing and informal contact of KCDC staffs for your understanding only

Thanks for your advice and WHO colleagues

Jong-koo LEE MD, MPH, PhD

Director, Center for Healthy Society and Education
Professor, Department of Family Medicine
Seoul National University College of Medicine
Ihwajang-gil 71, Jongno-gu, Seoul, 110-810, Republic of Korea
Tel +82-2-740-8867, +82-2-3668-7350
Fax +82-2-766-1185
email : docmohw@snu.ac.kr (b)(6)

---------- 원본 메일 ----------

보낸사람 : "AYLWARD, Raymond Bruce J." <aylwardb@who.int>

받는사람 : "Alexander SEMENOV (alexvsemeno" (b)(6) "Chikwe IHEKWEAZU (chikwe.ihekw" <chikwe.ihekweazu@ncdc.gov.ng>, "Clifford LANE (cliff.lane@nih." <cliff.lane@nih.gov>, "Zhou, Weigong (CDC/DDID/NCIRD/" <waz6@cdc.gov>, "Dale FISHER (mdcfda@nus.edu.sg" <mdcfda@nus.edu.sg>, "Dr Hitoshi TAKAHASHI (takajin@" <takajin@nih.go.jp>, "LEE Jong-Koo (docmohw@snu.ac.k" <docmohw@snu.ac.kr>, "Natalia PSHENICHNAYA (natalia-" <natalia-pshenichnaya@yandex.ru>, "Tim ECKMANNS (EckmannsT@rki.de" <EckmannsT@rki.de>, "XING, Jun" <xingj@who.int>, gmleung <gmleung@hku.hk>

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받은날짜 : 2020-03-02 (월) 03:44:04

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Sent: Friday, February 28, 2020 10:58
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Cc: KASAI, Takeshi <kasait@who.int>; GALEA, Gauden <galeag@who.int>; (b)(6) liangwn@nhc.gov.cn; liangwn@nhc.gov.cn; (b)(6) LI Juan (lijuan@nhc.gov.cn) <lijuan@nhc.gov.cn>; zhangyang@nhc.gov.cn; Alexander SEMENOV (b)(6) (b)(6) Chikwe IHEKWEAZU (chikwe.ihekweazu@ncdc.gov.ng) <chikwe.ihekweazu@ncdc.gov.ng>; Clifford LANE (cliff.lane@nih.gov) <cliff.lane@nih.gov>; Zhou, Weigong (CDC/DDID/NCIRD/ID) <waz6@cdc.gov>; Dale FISHER (mdcfda@nus.edu.sg) <mdcfda@nus.edu.sg>; Dr Hitoshi TAKAHASHI (takajin@nih.go.jp) <takajin@nih.go.jp>; LEE Jong-Koo (docmohw@snu.ac.kr) <docmohw@snu.ac.kr>; Natalia PSHENICHNAYA (natalia-pshenichnaya@yandex.ru) <natalia-pshenichnaya@yandex.ru>; Tim ECKMANNS (EckmannsT@rki.de) <EckmannsT@rki.de>; XING, Jun <xingj@who.int>; gmleung <gmleung@hku.hk>; Dr VAN KERKHOVE, Maria <vankerkhovem@who.int>; RYAN, Michael J. <ryanm@who.int>; SCHWARTLANDER, Bernhard F. <schwartlanderb@who.int>; MINHAS, Raman <minhasr@who.int>; SNIDER, Paige Anne <sniderp@who.int>; ALEXANDER, Nyka <alexandern@who.int>; STERN, Gabriella <sterng@who.int>
Subject: NEW - FOR PUBLIC RELEASE: WHO-China Joint Mission on COVID-19
Importance: High

Dr Tedros & colleagues,

Our eagle-eyed counterparts spotted a tiny edit I had inadvertently overlooked in the version just sent (an updated section now has six sub-sections but I had forgotten to say '6' instead of '5' in the preambular para).

I would be most grateful if the attached version be used as the 'final final' (with time stamp of 1100hr in the file name).

Apologies to all for any inconvenience.

Bruce

From: AYLWARD, Raymond Bruce J.
Sent: Friday, February 28, 2020 10:22
To: GHEBREYESUS, Tedros Adhanom <drtedros@who.int>
Cc: KASAI, Takeshi <kasait@who.int>; (b)(6); liangwn@nhc.gov.cn; liangwn@nhc.gov.cn (b)(6); LI Juan (lijuan@nhc.gov.cn) <lijuan@nhc.gov.cn>; zhangyang@nhc.gov.cn; Alexander SEMENOV (b)(6) (b)(6) Chikwe IHEKWEAZU (chikwe.ihekweazu@ncdc.gov.ng) <chikwe.ihekweazu@ncdc.gov.ng>; Clifford LANE (cliff.lane@nih.gov) <cliff.lane@nih.gov>; Zhou, Weigong (CDC/DDID/NCIRD/ID) <waz6@cdc.gov>; Dale FISHER (mdcfda@nus.edu.sg) <mdcfda@nus.edu.sg>; Dr Hitoshi TAKAHASHI (takajin@nih.go.jp) <takajin@nih.go.jp>; LEE Jong-Koo (docmohw@snu.ac.kr) <docmohw@snu.ac.kr>; Natalia PSHENICHNAYA (natalia-pshenichnaya@yandex.ru) <natalia-pshenichnaya@yandex.ru>; Tim ECKMANNS (EckmannsT@rki.de) <EckmannsT@rki.de>; XING, Jun <xingj@who.int>; gmleung <gmleung@hku.hk>; Dr VAN KERKHOVE, Maria <vankerkhovem@who.int>; RYAN, Michael J. <ryanm@who.int>; SCHWARTLANDER, Bernhard F. <schwartlanderb@who.int>; MINHAS, Raman <minhasr@who.int>; SNIDER, Paige Anne <sniderp@who.int>; ALEXANDER, Nyka <alexandern@who.int>; STERN, Gabriella <sterng@who.int>
Subject: FOR PUBLIC RELEASE: WHO-China Joint Mission on COVID-19
Importance: High

Dear Dr Tedros,

It is my honor to share with you the attached, final version of the ***Report of the WHO-China Joint Mission on COVID-19***, on behalf of myself, my Co-Lead Dr LIANG Wannian, our Deputy Team Leader Dr WANG Bin, and the entire Joint Team of Chinese national and international members.

I am pleased to inform you that in the 24 hours since sharing a preliminary version of this report, the China and international members have fully aligned the language of the English and Chinese versions, allowing the release of both versions today.

It is agreed with our Chinese counterparts that the English version can be released immediately, given the urgency of sharing these findings with the international community. The Honorable Minister of Health, Dr MA Xiaowei, will release the Chinese version within hours.

In closing, I would like to reiterate my personal gratitude to Dr LIANG for his deep experience and guidance as we consolidated our findings, and to the entire Team for their tremendous contributions throughout. As you and I have discussed, this was truly a Joint Mission and the quality of this report reflects the world-class expertise of all team members, both national and international. The attached findings and recommendations reflect the collective opinion of the entire team, all of whom have been closely engaged in its writing and finalization.

It is our common hope and belief that the findings contained herein can inform the global work you are leading to stem the ongoing international spread of COVID-19.

Regards

Bruce

Informal report by LEE

(b)(4)

(b)(4)

(b)(4)

From: AYLWARD, Raymond Bruce J.
Sent: Sun, 1 Mar 2020 22:00:16 +0000
To: Zhou, Weigong (CDC/DDID/NCIRD/ID);Alexander SEMENOV (b)(6) IHEKWEAZU (chikwe.ihekweazu@ncdc.gov.ng);Clifford LANE (cliff.lane@nih.gov);Dale FISHER (mdcfda@nus.edu.sg);Dr Hitoshi TAKAHASHI (takajin@nih.go.jp);LEE Jong-Koo (docmohw@snu.ac.kr);Natalia PSHENICHNAYA (natalia-pshenichnaya@yandex.ru);Tim ECKMANNS (EckmannsT@rki.de);XING, Jun;gmleung
Cc: Dr VAN KERKHOVE, Maria;Zunyou Wu;(SPmig) LEI ZHOU;(b)(6) liangwn@nhc.gov.cn;(b)(6)
Subject: RE: WITH ATTACHMENTS: WHO-China Joint Mission on COVID-19

Good points both – just going for simplicity of messaging that people can remember (I usually say 'about 15%' and 'about 5%). Will be clearer.

Re the diagram – agree as well – we need to get this designed properly. B

From: Zhou, Weigong (CDC/DDID/NCIRD/ID) <waz6@cdc.gov>
Sent: Sunday, March 1, 2020 21:49')
To: AYLWARD, Raymond Bruce J. <aylwardb@who.int>; Alexander SEMENOV (b)(6) (b)(6) Chikwe IHEKWEAZU (chikwe.ihekweazu@ncdc.gov.ng) <chikwe.ihekweazu@ncdc.gov.ng>; Clifford LANE (cliff.lane@nih.gov) <cliff.lane@nih.gov>; Dale FISHER (mdcfda@nus.edu.sg) <mdcfda@nus.edu.sg>; Dr Hitoshi TAKAHASHI (takajin@nih.go.jp) <takajin@nih.go.jp>; LEE Jong-Koo (docmohw@snu.ac.kr) <docmohw@snu.ac.kr>; Natalia PSHENICHNAYA (natalia-pshenichnaya@yandex.ru) <natalia-pshenichnaya@yandex.ru>; Tim ECKMANNS (EckmannsT@rki.de) <EckmannsT@rki.de>; XING, Jun <xingj@who.int>; gmleung <gmleung@hku.hk>
Cc: Dr VAN KERKHOVE, Maria <vankerkhovem@who.int>; Zunyou Wu (b)(6) (SPmig) LEI ZHOU <zhoulei@chinacdc.cn>;(b)(6) liangwn@nhc.gov.cn;(b)(6)
Subject: RE: WITH ATTACHMENTS: WHO-China Joint Mission on COVID-19

One more quick not on slide 11. The proportions for severe and critical are reported at 13.8% and 6.1%, respectively in the joint mission report. So the 15% and 5% on slide 11 should be changed to 14% and 6%, respectively.

Thanks,
Weigong

From: Zhou, Weigong (CDC/DDID/NCIRD/ID)
Sent: Sunday, March 1, 2020 3:39 PM
To: AYLWARD, Raymond Bruce J. <aylwardb@who.int>; Alexander SEMENOV (b)(6) (b)(6) Chikwe IHEKWEAZU (chikwe.ihekweazu@ncdc.gov.ng) <chikwe.ihekweazu@ncdc.gov.ng>; Clifford LANE (cliff.lane@nih.gov) <cliff.lane@nih.gov>; Dale FISHER (mdcfda@nus.edu.sg) <mdcfda@nus.edu.sg>; Dr Hitoshi TAKAHASHI (takajin@nih.go.jp) <takajin@nih.go.jp>; LEE Jong-Koo (docmohw@snu.ac.kr) <docmohw@snu.ac.kr>; Natalia PSHENICHNAYA (natalia-pshenichnaya@yandex.ru) <natalia-pshenichnaya@yandex.ru>; Tim ECKMANNS (EckmannsT@rki.de) <EckmannsT@rki.de>; XING, Jun <xingj@who.int>; gmleung

<gmleung@hku.hk>
Cc: Dr VAN KERKHOVE, Maria <vankerkhovem@who.int>; Zunyou Wu <wuzy@263.net>; (SPmig) LEI ZHOU <zhoulei@chinacdc.cn>; wsjkwlwn@163.com; liangwn@nhc.gov.cn; wangbin20081234@163.com
Subject: RE: WITH ATTACHMENTS: WHO-China Joint Mission on COVID-19

Dear Bruce, Maria, and all,

I still think the figure in slide 7 is a bit misleading and those red arrow lines should be modified. The mild and moderate cases do not died directly, but a small portion of them progressed to the next level. I thought this was pointed out during our discussion on Sunday. The suggested change was to have the red arrow lines go to the next level instead of going to death directly except the one from critical to death.

Thanks,
Weigong

From: AYLWARD, Raymond Bruce J. <aylwardb@who.int>
Sent: Sunday, March 1, 2020 1:41 PM
To: Alexander SEMENOV (b)(6) (b)(6) Chikwe IHEKWEAZU (chikwe.ihekweazu@ncdc.gov.ng) <chikwe.ihekweazu@ncdc.gov.ng>; Clifford LANE (cliff.lane@nih.gov) <cliff.lane@nih.gov>; Zhou, Weigong (CDC/DDID/NCIRD/ID) <waz6@cdc.gov>; Dale FISHER (mdcfda@nus.edu.sg) <mdcfda@nus.edu.sg>; Dr Hitoshi TAKAHASHI (takajin@nih.go.jp) <takajin@nih.go.jp>; LEE Jong-Koo (docmohw@snu.ac.kr) <docmohw@snu.ac.kr>; Natalia PSHENICHNAYA (natalia-pshenichnaya@yandex.ru) <natalia-pshenichnaya@yandex.ru>; Tim ECKMANNS (EckmannsT@rki.de) <EckmannsT@rki.de>; XING, Jun <xingj@who.int>; gmleung <gmleung@hku.hk>
Cc: Dr VAN KERKHOVE, Maria <vankerkhovem@who.int>; Zunyou Wu (b)(6); (SPmig) LEI ZHOU <zhoulei@chinacdc.cn> (b)(6) liangwn@nhc.gov.cn; (b)(6)
Subject: WITH ATTACHMENTS: WHO-China Joint Mission on COVID-19
Importance: High

Dear International Members of the Joint Mission,

Clearly I need to get more sleep! Maria just pointed out that I had forgotten to send the attachments – please find the message/attachments again here:

I trust (hope!) that everyone remains in good health as you approach Day 7 since your departures from China. I have now had a 2nd test here in Geneva and am – of course – negative (thanks to the good care of our Chinese hosts).

Congratulations to those of you who have been on the frontlines of managing new cases and importations such as Chikwe in Nigeria.

I'm writing tonight to share with you three things:

1. the official **Chinese version of the Joint Mission report** that WHO received from the National Health Commission and which will be posted on our site;

2. the **WHO website links for the English version** of the report in case helpful:
    - in the section of WHO Coronavirus page: https://www.who.int/emergencies/diseases/novel-coronavirus-2019
    - direct link to the report in English: https://www.who.int/docs/default-source/coronaviruse/who-china-joint-mission-on-covid-19-final-report.pdf

3. a **short overview presentation** I quickly put together to share some of the key findings of the report in a VC with RD/WPRO and the WPRO Ministers of Health on Friday morning.

Please note, **I have added 3 slides on 'key epi/technical insights'** from our Mission to the end of the presentation. Maria and I put these together and WU Zunyou did a quick check/correction of them earlier this evening for us. **I would be most grateful if you might have a look at the 3 'technical insight' slides and provide any thoughts/corrections from your side**. I am not trying to be comprehensive but just to find a few key points that are important to understanding the evolving epi and containment impact in China.

I have also cc'd Dr LIANG, Dr WANG Bin, Dr Wu Zunyou and Dr Zhou Lei so that they can 'hear' the conversation (v (b)(6) .

With very best regards to all,

Bruce

From: AYLWARD, Raymond Bruce J.
Sent: Friday, February 28, 2020 10:58
To: GHEBREYESUS, Tedros Adhanom <drtedros@who.int>
Cc: KASAI, Takeshi <kasait@who.int>; GALEA, Gauden <galeag@who.int>; (b)(6) liangwn@nhc.gov.cn; liangwn@nhc.gov.cn; (b)(6) ; LI Juan (lijuan@nhc.gov.cn) <lijuan@nhc.gov.cn>; zhangyang@nhc.gov.cn; Alexander SEMENOV (b)(6) (b)(6) Chikwe IHEKWEAZU (chikwe.ihekweazu@ncdc.gov.ng) <chikwe.ihekweazu@ncdc.gov.ng>; Clifford LANE (cliff.lane@nih.gov) <cliff.lane@nih.gov>; Zhou, Weigong (CDC/DDID/NCIRD/ID) <waz6@cdc.gov>; Dale FISHER (mdcfda@nus.edu.sg) <mdcfda@nus.edu.sg>; Dr Hitoshi TAKAHASHI (takajin@nih.go.jp) <takajin@nih.go.jp>; LEE Jong-Koo (docmohw@snu.ac.kr) <docmohw@snu.ac.kr>; Natalia PSHENICHNAYA (natalia-pshenichnaya@yandex.ru) <natalia-pshenichnaya@yandex.ru>; Tim ECKMANNS (EckmannsT@rki.de) <EckmannsT@rki.de>; XING, Jun <xingj@who.int>; gmleung <gmleung@hku.hk>; Dr VAN KERKHOVE, Maria <vankerkhovem@who.int>; RYAN, Michael J. <ryanm@who.int>; SCHWARTLANDER, Bernhard F. <schwartlanderb@who.int>; MINHAS, Raman <minhasr@who.int>; SNIDER, Paige Anne <sniderp@who.int>; ALEXANDER, Nyka <alexandern@who.int>; STERN, Gabriella <sterng@who.int>
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Cc: KASAI, Takeshi <kasait@who.int>; (b)(6); liangwn@nhc.gov.cn; liangwn@nhc.gov.cn; (b)(6) LI Juan (lijuan@nhc.gov.cn) <lijuan@nhc.gov.cn>; zhangyang@nhc.gov.cn; Alexander SEMENOV (b)(6) (b)(6) Chikwe IHEKWEAZU (chikwe.ihekweazu@ncdc.gov.ng) <chikwe.ihekweazu@ncdc.gov.ng>; Clifford LANE (cliff.lane@nih.gov) <cliff.lane@nih.gov>; Zhou, Weigong (CDC/DDID/NCIRD/ID) <waz6@cdc.gov>; Dale FISHER (mdcfda@nus.edu.sg) <mdcfda@nus.edu.sg>; Dr Hitoshi TAKAHASHI (takajin@nih.go.jp) <takajin@nih.go.jp>; LEE Jong-Koo (docmohw@snu.ac.kr) <docmohw@snu.ac.kr>; Natalia PSHENICHNAYA (natalia-pshenichnaya@yandex.ru) <natalia-pshenichnaya@yandex.ru>; Tim ECKMANNS (EckmannsT@rki.de) <EckmannsT@rki.de>; XING, Jun <xingj@who.int>; gmleung <gmleung@hku.hk>; Dr VAN KERKHOVE, Maria <vankerkhovem@who.int>; RYAN, Michael J. <ryanm@who.int>; SCHWARTLANDER, Bernhard F. <schwartlanderb@who.int>; MINHAS, Raman <minhasr@who.int>; SNIDER, Paige Anne <sniderp@who.int>; ALEXANDER, Nyka <alexandern@who.int>; STERN, Gabriella <sterng@who.int>
Subject: FOR PUBLIC RELEASE: WHO-China Joint Mission on COVID-19
Importance: High

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It is our common hope and belief that the findings contained herein can inform the global work you are leading to stem the ongoing international spread of COVID-19.

Regards

Bruce

From: ZHOU, Weigong
Sent: Sun, 23 Feb 2020 22:44:22 +0000
To: Zhou, Weigong (CDC/DDID/NCIRD/ID)
Subject: WHO-China Joint Mission - DRAFT REPORT V4.2.docx
Attachments: WHO-China Joint Mission - DRAFT REPORT V4.2.docx, ATT00001.txt

Draft report v4.2

WHO-China Joint Mission on COVID-19
Draft Report

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Best,
Weigong

From: Dr VAN KERKHOVE, Maria
Sent: Sun, 23 Feb 2020 01:34:01 +0000
To: Alexander SEMENOV (b)(6) IHEKWEAZU (chikwe.ihekweazu@ncdc.gov.ng);Clifford LANE (cliff.lane@nih.gov);Dale FISHER (mdcfda@nus.edu.sg);Dr Hitoshi TAKAHASHI (takajin@nih.go.jp);gmleung;LEE Jong-Koo (docmohw@snu.ac.kr);Natalia PSHENICHNAYA (natalia-pshenichnaya@yandex.ru);Tim ECKMANNS (EckmannsT@rki.de);Zhou, Weigong (CDC/DDID/NCIRD/ID);Zhou, Weigong (CDC/DDID/NCIRD/ID);XING, Jun
Cc: AYLWARD, Raymond Bruce J.
Subject: Re: Draft report 22 Feb 1654 version
Attachments: WHO-China Joint Mission - DRAFT REPORT V2.3.docx

Dear colleagues,

Use this version to review for the next hour. Any changed need to be in track changes.

Thanks,
Maria

From: Maria Van Kerkhove <vankerkhovem@who.int>
Date: Saturday, 22 February 2020 at 09:56
To: "Alexander SEMENOV (b)(6) (b)(6) "chikwe.ihekweazu@ncdc.gov.ng" <chikwe.ihekweazu@ncdc.gov.ng>, "Clifford LANE (cliff.lane@nih.gov)" <cliff.lane@nih.gov>, Dale Fisher <mdcfda@nus.edu.sg>, "Dr Hitoshi TAKAHASHI (takajin@nih.go.jp)" <takajin@nih.go.jp>, Gabriel Leung <gmleung@hku.hk>, "LEE Jong-Koo (docmohw@snu.ac.kr)" <docmohw@snu.ac.kr>, "Natalia PSHENICHNAYA (natalia-pshenichnaya@yandex.ru)" <natalia-pshenichnaya@yandex.ru>, "eckmannst@rki.de" <EckmannsT@rki.de>, "Weigong ZHOU (waz6@cdc.gov)" <waz6@cdc.gov>, "Weigong ZHOU (wzhou@cdc.gov)" <wzhou@cdc.gov>, "XING, Jun" <xingj@who.int>
Cc: "AYLWARD, Raymond Bruce J." <aylwardb@who.int>
Subject: Draft report 22 Feb 1654 version

Dear colleagues,

Thank you for the tremendous work in drafting this together with our colleagues from China. It was a fascinating and productive day. Jun, can you please share this word document with Chinese colleagues?

As discussed, please use this version to update your technical sections (the narrative) adding in the discussed recommended text/tables/stats/figures. Please also revise your technical recommendations.

I look forward to receiving your updated versions by 2200 tonight.

Thank you!

Maria

Draft report 2.2

WHO-China Joint Mission on COVID-19
Draft Report

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From: Chase, Martine (CDC/DDPHSIS/CGH/DGHT)
Sent: Wed, 27 May 2020 13:54:47 +0000
To: Ejigu, Girum (CDC/DDPHSS/CSELS/DHIS);Deyde, Varough (CDC/DDPHSIS/CGH/DGHT);McCarron, Margaret (Meg) (CDC/DDID/NCIRD/ID);Mujawar, Mohammed (CDC/DDPHSIS/CGH/DGHT);Killam, William P. (CDC/DDPHSIS/CGH/DGHT);Zhou, Weigong (CDC/DDID/NCIRD/ID);Wiesen, Eric (CDC/DDPHSIS/CGH/GID)
Cc: Kirivong, Douan (CDC/DDPHSIS/CGH/DGHT)
Subject: RE: The University of the West Indies and CDC Peds Study
Attachments: COVID-19 UHWI Post Ethics_CDC meeting For submission_vd_gse_mc.docx

Good morning everyone,

I have combined the comments provided so far (thank you Girum) in the attached. We will plan to share the feedback with the UHWI later today. If you are able to, please share your feedback **by 1pm EST.**

Many thanks in advance.

Regards,
Martine

Caribbean Regional Office (CDC/CRO)
Centers for Disease Control and Prevention
Mailing Address: US Embassy Kingston, 142 Old Hope Road, Kingston 6, Jamaica
Telephone: (876) 702 -6147 (Office) / (b)(6) (Mobile) / (b)(6) (VOIP)
Email: xih5@cdc.gov

From: Ejigu, Girum (CDC/DDPHSS/CSELS/DHIS) <kwa7@cdc.gov>
Sent: 26 May 2020 15:13
To: Deyde, Varough (CDC/DDPHSIS/CGH/DGHT) <che5@cdc.gov>; McCarron, Margaret (Meg) (CDC/DDID/NCIRD/ID) <dme8@cdc.gov>; Mujawar, Mohammed (CDC/DDPHSIS/CGH/DGHT) <lrz5@cdc.gov>; Killam, William P. (CDC/DDPHSIS/CGH/DGHT) <imi5@cdc.gov>; Zhou, Weigong (CDC/DDID/NCIRD/ID) <waz6@cdc.gov>; Wiesen, Eric (CDC/DDPHSIS/CGH/GID) <ejw2@cdc.gov>
Cc: Kirivong, Douan (CDC/DDPHSIS/CGH/DGHT) <bpq7@cdc.gov>; Chase, Martine (CDC/DDPHSIS/CGH/DGHT) <xih5@cdc.gov>
Subject: RE: The University of the West Indies and CDC Peds Study

Hi Varough,

Thank you for sharing your review on the proposal. Please also find my initial comments on the document attached in this email. I will also ask others to add if they have any additional comments and suggestion.

I just also wanted to let you know that I will continue working in this project (with roles in data management and analysis as well as in the write up of the final paper).

Thanks again!
Girum

From: Deyde, Varough (CDC/DDPHSIS/CGH/DGHT) <che5@cdc.gov>
Sent: Tuesday, May 26, 2020 11:41 AM
To: McCarron, Margaret (Meg) (CDC/DDID/NCIRD/ID) <dme8@cdc.gov>; Mujawar, Mohammed (CDC/DDPHSIS/CGH/DGHT) <lrz5@cdc.gov>; Killam, William P. (CDC/DDPHSIS/CGH/DGHT) <imi5@cdc.gov>; Zhou, Weigong (CDC/DDID/NCIRD/ID) <waz6@cdc.gov>; Wiesen, Eric (CDC/DDPHSIS/CGH/GID) <ejw2@cdc.gov>; Ejigu, Girum (CDC/DDPHSS/CSELS/DHIS) <kwa7@cdc.gov>
Cc: Kirivong, Douan (CDC/DDPHSIS/CGH/DGHT) <bpq7@cdc.gov>; Chase, Martine (CDC/DDPHSIS/CGH/DGHT) <xih5@cdc.gov>
Subject: RE: The University of the West Indies and CDC Peds Study
Importance: High

Good morning Girum and Team,

I hope all had a restful weekend!

Please confirm who from HQ is interested and willing to participate in this study. Please include what would be their contributions.

Attached is our initial review and comments. As discussed, please share you comments today so that we can send back to the Team.

I also wanted to inform you that we received a draft copy of the Caribbean-wide proposal to look at children in the Caribbean which will be a retrospective study. We are happy to include folks from your side once confirmed.

Thank you,

Varough

From: Deyde, Varough (CDC/DDPHSIS/CGH/DGHT)
Sent: Thursday, May 21, 2020 7:27 AM
To: McCarron, Margaret (Meg) (CDC/DDID/NCIRD/ID) <dme8@cdc.gov>; Mujawar, Mohammed (CDC/DDPHSIS/CGH/DGHT) <lrz5@cdc.gov>; Killam, William P. (CDC/DDPHSIS/CGH/DGHT) <imi5@cdc.gov>; Zhou, Weigong (CDC/DDID/NCIRD/ID) <waz6@cdc.gov>; Wiesen, Eric (CDC/DDPHSIS/CGH/GID) <ejw2@cdc.gov>; Ejigu, Girum (CDC/DDPHSS/CSELS/DHIS) <kwa7@cdc.gov>

Cc: Kirivong, Douan (CDC/DDPHSIS/CGH/DGHT) <bpq7@cdc.gov>; Chase, Martine (CDC/DDPHSIS/CGH/DGHT) <xih5@cdc.gov>
Subject: RE: The University of the West Indies and CDC Peds Study

Thank you Meg and Imran,

Sorry Girum, I also did not realize you were not in the chain of emails!

Please see attached the documents sent to the Team on Tuesday for review ahead of the call at 12 noon EST today.

Looking forward to your leadership on this one!

Best,

Varough

From: McCarron, Margaret (Meg) (CDC/DDID/NCIRD/ID) <dme8@cdc.gov>
Sent: Thursday, May 21, 2020 7:17 AM
To: Deyde, Varough (CDC/DDPHSIS/CGH/DGHT) <che5@cdc.gov>; Mujawar, Mohammed (CDC/DDPHSIS/CGH/DGHT) <lrz5@cdc.gov>; Killam, William P. (CDC/DDPHSIS/CGH/DGHT) <imi5@cdc.gov>; Zhou, Weigong (CDC/DDID/NCIRD/ID) <waz6@cdc.gov>; Wiesen, Eric (CDC/DDPHSIS/CGH/GID) <ejw2@cdc.gov>; Ejigu, Girum (CDC/DDPHSS/CSELS/DHIS) <kwa7@cdc.gov>
Cc: Kirivong, Douan (CDC/DDPHSIS/CGH/DGHT) <bpq7@cdc.gov>; Chase, Martine (CDC/DDPHSIS/CGH/DGHT) <xih5@cdc.gov>
Subject: RE: The University of the West Indies and CDC Peds Study

Hi Varough,

Copying Girum Ejigu, who will be taking the lead on this one.

Girum, my apologies, I though you were on the thread about this call; I hope you can make it at noon today, and for a debrief before the call.

I will not be able to join a pre-call check in.

Meg

From: Deyde, Varough (CDC/DDPHSIS/CGH/DGHT) <che5@cdc.gov>
Sent: Thursday, May 21, 2020 7:30 AM
To: Mujawar, Mohammed (CDC/DDPHSIS/CGH/DGHT) <lrz5@cdc.gov>; Killam, William P. (CDC/DDPHSIS/CGH/DGHT) <imi5@cdc.gov>; McCarron, Margaret (Meg) (CDC/DDID/NCIRD/ID) <dme8@cdc.gov>; Zhou, Weigong (CDC/DDID/NCIRD/ID) <waz6@cdc.gov>; Wiesen, Eric (CDC/DDPHSIS/CGH/GID) <ejw2@cdc.gov>
Cc: Kirivong, Douan (CDC/DDPHSIS/CGH/DGHT) <bpq7@cdc.gov>; Chase, Martine

(CDC/DDPHSIS/CGH/DGHT) <xih5@cdc.gov>
Subject: RE: The University of the West Indies and CDC Peds Study

Hello Team,

Just circling back to confirm who is joining the call today at 12 noon and if you guys think an internal check in 15-20 min before the call with the University is helpful.

Please let me know and thank you, Varough

From: Deyde, Varough (CDC/DDPHSIS/CGH/DGHT)
Sent: Tuesday, May 19, 2020 10:15 AM
To: Mujawar, Mohammed (CDC/DDPHSIS/CGH/DGHT) <lrz5@cdc.gov>; Killam, William P. (CDC/DDPHSIS/CGH/DGHT) <imi5@cdc.gov>; McCarron, Margaret (Meg) (CDC/DDID/NCIRD/ID) <dme8@cdc.gov>; Zhou, Weigong (CDC/DDID/NCIRD/ID) <waz6@cdc.gov>; Wiesen, Eric (CDC/DDPHSIS/CGH/GID) <ejw2@cdc.gov>
Cc: Kirivong, Douan (CDC/DDPHSIS/CGH/DGHT) <bpq7@cdc.gov>; Chase, Martine (CDC/DDPHSIS/CGH/DGHT) <xih5@cdc.gov>
Subject: The University of the West Indies and CDC Peds Study
Importance: High

Hello Team,

Please see documents for review ahead of the Thursday call. If we need to have a CDC internal call prior to talking to the University Team, please let us know.

Best,

Varough

From: Deyde, Varough (CDC/DDPHSIS/CGH/DGHT)
Sent: Tuesday, May 19, 2020 9:48 AM
To: Mujawar, Mohammed (CDC/DDPHSIS/CGH/DGHT) <lrz5@cdc.gov>; Killam, William P. (CDC/DDPHSIS/CGH/DGHT) <imi5@cdc.gov>; McCarron, Margaret (Meg) (CDC/DDID/NCIRD/ID) <dme8@cdc.gov>; Zhou, Weigong (CDC/DDID/NCIRD/ID) <waz6@cdc.gov>; Wiesen, Eric (CDC/DDPHSIS/CGH/GID) <ejw2@cdc.gov>
Cc: Kirivong, Douan (CDC/DDPHSIS/CGH/DGHT) <bpq7@cdc.gov>; Chase, Martine (CDC/DDPHSIS/CGH/DGHT) <xih5@cdc.gov>
Subject: RE: CDC CAR - Modeling for Jamaica & West Indies

Good morning Team,

Just wanted to say thank you for your time and support.

This TA is highly valuable for CDC as we establish our technical collaboration with the MoHW in Jamaica in the area of epidemiology and surveillance.

We look forward to hearing back from Imran and to the next steps, including sharing material on examples of models already run with scripts and assumptions.

On the Peds study call, would appreciate if you can confirm what time works best for you on Thursday May 21 between 12:00 pm and 3:30 pm EST.

Thanks again,

Varough

From: Deyde, Varough (CDC/DDPHSIS/CGH/DGHT)
Sent: Monday, May 18, 2020 1:20 PM
To: Mujawar, Mohammed (CDC/DDPHSIS/CGH/DGHT) <lrz5@cdc.gov>; Killam, William P. (CDC/DDPHSIS/CGH/DGHT) <imi5@cdc.gov>; McCarron, Margaret (Meg) (CDC/DDID/NCIRD/ID) <dme8@cdc.gov>; Zhou, Weigong (CDC/DDID/NCIRD/ID) <waz6@cdc.gov>; Wiesen, Eric (CDC/DDPHSIS/CGH/GID) <ejw2@cdc.gov>
Cc: Kirivong, Douan (CDC/DDPHSIS/CGH/DGHT) <bpq7@cdc.gov>; Chase, Martine (CDC/DDPHSIS/CGH/DGHT) <xih5@cdc.gov>
Subject: RE: CDC CAR - Modeling for Jamaica & West Indies

Good afternoon Meg and Team,

I hope all is well!

Just a quick follow up- 1) the forecasting/modeling call is set for tomorrow at 10 am EST with MoHW; 2) for the call with the University/Peds study: can the Team confirm what time works best for you guys on Thursday May 21 between 12:00 pm and 3:30 pm EST.

Thank you for your support,

Best,

Varough

From: Deyde, Varough (CDC/DDPHSIS/CGH/DGHT)
Sent: Friday, May 15, 2020 5:31 PM
To: Mujawar, Mohammed (CDC/DDPHSIS/CGH/DGHT) <lrz5@cdc.gov>; Killam, William P. (CDC/DDPHSIS/CGH/DGHT) <imi5@cdc.gov>; McCarron, Margaret (Meg) (CDC/DDID/NCIRD/ID) <dme8@cdc.gov>

Cc: Zhou, Weigong (CDC/DDID/NCIRD/ID) <waz6@cdc.gov>; Wiesen, Eric (CDC/DDPHSIS/CGH/GID) <ejw2@cdc.gov>; Kirivong, Douan (CDC/DDPHSIS/CGH/DGHT) <bpq7@cdc.gov>; Chase, Martine (CDC/DDPHSIS/CGH/DGHT) <xih5@cdc.gov>
Subject: RE: CDC CAR - Modeling for Jamaica & West Indies
Importance: High

Hello Imran,

Thank you for the feedback.

The Ministry wrote today with a specific ask: They need CDC's help in disease forecasting to assess the impact of current interventions on the number of COVID-19 cases, hospitalizations and deaths. The want to use this information to guide interventions, and hope to adjust models as the data changes over time.

We would like to have call with you and the National Epidemiologist from the MoHW next week. Can you please confirm if Monday, May 18 at 4:00pm EST or Tuesday, May 19 at 10:00am EST work for you?

We would appreciate this call to take place so that we can provide them Ministry with the TA they need.

Others on the Team, with to regard to the proposed study on COVID-19 Outcomes in Children in Jamaica, we just finished a call with the University Team, they are revised the scope of the study and we expect to receive the revised version on Monday. We have agreed with them that we will share with you that version and we are suggesting a call with you and the study Team at the University on Thursday May 21 at 4 pm EST. Please confirm if this time works for you. If not, let us know your availability for Thursday.

Thank you and we look forward to hearing from you,

Regards,

Varough

Varough Deyde, MS, PhD
Director,
Caribbean Regional Office
Centers for Disease Control and Prevention (CDC)
US Embassy Kingston, Jamaica
Office: + 1876 702 6136
Cell: + (b)(6)
IP : + 1 404 553 7389
Email: che5@cdc.gov

From: Mujawar, Mohammed (CDC/DDPHSIS/CGH/DGHT) <lrz5@cdc.gov>
Sent: Friday, May 15, 2020 12:16 PM
To: Deyde, Varough (CDC/DDPHSIS/CGH/DGHT) <che5@cdc.gov>; Killam, William P. (CDC/DDPHSIS/CGH/DGHT) <imi5@cdc.gov>; McCarron, Margaret (Meg) (CDC/DDID/NCIRD/ID) <dme8@cdc.gov>
Cc: Zhou, Weigong (CDC/DDID/NCIRD/ID) <waz6@cdc.gov>; Wiesen, Eric (CDC/DDPHSIS/CGH/GID) <ejw2@cdc.gov>; Kirivong, Douan (CDC/DDPHSIS/CGH/DGHT) <bpq7@cdc.gov>; Chase, Martine (CDC/DDPHSIS/CGH/DGHT) <xih5@cdc.gov>
Subject: RE: CDC CAR - Modeling for Jamaica & West Indies

Thanks so much, I've been collaborating with the modeling task force on how to optimize the Rt models, especially thinking through the best way to get appropriate serial interval estimate for each country. Also looking into varying other parameters, or providing the option on the dashboard.

Will keep you posted.

Best,
Imran

From: Deyde, Varough (CDC/DDPHSIS/CGH/DGHT) <che5@cdc.gov>
Sent: Friday, May 15, 2020 12:41 PM
To: Killam, William P. (CDC/DDPHSIS/CGH/DGHT) <imi5@cdc.gov>; McCarron, Margaret (Meg) (CDC/DDID/NCIRD/ID) <dme8@cdc.gov>; Mujawar, Mohammed (CDC/DDPHSIS/CGH/DGHT) <lrz5@cdc.gov>
Cc: Zhou, Weigong (CDC/DDID/NCIRD/ID) <waz6@cdc.gov>; Wiesen, Eric (CDC/DDPHSIS/CGH/GID) <ejw2@cdc.gov>; Kirivong, Douan (CDC/DDPHSIS/CGH/DGHT) <bpq7@cdc.gov>; Chase, Martine (CDC/DDPHSIS/CGH/DGHT) <xih5@cdc.gov>
Subject: RE: CDC CAR - Modeling for Jamaica & West Indies

Thank you Perry for your support!

Best,

Varough

From: Killam, William P. (CDC/DDPHSIS/CGH/DGHT) <imi5@cdc.gov>
Sent: Friday, May 15, 2020 10:59 AM
To: Deyde, Varough (CDC/DDPHSIS/CGH/DGHT) <che5@cdc.gov>; McCarron, Margaret (Meg) (CDC/DDID/NCIRD/ID) <dme8@cdc.gov>; Mujawar, Mohammed (CDC/DDPHSIS/CGH/DGHT) <lrz5@cdc.gov>
Cc: Zhou, Weigong (CDC/DDID/NCIRD/ID) <waz6@cdc.gov>; Wiesen, Eric (CDC/DDPHSIS/CGH/GID) <ejw2@cdc.gov>; Kirivong, Douan (CDC/DDPHSIS/CGH/DGHT) <bpq7@cdc.gov>; Chase, Martine

(CDC/DDPHSIS/CGH/DGHT) <xih5@cdc.gov>
Subject: RE: CDC CAR - Modeling for Jamaica & West Indies

Hi all,
Sorry I was late to the call. Thanks to the Surveillance team for offering the support to Jamaica and West Indes. I'll step back at this point and let Imran and Varough take this forward at your own initiative and pace. Please let me know if you need additional support for this.
Best,
Perry

From: Deyde, Varough (CDC/DDPHSIS/CGH/DGHT) <che5@cdc.gov>
Sent: Friday, May 15, 2020 10:46 AM
To: McCarron, Margaret (Meg) (CDC/DDID/NCIRD/ID) <dme8@cdc.gov>; Mujawar, Mohammed (CDC/DDPHSIS/CGH/DGHT) <lrz5@cdc.gov>
Cc: Zhou, Weigong (CDC/DDID/NCIRD/ID) <waz6@cdc.gov>; Wiesen, Eric (CDC/DDPHSIS/CGH/GID) <ejw2@cdc.gov>; Killam, William P. (CDC/DDPHSIS/CGH/DGHT) <imi5@cdc.gov>; Kirivong, Douan (CDC/DDPHSIS/CGH/DGHT) <bpq7@cdc.gov>; Chase, Martine (CDC/DDPHSIS/CGH/DGHT) <xih5@cdc.gov>
Subject: RE: CDC CAR - Modeling for Jamaica & West Indies

Dear Meg, thank you and Team for the introductions and the support, well appreciated!

Imran, we look forward to talking to about the modeling and forecasting for Jamaica. Please let us know when would be a good date/time next week to discuss.

Regards,

Varough

From: McCarron, Margaret (Meg) (CDC/DDID/NCIRD/ID) <dme8@cdc.gov>
Sent: Friday, May 15, 2020 8:53 AM
To: Deyde, Varough (CDC/DDPHSIS/CGH/DGHT) <che5@cdc.gov>; Mujawar, Mohammed (CDC/DDPHSIS/CGH/DGHT) <lrz5@cdc.gov>
Cc: Zhou, Weigong (CDC/DDID/NCIRD/ID) <waz6@cdc.gov>; Wiesen, Eric (CDC/DDPHSIS/CGH/GID) <ejw2@cdc.gov>; Killam, William P. (CDC/DDPHSIS/CGH/DGHT) <imi5@cdc.gov>; Kirivong, Douan (CDC/DDPHSIS/CGH/DGHT) <bpq7@cdc.gov>; Chase, Martine (CDC/DDPHSIS/CGH/DGHT) <xih5@cdc.gov>
Subject: CDC CAR - Modeling for Jamaica & West Indies

Dear Varough,

It was nice to talk to you all this morning and get a better understanding of what sorts of activities you're looking for help with. I've copied Imran from our Epi team on the ITF, who has developed a PowerBI dashboard with estimates of Rt for every country globally. He is a modeler on our team, and also a liaison with the Modeling Task Force that was recently stood up within the response. He will have the best information about the inputs for the Rt estimates, and can help identify the best route to help you with potential forecasting work.

Imran – Varough, Douan and Martine are with the CDC Caribbean office in Jamaica and have received requests from the MOH with modeling and forecasting of the outbreak.

Thanks everyone!
Meg

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(b)(4)

From: Martyn Kirk
Sent: Tue, 2 Jun 2020 22:26:43 +0000
To: Loharikar, Anagha (CDC/DDPHSIS/CGH/GID)
Cc: Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM);Fleming, Monica (CDC/DDPHSIS/CGH/GID);Kelaher, Catherine;Jenny.Firman@health.gov.au;Paul.Kelly@health.gov.au;Rhonda.Owen@health.gov.au;kristine.macartney@health.nsw.gov.au;Bennett, Sarah D. (CDC/DDPHSIS/CGH/GID);McElroy, Peter (CDC/DDPHSIS/CGH/DPDM);Zhou, Weigong (CDC/DDID/NCIRD/ID);Soeters, Heidi (CDC/DDPHSIS/CGH/GID);Mikus, Kristie (CDC/DDPHSIS/CGH/OD);bhowden@unimelb.edu.au;Vitali Sintchenko;Courtney Lane;alicia.arnott@health.nsw.gov.au;Charles Alpren (DHHS);Annaliese.VanDiemen@dhhs.vic.gov.au;Wright, Rose;robyn.hall@health.gov.au;Hall, Aron (CDC/DDID/NCIRD/DVD);Honein, Margaret (Peggy) (CDC/DDNID/NCBDDD/DBDID);MONTGOMERY, Joshua
Subject: Australian COVID-19 management, surveillance and outbreak guidance
Attachments: COVID-19-SoNG-v3.0.pdf

Hi Sarah and colleagues,
thanks for a great call this morning. It was very helpful to discuss genomics and clusters/outbreaks definitions.
As I mentioned during the call, the Communicable Disease Network Australia (CSTE equivalent) has produced guidance for health departments on the management, surveillance and investigation of COVID-19 outbreaks. In it, we document the investigation of outbreaks in closed communities, such as residential aged care facilities. One thing we haven't done is to build in how to incorporate genomics into routine public health practice.
We will do this in future iterations, as this is a living document. I have attached it for your reference and the web link is below. All the yellow highlighted sections are new since the last version. We are up to over 30 versions since the beginning of the outbreak, which has been a massive task! You can find the guidance here:
https://www1.health.gov.au/internet/main/publishing.nsf/Content/cdna-song-novel-coronavirus.htm
Peggy, the CDC/CSTE group might find these guidelines helpful to inform State investigation.
Sarah, I don't have some of the CDC email addresses, such as Duncan, can you please pass this onto others who may have been on the call.
We will be in touch
Warm regards
Martyn
Martyn Kirk PhD
COVID-Net, National Incident Room
Australian Government Department of Health
From: Loharikar, Anagha (CDC/DDPHSIS/CGH/GID) <igd2@cdc.gov>
Sent: 02 June 2020 21:49
To: Martyn Kirk <Martyn.Kirk@anu.edu.au>
Cc: Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM) <bxm5@cdc.gov>; Fleming, Monica (CDC/DDPHSIS/CGH/GID) <njl9@cdc.gov>; Kelaher, Catherine <Catherine.Kelaher@health.gov.au>;

Jenny.Firman@health.gov.au <Jenny.Firman@health.gov.au>; Paul.Kelly@health.gov.au <Paul.Kelly@health.gov.au>; Rhonda.Owen@health.gov.au <Rhonda.Owen@health.gov.au>; kristine.macartney@health.nsw.gov.au <kristine.macartney@health.nsw.gov.au>; Bennett, Sarah D. (CDC/DDPHSIS/CGH/GID) <iyk3@cdc.gov>; McElroy, Peter (CDC/DDPHSIS/CGH/DPDM) <pgm9@cdc.gov>; Zhou, Weigong (CDC/DDID/NCIRD/ID) <waz6@cdc.gov>; Soeters, Heidi (CDC/DDPHSIS/CGH/GID) <hzx8@cdc.gov>; Mikus, Kristie (CDC/DDPHSIS/CGH/OD) <lqq1@cdc.gov>
Subject: RE: Australia (schools and clusters)

Many thanks Martyn. We look forward to this discussion. I will add the point noted below.

Thank you again.

Kind Regards,
Anagha

From: Martyn Kirk <Martyn.Kirk@anu.edu.au>
Sent: Monday, June 1, 2020 11:15 PM
To: Loharikar, Anagha (CDC/DDPHSIS/CGH/GID) <igd2@cdc.gov>
Cc: Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM) <bxm5@cdc.gov>; Fleming, Monica (CDC/DDPHSIS/CGH/GID) <njl9@cdc.gov>; Kelaher, Catherine <Catherine.Kelaher@health.gov.au>; Jenny.Firman@health.gov.au; Paul.Kelly@health.gov.au; Rhonda.Owen@health.gov.au; kristine.macartney@health.nsw.gov.au; Bennett, Sarah D. (CDC/DDPHSIS/CGH/GID) <iyk3@cdc.gov>; McElroy, Peter (CDC/DDPHSIS/CGH/DPDM) <pgm9@cdc.gov>; Zhou, Weigong (CDC/DDID/NCIRD/ID) <waz6@cdc.gov>; Soeters, Heidi (CDC/DDPHSIS/CGH/GID) <hzx8@cdc.gov>; Mikus, Kristie (CDC/DDPHSIS/CGH/OD) <lqq1@cdc.gov>
Subject: Re: Australia (schools and clusters)

Hi Anagha,

Thanks for that. We are good for tomorrow morning and will have quite a few additional people from Australia who are keen to join the call.

I have asked our genomics specialists from two States to join the conference call. They will be able to talk about what is happening for public health surveillance using genomics.

Can you please include the following dot points under the genomics discussion item:
- AusTrakka platform for SARS-CoV-2 genomes (Torsten Seeman)

We will look forward to talking tomorrow.

Warm regards

Martyn

> On 2 Jun 2020, at 2:03 am, Loharikar, Anagha (CDC/DDPHSIS/CGH/GID) <igd2@cdc.gov> wrote:

Dear Martyn,

I hope you are well. I want to confirm this time for our call this week on viral genomics. I will forward the call information to you, and well look forward to connecting.

Kind regards,
Anagha

From: Martyn Kirk <Martyn.Kirk@anu.edu.au>
Sent: Wednesday, May 27, 2020 5:40 PM
To: Loharikar, Anagha (CDC/DDPHSIS/CGH/GID) <igd2@cdc.gov>; Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM) <bxm5@cdc.gov>
Cc: Fleming, Monica (CDC/DDPHSIS/CGH/GID) <njl9@cdc.gov>; Kelaher, Catherine <Catherine.Kelaher@health.gov.au>; Jenny.Firman@health.gov.au; Paul.Kelly@health.gov.au; Rhonda.Owen@health.gov.au; kristine.macartney@health.nsw.gov.au; Bennett, Sarah D. (CDC/DDPHSIS/CGH/GID) <iyk3@cdc.gov>; McElroy, Peter (CDC/DDPHSIS/CGH/DPDM) <pgm9@cdc.gov>; Zhou, Weigong (CDC/DDID/NCIRD/ID) <waz6@cdc.gov>; Soeters, Heidi (CDC/DDPHSIS/CGH/GID) <hzx8@cdc.gov>; Mikus, Kristie (CDC/DDPHSIS/CGH/OD) <lqq1@cdc.gov>
Subject: Re: Australia (schools and clusters)

HI Anagha,

thanks for that. Yes, we would be happy to do another call next week. Maybe we should aim for the same time next week as you suggest; 5pm Tuesday 2 June in Atlanta and 7am Wednesday 3 June 2020 in Australia.

I will contact some of our genomics experts and get back to you shortly.

Warm regards

Martyn

From: Loharikar, Anagha (CDC/DDPHSIS/CGH/GID) <igd2@cdc.gov>
Sent: 28 May 2020 04:44
To: Martyn Kirk <Martyn.Kirk@anu.edu.au>; Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM) <bxm5@cdc.gov>
Cc: Fleming, Monica (CDC/DDPHSIS/CGH/GID) <njl9@cdc.gov>; Kelaher, Catherine <Catherine.Kelaher@health.gov.au>; Jenny.Firman@health.gov.au <Jenny.Firman@health.gov.au>; Paul.Kelly@health.gov.au <Paul.Kelly@health.gov.au>; Rhonda.Owen@health.gov.au <Rhonda.Owen@health.gov.au>; kristine.macartney@health.nsw.gov.au <kristine.macartney@health.nsw.gov.au>; Bennett, Sarah D. (CDC/DDPHSIS/CGH/GID) <iyk3@cdc.gov>; McElroy, Peter (CDC/DDPHSIS/CGH/DPDM) <pgm9@cdc.gov>; Zhou, Weigong (CDC/DDID/NCIRD/ID)

<waz6@cdc.gov>; Soeters, Heidi (CDC/DDPHSIS/CGH/GID) <hzx8@cdc.gov>; Mikus, Kristie (CDC/DDPHSIS/CGH/OD) <lqq1@cdc.gov>
Subject: RE: Australia (schools and clusters)

Dear Martyn,

Many thanks for the call yesterday. We look forward to arranging a next call to discuss genomics, as well as further explore cluster investigation. There is interest from CDC to have this discussion with Australia colleagues sooner – potentially next week. Please let us know if you and your team would have availability for next week: June 3rd or 4th at 5pm ET. Or if it is preferred to aim for the week of June 8th. We look forward to hearing from you.

Kind regards,
Anagha

Anagha Loharikar, MD
LCDR, US Public Health Service
South/East Asia Regional Advisor
International Task Force, Country Support Team
CDC COVID-19 Response

From: Martyn Kirk <Martyn.Kirk@anu.edu.au>
Sent: Wednesday, May 27, 2020 7:48 AM
To: Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM) <bxm5@cdc.gov>
Cc: Fleming, Monica (CDC/DDPHSIS/CGH/GID) <njl9@cdc.gov>; Kelaher, Catherine <Catherine.Kelaher@health.gov.au>; Jenny.Firman@health.gov.au; Paul.Kelly@health.gov.au; Rhonda.Owen@health.gov.au; kristine.macartney@health.nsw.gov.au; Pesik, Nicki (CDC/DDID/NCEZID/OD) <ndp9@cdc.gov>; Knight, Nancy (CDC/DDPHSIS/CGH/DGHP) <fma2@cdc.gov>; Bennett, Sarah D. (CDC/DDPHSIS/CGH/GID) <iyk3@cdc.gov>; McElroy, Peter (CDC/DDPHSIS/CGH/DPDM) <pgm9@cdc.gov>; Lindell, Kristine (CDC/DDID/NCEZID/DVBD) <LGZ7@cdc.gov>; Zhou, Weigong (CDC/DDID/NCIRD/ID) <waz6@cdc.gov>; Hakim, Avi (CDC/DDPHSIS/CGH/DGHT) <hxv8@cdc.gov>; Soeters, Heidi (CDC/DDPHSIS/CGH/GID) <hzx8@cdc.gov>; Loharikar, Anagha (CDC/DDPHSIS/CGH/GID) <igd2@cdc.gov>; Mikus, Kristie (CDC/DDPHSIS/CGH/OD) <lqq1@cdc.gov>; Baldwin, Grant (CDC/DDNID/NCIPC/DOP) <gfb3@cdc.gov>; Parise, Monica E. (CDC/DDPHSIS/CGH/DPDM) <mep0@cdc.gov>; Edens, William (Chris) (CDC/DDID/NCIRD/DBD) <iek4@cdc.gov>; Summers, Aimee (CDC/DDPHSIS/CGH/DGHP) <ydj1@cdc.gov>; Pejavara, Anu (CDC/DDNID/NCCDPHP/DNPAO) <bkz5@cdc.gov>; Lee, Sarah M. (CDC/DDNID/NCCDPHP/DPH) <bvv5@cdc.gov>; Rasberry, Catherine N. (CDC/DDID/NCHHSTP/DASH) <fhh6@cdc.gov>; Ijaz, Kashef (CDC/DDPHSIS/CGH/DGHP) <kil6@cdc.gov>
Subject: Re: Australia (schools and clusters)

Thanks Barb,

I agree it was a really interesting call. A big thank you Monica for those great notes.

A call in two weeks time on genomics and cluster investigation would be great. I will speak to our colleagues in Victoria about joining to share their experience.

Warm regards

Martyn

On 27 May 2020, at 9:03 pm, Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM) <bxm5@cdc.gov> wrote:

Dear All—
Thanks so much for the super informative conversation yesterday.
Please find notes below (Thank you Monica!). We hope everyone can further connect on specific issues.
We'll go ahead with plans for another call in about 2 weeks, to discuss WGS and continue the discussion on clusters/outbreaks. We'll try to include folks working on clusters in specific settings such as in the food industry.
Best wishes,
Barb

Barbara Marston, M.D.
International Task Force, Emergency Novel Corona Virus Response
Centers for Disease Control and Prevention
1600 Clifton Road, MS A06

bxm5@cdc.gov
404 200 7616
Or 404 510 4268

Australia (schools and clusters)

Meeting Date: 5/26/2020 5:00 PM (US East Coast Time)
Location: Zoom

Participants:

Australia colleagues:	**International Task Force:**	**Community Intervention and At Risk**	**Division of Adolescent and School**	**State Heath Dept**	**Case Surveillance Task Force :**

		Task Force:	**Health:**	**Task Force:**	
Martyn Kirk	Sarah Bennett	Catherine Rasberry	Kathleen Ethier	Peggy Honein	Aaron Aranas
Kristine Macartney	Barb Marston	Anu Pejavara	Lisa Barrios		Danielle Tack
Catherine Kelaher	Heidi Soeters		Carmen Ashley		Aron Hall (Epi Task Force)
Paul Kelly	Anagha Loharikar		Natalie Wilkins		Katie Fullerton
Sonya	Kristie Mikus		Rebecca Polinsky		Matt Ritchey
	Monica Fleming				
	Aimee Summers				
	Kashef Ijaz				

COVID-19 in Schools

1. Schools Closures
    - Paul Kelly - Australia
        - Different states did different things. Some states kept schools open. Other states decided to go on holiday early and then did not reopen.
        - At this stage, most states have re-opened schools. Starting with young children (primary school) and then up, all the way to University.
    - Kathleen Ethier - CDC/DASH
        - CDC was looking into a staged approach to school closures and reasons why you shouldn't close schools immediately. CDC did not recommend school closures but things moved very quickly.
        - Decisions about schools were made at the state level. Governors began closing schools, and this continued until schools were closed in every state.
        - Initial thinking was that the schools would open in a couple weeks, but then the pandemic picked up. Schools in all 50 states have remained closed for the school year.
        - The rapid closures meant little research/studies on transmission in schools in the US. There were school related outbreaks from school trips to Italy.

- CDC compiled data from other countries' studies on transmission in schools. Findings: kids seem unlikely to transmit to each other.
- Now schools and stakeholders are concerned with whether schools are safe places to reopen and how to implement guidance in schools.

2. School Guidance on Re-Opening (Catherine Rasberry - CDC)
    - Very difficult to write guidance for all school types and situations.
    - Guidance for schools is evolving over time. Most recent is a set of considerations. Guidance at https://www.cdc.gov/coronavirus/2019-ncov/community/schools-childcare/index.html
    - Schools are looking at if/how/should they re-open.
    - Key guiding principles to reduce the spread - healthy environments and what to do if someone is ill. There will be a lot of local decision making - we expect to see variability.

1. COVID-19 in Schools and School Outbreaks (Kristine Macartney - Australia/New South Wales)
    - Background:
        - 2% of cases overall in New South Wales have been age 5-18. No deaths and very few i severely ill in this age group.
        - Population 18 and under - 1.8 million. Approximately 2,700 schools for children ages 5-18.
    - Investigation into all COVID-19 cases in New South Wales (NSW) schools:
        - Investigation NCIRS.org.au - preliminary report available
        - 15 schools (10 high schools and 5 primary schools) identified 18 COVID-19 cases between 5 March 2020 and 3 April 2020. 10 early childcare centers also had cases and were investigated.
        - Contact lists were generated (contacts from 24 hours pre-infectious to 14 days).
            - Of the 25 schools and daycare centers, 7 participated in enhanced surveillance which offered serologic testing approximately 4 weeks after case was detected.
            - 1400 contacts were identified, 863 contacts were in the schools (remainder at home).
        - Testing:
            - There was approx. 44% testing rate of contacts, 70% testing rate of contacts in schools with enhanced surveillance.
        - Results:
            - Out of the 15 schools, only 2 secondary cases identified.
            - 1 outbreak in a childhood center - primary case was a teacher.

COVID 19 In Schools Q&A:

1. How likely is transmission in school settings? Is it safe to open schools?
    - Australia: Data shows not a large transmission in schools. However, Australia schools did not have multiple introductions and overall case numbers were manageable (no more than 210 cases a day in the state). If epidemic is under control, schools seem okay. Each school was only closed for 24/48 hours after a case was identified. 70% serology coverage showed relatively low transmission. No kids were severely ill.
2. Concerns for COVID-19 transmission from kids to adults?
    - Australia: Did not specifically look at HH in the study, but did not see any additional cases. The exception was in the childcare outbreak where teachers and parents were infected, but there was possibly transmitted from teachers to parents during pick-up/drop-off.
3. What are schools doing to mitigate COVID 19 transmission?
    - Australia: a large number of directives were given - trying to limit size of classrooms (this one was difficult to do), strong messaging to not come to school if unwell, handwashing, and discouraging public transport. Masks are not widely used in Australia.

Cluster and Outbreak Surveillance:

1. Australia Experience (Martyn Kirk)
    - Set up COVID-NET to help identify clusters - Covid 19 does strongly cluster.
        - Work in progress
        - Epidemiologists from each jurisdiction working to look at clusters.
        - Clusters under investigation - include 2 or more cases.
            - Many clusters overlapping (e.g. initial cases from a cruise ship followed by transmission in a health care setting)
        - Starting to look at transmission on planes (little reported to date, but ongoing investigations of likely transmission). Air travel in Australia currently very substantially curtailed.

    - States were incredibly overwhelmed with contact tracing in the early stages of the outbreak. Now that there are fewer cases, it is easier to do outbreak investigations.
2. How CDC is capturing outbreaks across the country (Peggy Honein and Katie Fullerton)
    - Variable information received - state reporting, web scraping, media, specific outbreaks (meat processing plants)

- Case report forms have just been updated to ask whether the case is part of a cluster
- Information fairly incomplete
- Considering genome sequencing
- Trying to streamline the response and working with the Division of Foodborne, Waterborne, and Environmental Diseases- using their system on outbreak management.
- Looking at the National Outbreak Reporting System for COVID-19 surveillance but right now it only reports on enteric diseases. Part of the longer term version.
- US has a COVID-NET but it reports on US hospitalizations, not outbreaks.
- CDC sending teams to respond to outbreaks and help states manage but states remain overwhelmed.

Next Steps/Follow Up:

- Interest in having another call in approximately 2 weeks.
- Topics for next call:
  - Genome sequencing
  - Continuing discussion around clusters
  - Workplace clusters in specific environments (meat and food processing industries, call centers, restaurants)

Agenda:

1. Welcome Remarks and Introductions (10 minutes)	Barb Marston
2. COVID-19 Transmission in Schools (25 minutes) a. School policies - US, Australia and Globally b. Details on recent school openings c. Transmission and outbreaks in schools d. Incidence among school age children and transmission to adults	Division of Adolescent and School Health - Kathleen Ethier International Task Force - Aimee Summers Community Intervention and At Risk Task Force - Catherine Rasberry and Anu Pejavara
3. Cluster and Outbreak Surveillance (15 minutes) a. Data and approaches to capturing and defining outbreaks	Council of State and Territorial Epidemiologists/Case Surveillance Task Force - Peggy Honein
4. AOB- Open Discussion (10 minutes)	All

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From: McMorrow, Meredith (CDC/DDID/NCIRD/ID)
Sent: Wed, 6 May 2020 06:07:03 +0000
To: Gross, Samantha (CDC/DDPHSIS/CGH/DGHT);Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM);Swezy, Virginia (CDC/DDPHSIS/CGH/GID);McElroy, Peter (CDC/DDPHSIS/CGH/DPDM);Azziz-Baumgartner, Eduardo (CDC/DDID/NCIRD/ID);Greene, Carolyn M. (CDC/DDID/NCIRD/ID);Spencer, Sarah (CDC/DDID/NCIRD/ID);McCarron, Margaret (Meg) (CDC/DDID/NCIRD/ID);Peck, Megan (CDC/CGH/GID)
Cc: Wheeler, Paulah (CDC/DDPHSIS/CGH/DGHT);Fleming, Monica (CDC/DDPHSIS/CGH/GID);Gogstad, Eric (CDC/DDID/NCIRD/ID);Zhou, Weigong (CDC/DDID/NCIRD/ID)
Subject: RE: Special Investigation Update - South Africa
Attachments: SARS-CoV-2 - Proposal - Cohort Study - V2.docx, PHIRST-C brief 05052020 - SAC.pptx, PHIRST-SARS-CoV-2 - Protocol - WV5 - Clean.pdf

Apologies, this was still in my draft box today. Please find attached a 4-page study summary document, slides covering methods and brief summary of findings from the original cohort study (2016-2018), and the draft protocol.

Best wishes, Meredith

Meredith McMorrow, MD, MPH, FAAP
CAPT, US Public Health Service
Director, Influenza Program
Centers for Disease Control and Prevention, South Africa
Email: bwe3@cdc.gov | Office: +27124249081 | Cell: (b)(6)

-----Original Appointment-----
From: Gross, Samantha (CDC/DDPHSIS/CGH/DGHT) <puj3@cdc.gov>
Sent: Monday, May 4, 2020 7:22 PM
To: Gross, Samantha (CDC/DDPHSIS/CGH/DGHT); Marston, Barbara J. (CDC/DDPHSIS/CGH/DPDM); Swezy, Virginia (CDC/DDPHSIS/CGH/GID); McElroy, Peter (CDC/DDPHSIS/CGH/DPDM); Azziz-Baumgartner, Eduardo (CDC/DDID/NCIRD/ID); Greene, Carolyn M. (CDC/DDID/NCIRD/ID); Spencer, Sarah (CDC/DDID/NCIRD/ID); McCarron, Margaret (Meg) (CDC/DDID/NCIRD/ID); McMorrow, Meredith (CDC/DDID/NCIRD/ID); Peck, Megan (CDC/CGH/GID)
Cc: Wheeler, Paulah (CDC/DDPHSIS/CGH/DGHT); Fleming, Monica (CDC/DDPHSIS/CGH/GID); Gogstad, Eric (CDC/DDID/NCIRD/ID)
Subject: Special Investigation Update - South Africa
When: Tuesday, May 5, 2020 9:00 AM-10:00 AM (UTC-05:00) Eastern Time (US & Canada).
Where: Skype Meeting

Dear All,

On behalf of the COVID-19 International Task Force, we would like to schedule a meeting for South Africa colleagues to provide ITF Leadership with an overview of the proposed COVID-19 study, protocol, timeline, and budget that was submitted for ITF funding. Please let us know if this time works for you.

Best,
Sam Gross

Join Skype Meeting

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	(Atlanta Dial-in Conference Region)	English (United States)

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From: Zhou, Weigong (CDC/DDID/NCIRD/ID)
Sent: Mon, 2 Mar 2020 00:31:26 +0000
To: Wong, Diana (OS/ASPR/SIIM)
Subject: RE: Urgent Request for SME Input
Attachments: WHO-China Joint Mission on COVID-19 - FINAL REPORT 1100hr 28Feb2020.pdf

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Report of the WHO-China Joint Mission on Coronavirus Disease 2019 (COVID-19)

16-24 February 2020

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I. The Mission

Goal and Objectives

The overall goal of the Joint Mission was to rapidly inform national (China) and international planning on next steps in the response to the ongoing outbreak of the novel coronavirus disease (COVID-19[1]) and on next steps in readiness and preparedness for geographic areas not yet affected.

The major objectives of the Joint Mission were as follows:

- To enhance understanding of the evolving COVID-19 outbreak in China and the nature and impact of ongoing containment measures;
- To share knowledge on COVID-19 response and preparedness measures being implemented in countries affected by or at risk of importations of COVID-19;
- To generate recommendations for adjusting COVID-19 containment and response measures in China and internationally; and
- To establish priorities for a collaborative programme of work, research and development to address critical gaps in knowledge and response and readiness tools and activities.

Members & Method of Work

The Joint Mission consisted of 25 national and international experts from China, Germany, Japan, Korea, Nigeria, Russia, Singapore, the United States of America and the World Health Organization (WHO). The Joint Mission was headed by Dr Bruce Aylward of WHO and Dr Wannian Liang of the People's Republic of China. The full list of members and their affiliations is available in Annex A. The Joint Mission was implemented over a 9-day period from 16-24 February 2020. The schedule of work is available in Annex B.

The Joint Mission began with a detailed workshop with representatives of all of the principal ministries that are leading and/or contributing to the response in China through the National Prevention and Control Task Force. A series of in-depth meetings were then conducted with national level institutions responsible for the management, implementation and evaluation of the response, particularly the National Health Commission and the China Centers for Disease Control and Prevention (China CDC). To gain first-hand knowledge on the field level implementation and impact of the national and local response strategy, under a range of epidemiologic and provincial contexts, visits were conducted to Beijing Municipality and the provinces of Sichuan (Chengdu), Guangdong (Guangzhou, Shenzhen) and Hubei (Wuhan). The field visits included community centers and health clinics, country/district hospitals, COVID-19 designated hospitals, transportations hubs (air, rail, road), a wet market, pharmaceutical and personal protective equipment (PPE) stocks warehouses, research institutions, provincial health commissions, and local Centers for

[1] In the Chinese version of this report, COVID-19 is referred to throughout as novel coronavirus pneumonia or NCP, the term by which COVID-19 is most widely known in the People's Republic of China.

Disease Control (provincial and prefecture). During these visits, the team had detailed discussion and consultations with Provincial Governors, municipal Mayors, their emergency operations teams, senior scientists, frontline clinical, public health and community workers, and community neighbourhood administrators. The Joint Mission concluded with working sessions to consolidate findings, generate conclusions and propose suggested actions.

To achieve its goal, the Joint Mission gave particular focus to addressing key questions related to the natural history and severity of COVID-19, the transmission dynamics of the COVID-19 virus in different settings, and the impact of ongoing response measures in areas of high (community level), moderate (clusters) and low (sporadic cases or no cases) transmission.

The findings in this report are based on the Joint Mission's review of national and local governmental reports, discussions on control and prevention measures with national and local experts and response teams, and observations made and insights gained during site visits. The figures have been produced using information and data collected during site visits and with the agreement of the relevant groups. References are available for any information in this report that has already been published in journals.

The final report of the Joint Mission was submitted on 28 February 2020.

II. Major findings

The major findings are described in six sections: the virus, the outbreak, transmission dynamics, disease progression and severity, the China response and knowledge gaps. More detailed descriptions of technical findings are provided in Annex C.

The virus

On 30 December 2019, three bronchoalveolar lavage samples were collected from a patient with pneumonia of unknown etiology – a surveillance definition established following the SARS outbreak of 2002-2003 – in Wuhan Jinyintan Hospital. Real-time PCR (RT-PCR) assays on these samples were positive for pan-Betacoronavirus. Using Illumina and nanopore sequencing, the whole genome sequences of the virus were acquired. Bioinformatic analyses indicated that the virus had features typical of the coronavirus family and belonged to the Betacoronavirus 2B lineage. Alignment of the full-length genome sequence of the COVID-19 virus and other available genomes of Betacoronavirus showed the closest relationship was with the bat SARS-like coronavirus strain BatCov RaTG13, identity 96%.

Virus isolation was conducted with various cell lines, such as human airway epithelial cells, Vero E6, and Huh-7. Cytopathic effects (CPE) were observed 96 hours after inoculation. Typical crown-like particles were observed under transmission electron microscope (TEM) with negative staining. The cellular infectivity of the isolated viruses could be completely neutralized by the sera collected from convalescent patients. Transgenic human ACE2 mice and Rhesus monkey intranasally challenged by this virus isolate induced multifocal pneumonia with interstitial hyperplasia. The COVID-19 virus was subsequently detected and isolated in the lung and intestinal tissues of the challenged animals.

Whole genome sequencing analysis of 104 strains of the COVID-19 virus isolated from patients in different localities with symptom onset between the end of December 2019 and mid-February 2020 showed 99.9% homology, without significant mutation (Figure 1).

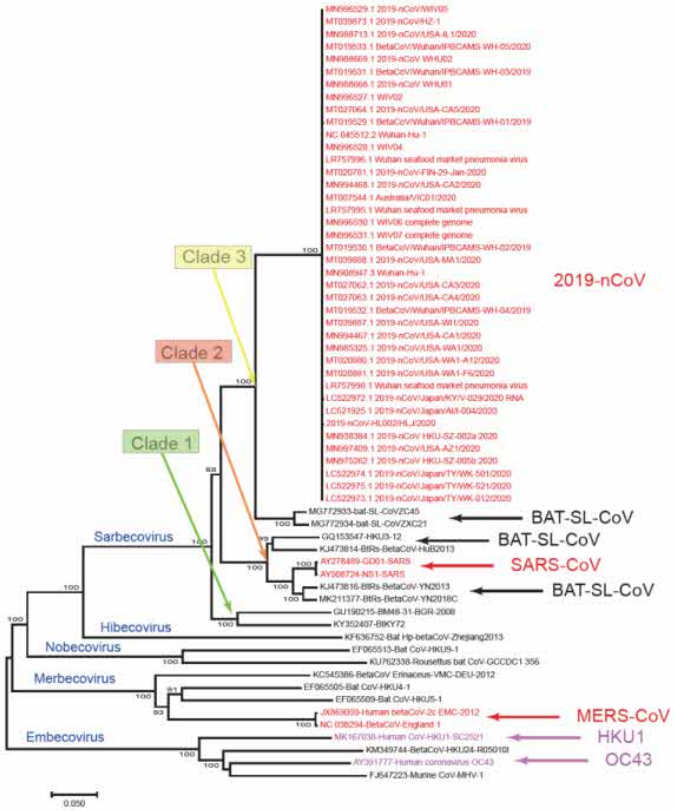


Figure 1. Phylogenetic analysis of the COVID-19 virus and its closely related reference genomes

Note: COVID-19 virus is referred to as 2019-nCoV in the figure, the interim virus name WHO announced early in the outbreak.

Post-mortem samples from a 50-year old male patient from Wuhan were taken from the lung, liver, and heart. Histological examination showed bilateral diffuse alveolar damage with cellular fibromyxoid exudates. The lung showed evident desquamation of pneumocytes and hyaline membrane formation, indicating acute respiratory distress syndrome (ARDS). Lung tissue also displayed cellular and fibromyxoid exudation, desquamation of pneumocytes and pulmonary oedema. Interstitial mononuclear inflammatory infiltrates, dominated by lymphocytes, were seen in both lungs. Multinucleated syncytial cells with atypical enlarged pneumocytes characterized by large nuclei, amphophilic granular cytoplasm, and prominent nucleoli were identified in the intra-alveolar spaces, showing viral cytopathic-like changes. No obvious intranuclear or intracytoplasmic viral inclusions were identified.

The outbreak

As of 20 February 2020, a cumulative total of 75,465 COVID-19 cases were reported in China. Reported cases are based on the National Reporting System (NRS) between the

National and Provincial Health Commissions. The NRS issues daily reports of newly recorded confirmed cases, deaths, suspected cases, and contacts. A daily report is provided by each province at 0300hr in which they report cases from the previous day.

The epidemic curves presented in Figures 2 and 3 are generated using China's National Infectious Disease Information System (IDIS), which requires each COVID-19 case to be reported electronically by the responsible doctor as soon as a case has been diagnosed. It includes cases that are reported as asymptomatic and data are updated in real time. Individual case reporting forms are downloaded after 2400hr daily. Epidemiologic curves for Wuhan, Hubei (outside of Wuhan), China (outside Hubei) and China by symptom onset are provided in Figure 2.

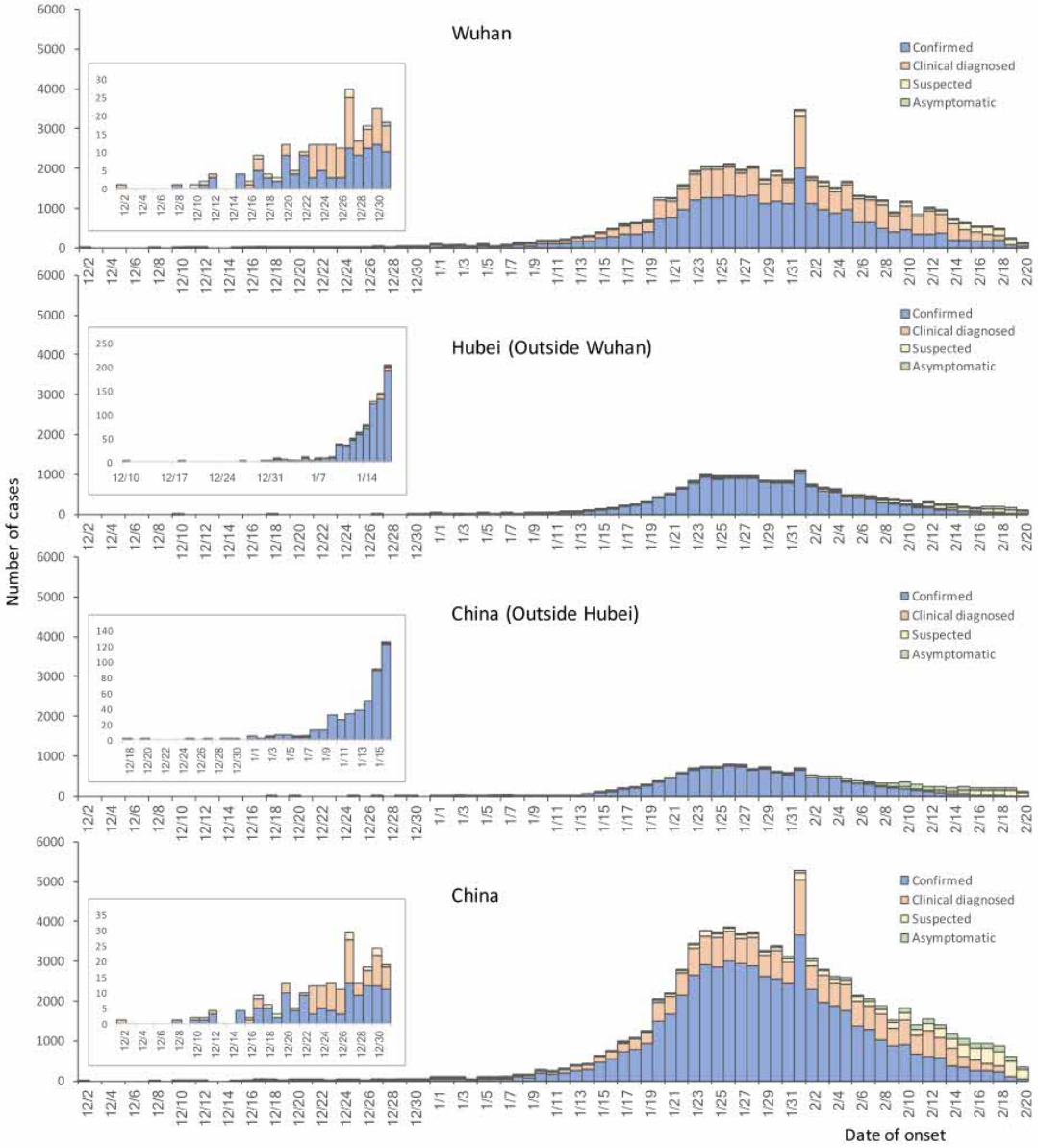


Figure 2 Epidemiologic curve of COVID-19 laboratory confirmed cases, by date of onset of illness, reported in China, as of 20 February 2020

Figure 3 presents epidemic curves of laboratory-confirmed cases, by symptom onset and separately by date of report, at 5, 12, and 20 February 2020. Figures 2 and 3 illustrate that the epidemic rapidly grew from 10-22 January, reported cases peaked and plateaued between 23 January and 27 January, and have been steadily declining since then, apart from the spike that was reported on 1 February (note: at a major hospital in Wuhan, fever clinic patients fell from a peak of 500/day in late January to average 50/day since mid-February).

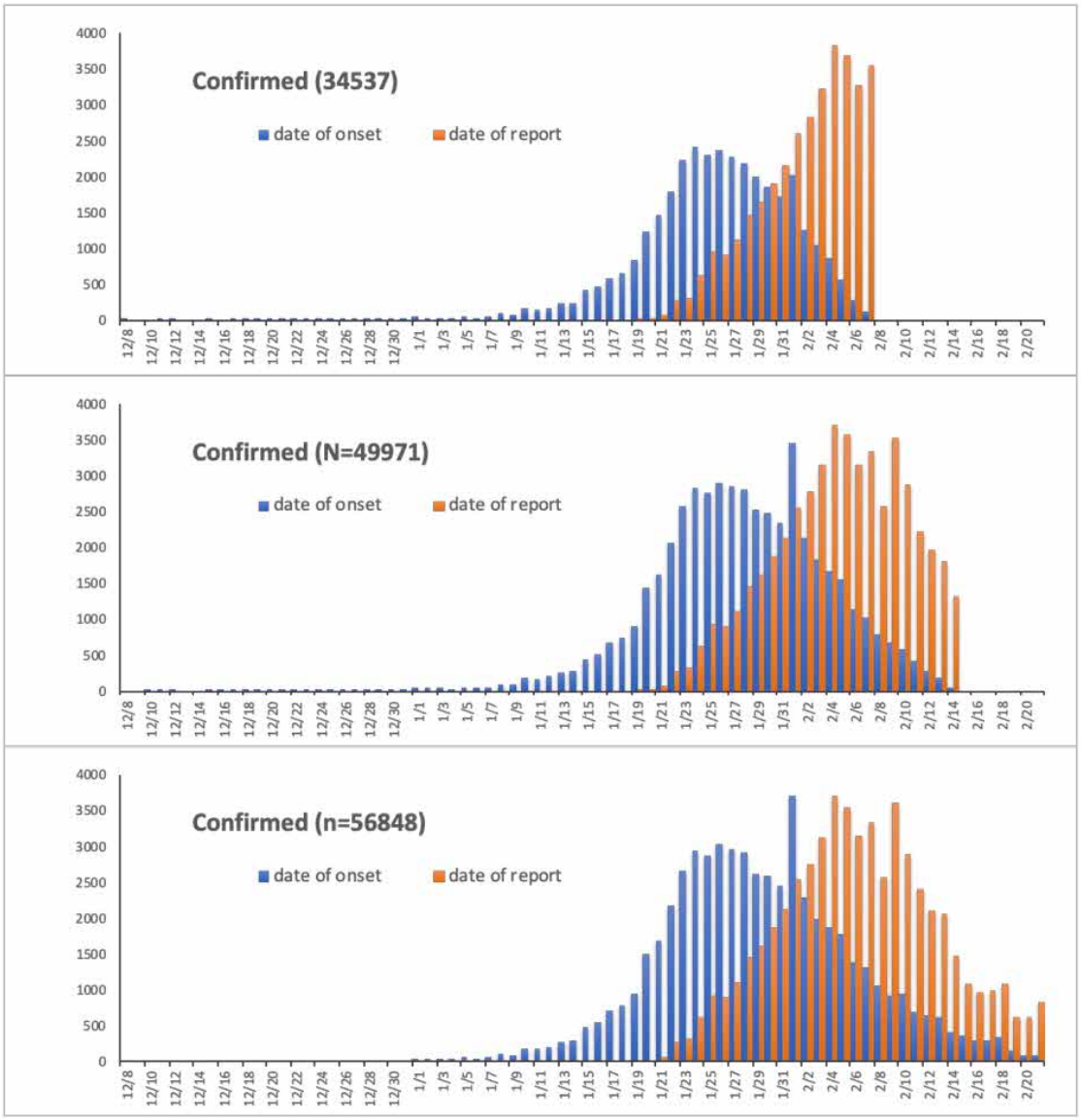


Figure 3. Epidemic curves by symptom onset and date of report as of 5 February (top panel), 12 February (middle panel) and 20 February 2020 (lower panel) for laboratory confirmed COVID-19 cases for all of China

Based on these epidemic curves, the published literature, and our on-site visits in Wuhan (Hubei), Guangdong (Shenzhen and Guangzhou), Sichuan (Chengdu), and Beijing, the Joint Mission team has made the following epidemiological observations:

Demographic characteristics

Among 55,924 laboratory confirmed cases reported as of 20 February 2020, the median age is 51 years (range 2 days-100 years old; IQR 39-63 years old) with the majority of cases (77.8%) aged between 30–69 years. Among reported cases, 51.1% are male, 77.0% are from Hubei and 21.6% are farmers or laborers by occupation.

Zoonotic origins

COVID-19 is a zoonotic virus. From phylogenetics analyses undertaken with available full genome sequences, bats appear to be the reservoir of COVID-19 virus, but the intermediate host(s) has not yet been identified. However, three important areas of work are already underway in China to inform our understanding of the zoonotic origin of this outbreak. These include early investigations of cases with symptom onset in Wuhan throughout December 2019, environmental sampling from the Huanan Wholesale Seafood Market and other area markets, and the collection of detailed records on the source and type of wildlife species sold at the Huanan market and the destination of those animals after the market was closed.

Routes of transmission

COVID-19 is transmitted via droplets and fomites during close unprotected contact between an infector and infectee. Airborne spread has not been reported for COVID-19 and it is not believed to be a major driver of transmission based on available evidence; however, it can be envisaged if certain aerosol-generating procedures are conducted in health care facilities. Fecal shedding has been demonstrated from some patients, and viable virus has been identified in a limited number of case reports. However, the fecal-oral route does not appear to be a driver of COVID-19 transmission; its role and significance for COVID-19 remains to be determined. Viral shedding is discussed in the Technical Findings (Annex C).

Household transmission

In China, human-to-human transmission of the COVID-19 virus is largely occurring in families. The Joint Mission received detailed information from the investigation of clusters and some household transmission studies, which are ongoing in a number of Provinces. Among 344 clusters involving 1308 cases (out of a total 1836 cases reported) in Guangdong Province and Sichuan Province, most clusters (78%-85%) have occurred in families. Household transmission studies are currently underway, but preliminary studies ongoing in Guangdong estimate the secondary attack rate in households ranges from 3-10%.

Contact Tracing

China has a policy of meticulous case and contact identification for COVID-19. For example, in Wuhan more than 1800 teams of epidemiologists, with a minimum of 5 people/team, are tracing tens of thousands of contacts a day. Contact follow up is painstaking, with a high percentage of identified close contacts completing medical observation. Between 1% and 5% of contacts were subsequently laboratory confirmed cases of COVID-19, depending on location. For example:

- As of 17 February, in Shenzhen City, among 2842 identified close contacts, 2842 (100%) were traced and 2240 (72%) have completed medical observation. Among the close contacts, 88 (2.8%) were found to be infected with COVID-19.

- As of 17 February, in Sichuan Province, among 25493 identified close contacts, 25347 (99%) were traced and 23178 (91%) have completed medical observation. Among the close contacts, 0.9% were found to be infected with COVID-19.
- As of 20 February, in Guangdong Province, among 9939 identified close contacts, 9939 (100%) were traced and 7765 (78%) have completed medical observation. Among the close contacts, 479 (4.8%) were found to be infected with COVID-19.

Testing at fever clinics and from routine ILI/SARI surveillance

The Joint Mission systematically enquired about testing for COVID-19 from routine respiratory disease surveillance systems to explore if COVID-19 is circulating more broadly and undetected in the community in China. These systems could include RT-PCR testing of COVID-19 virus in influenza-like-illness (ILI) and severe acute respiratory infection (SARI) surveillance systems, as well as testing of results among all visitors to fever clinics.

In Wuhan, COVID-19 testing of ILI samples (20 per week) in November and December 2019 and in the first two weeks of January 2020 found no positive results in the 2019 samples, 1 adult positive in the first week of January, and 3 adults positive in the second week of January; all children tested were negative for COVID-19 although a number were positive for influenza. In Guangdong, from 1-14 January, only 1 of more than 15000 ILI/SARI samples tested positive for the COVID-19 virus. In one hospital in Beijing, there were no COVID-19 positive samples among 1910 collected from 28 January 2019 to 13 February 2020. In a hospital in Shenzhen, 0/40 ILI samples were positive for COVID-19.

Within the fever clinics in Guangdong, the percentage of samples that tested positive for the COVID-19 virus has decreased over time from a peak of 0.47% positive on 30 January to 0.02% on 16 February. Overall in Guangdong, 0.14% of approximately 320,000 fever clinic screenings were positive for COVID-19.

Susceptibility

As COVID-19 is a newly identified pathogen, there is no known pre-existing immunity in humans. Based on the epidemiologic characteristics observed so far in China, everyone is assumed to be susceptible, although there may be risk factors increasing susceptibility to infection. This requires further study, as well as to know whether there is neutralising immunity after infection.

The transmission dynamics

Inferring from Figures 2 and 3, and based on our observations at the national and provincial/municipal levels during the Joint Mission, we summarize and interpret the transmission dynamics of COVID-19 thus far. It is important to note that transmission dynamics of any outbreak are inherently contextual. For COVID-19, we observe four major types of transmission dynamics during the epidemic growth phase and in the post-control period, and highlight what is known about transmission in children, as follows:

Transmission in Wuhan

Early cases identified in Wuhan are believed to be have acquired infection from a zoonotic source as many reported visiting or working in the Huanan Wholesale Seafood Market. As of 25 February, an animal source has not yet been identified.

At some point early in the outbreak, some cases generated human-to-human transmission chains that seeded the subsequent community outbreak prior to the implementation of the comprehensive control measures that were rolled out in Wuhan. The dynamics likely approximated mass action and radiated from Wuhan to other parts of Hubei province and China, which explains a relatively high R_0 of 2-2.5.

The *cordon sanitaire* around Wuhan and neighboring municipalities imposed since 23 January 2020 has effectively prevented further exportation of infected individuals to the rest of the country.

Transmission in Hubei, other than Wuhan

In the prefectures immediately adjoining Wuhan (Xiaogan, Huanggang, Jingzhou and Ezhou), transmission is less intense. For other prefectures, due to fewer transport links and human mobility flows with Wuhan, the dynamics are more closely aligned with those observed in the other areas of the country. Within Hubei, the implementation of control measures (including social distancing) has reduced the community force of infection, resulting in the progressively lower incident reported case counts.

Transmission in China outside of Hubei

Given Wuhan's transport hub status and population movement during the Chinese New Year (chunyun), infected individuals quickly spread throughout the country, and were particularly concentrated in cities with the highest volume of traffic with Wuhan. Some of these imported seeds generated limited human-to-human transmission chains at their destination.

Given the Wuhan/Hubei experience, a comprehensive set of interventions, including aggressive case and contact identification, isolation and management and extreme social distancing, have been implemented to interrupt the chains of transmission nationwide. To date, most of the recorded cases were imported from or had direct links to Wuhan/Hubei. Community transmission has been very limited. Most locally generated cases have been clustered, the majority of which have occurred in households, as summarized above.

Of note, the highly clustered nature of local transmission may explain a relatively high R_0 (2-2.5) in the absence of interventions and low confirmed case counts with intense quarantine and social distancing measures.

Special settings

We note that instances of transmission have occurred within health care settings prisons and other closed settings. At the present time, it is not clear what role these settings and groups play in transmission. However, they do not appear to be major drivers of the overall epidemic dynamics. Specifically, we note:

(a) **Transmission in health care settings and among health care workers (HCW)** – The Joint Mission discussed nosocomial infection in all locations visited during the Mission. As of 20 February 2020, there were 2,055 COVID-19 laboratory-confirmed cases reported among HCW from 476 hospitals across China. The majority of HCW cases (88%) were reported from Hubei.

Remarkably, more than 40,000 HCW have been deployed from other areas of China to support the response in Wuhan. Notwithstanding discrete and limited instances of nosocomial outbreaks (e.g. a nosocomial outbreak involving 15 HCW in Wuhan), transmission within health care settings and amongst health care workers does not appear to be a major transmission feature of COVID-19 in China. The Joint Mission learned that, among the HCW infections, most were identified early in the outbreak in Wuhan when supplies and experience with the new disease was lower. Additionally, investigations among HCW suggest that many may have been infected within the household rather than in a health care setting. Outside of Hubei, health care worker infections have been less frequent (i.e. 246 of the total 2055 HCW cases). When exposure was investigated in these limited cases, the exposure for most was reported to have been traced back to a confirmed case in a household.

The Joint Team noted that attention to the prevention of infection in health care workers is of paramount importance in China. Surveillance among health care workers identified factors early in the outbreak that placed HCW at higher risk of infection, and this information has been used to modify policies to improve protection of HCW.

(b) **Transmission in closed settings** – There have been reports of COVID-19 transmission in prisons (Hubei, Shandong, and Zhejiang, China), hospitals (as above) and in a long-term living facility. The close proximity and contact among people in these settings and the potential for environmental contamination are important factors, which could amplify transmission. Transmission in these settings warrants further study.

Children

Data on individuals aged 18 years old and under suggest that there is a relatively low attack rate in this age group (2.4% of all reported cases). Within Wuhan, among testing of ILI samples, no children were positive in November and December of 2019 and in the first two weeks of January 2020. From available data, and in the absence of results from serologic studies, it is not possible to determine the extent of infection among children, what role children play in transmission, whether children are less susceptible or if they present differently clinically (i.e. generally milder presentations). The Joint Mission learned that infected children have largely been identified through contact tracing in households of adults. Of note, people interviewed by the Joint Mission Team could not recall episodes in which transmission occurred from a child to an adult.

The signs, symptoms, disease progression and severity

Symptoms of COVID-19 are non-specific and the disease presentation can range from no symptoms (asymptomatic) to severe pneumonia and death. As of 20 February 2020 and

based on 55924 laboratory confirmed cases, typical **signs and symptoms** include: fever (87.9%), dry cough (67.7%), fatigue (38.1%), sputum production (33.4%), shortness of breath (18.6%), sore throat (13.9%), headache (13.6%), myalgia or arthralgia (14.8%), chills (11.4%), nausea or vomiting (5.0%), nasal congestion (4.8%), diarrhea (3.7%), and hemoptysis (0.9%), and conjunctival congestion (0.8%).

People with COVID-19 generally develop signs and symptoms, including mild respiratory symptoms and fever, on an average of 5-6 days after infection (mean incubation period 5-6 days, range 1-14 days).

Most people infected with COVID-19 virus have mild disease and recover. Approximately 80% of laboratory confirmed patients have had **mild to moderate disease**, which includes non-pneumonia and pneumonia cases, 13.8% have **severe disease** (dyspnea, respiratory frequency ≥30/minute, blood oxygen saturation ≤93%, PaO2/FiO2 ratio <300, and/or lung infiltrates >50% of the lung field within 24-48 hours) and 6.1% are **critical** (respiratory failure, septic shock, and/or multiple organ dysfunction/failure). **Asymptomatic infection** has been reported, but the majority of the relatively rare cases who are asymptomatic on the date of identification/report went on to develop disease. The proportion of truly asymptomatic infections is unclear but appears to be relatively rare and does not appear to be a major driver of transmission.

Individuals at **highest risk** for severe disease and death include people aged over 60 years and those with underlying conditions such as hypertension, diabetes, cardiovascular disease, chronic respiratory disease and cancer. Disease in **children** appears to be relatively rare and mild with approximately 2.4% of the total reported cases reported amongst individuals aged under 19 years. A very small proportion of those aged under 19 years have developed severe (2.5%) or critical disease (0.2%).

As of 20 February, 2114 of the 55,924 laboratory confirmed cases have died (**crude fatality ratio** [CFR[2]] 3.8%) (note: at least some of whom were identified using a case definition that included pulmonary disease). The overall CFR varies by location and intensity of transmission (i.e. 5.8% in Wuhan vs. 0.7% in other areas in China). In China, the overall CFR was higher in the early stages of the outbreak (17.3% for cases with symptom onset from 1-10 January) and has reduced over time to 0.7% for patients with symptom onset after 1 February (Figure 4). The Joint Mission noted that the standard of care has evolved over the course of the outbreak.

Mortality increases with age, with the highest mortality among people over 80 years of age (CFR 21.9%). The CFR is higher among males compared to females (4.7% vs. 2.8%). By occupation, patients who reported being retirees had the highest CFR at 8.9%. While patients who reported no comorbid conditions had a CFR of 1.4%, patients with comorbid conditions had much higher rates: 13.2% for those with cardiovascular disease, 9.2% for diabetes, 8.4% for hypertension, 8.0% for chronic respiratory disease, and 7.6% for cancer.

[2] The Joint Mission acknowledges the known challenges and biases of reporting crude CFR early in an epidemic.

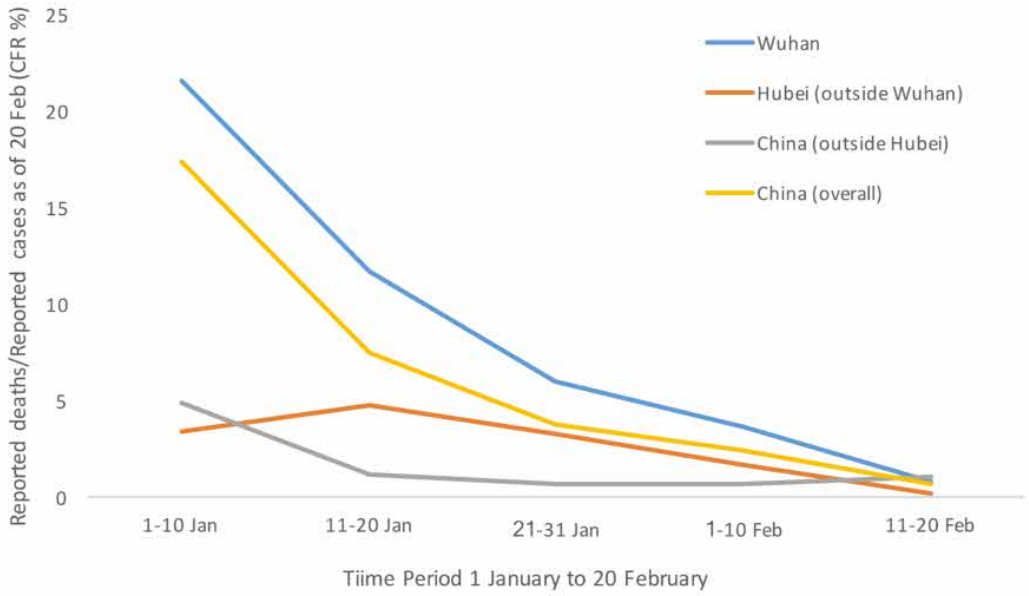


Figure 4 Case fatality ratio (reported deaths among total cases) for COVID-19 in China over time and by location, as of 20 February 2020

Data on the **progression of disease** is available from a limited number of reported hospitalized cases (Figure 5). Based on available information, the median time from symptom onset to laboratory confirmation nationally decreased from 12 days (range 8-18 days) in early January to 3 days (1-7) by early February 2020, and in Wuhan from 15 days (10-21) to 5 days (3-9), respectively. This has allowed for earlier case and contact identification, isolation and treatment.

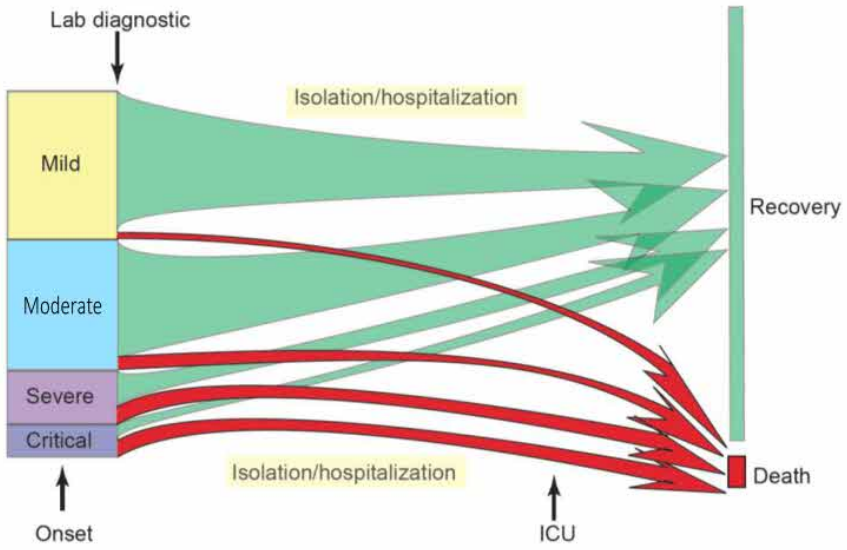


Figure 5. Pattern of disease progression for COVID-19 in China

Note: the relative size of the boxes for disease severity and outcome reflect the proportion of cases reported as of 20 February 2020. The size of the arrows indicates the proportion of cases who recovered or died. Disease definitions are described above. Moderate cases have a mild form of pneumonia.

Using available preliminary data, the median time from onset to clinical recovery for mild cases is approximately 2 weeks and is 3-6 weeks for patients with severe or critical disease. Preliminary data suggests that the time period from onset to the development of severe disease, including hypoxia, is 1 week. Among patients who have died, the time from symptom onset to outcome ranges from 2-8 weeks.

An increasing number of patients have **recovered**; as of 20 February, 18264 (24%) reported cases have recovered. Encouragingly, a report on 20 February from the Guangdong CDC suggests that of 125 severe cases identified in Guangdong, 33 (26.4%) have recovered and been released from hospital, and 58 (46.4%) had improved and were reclassified as having mild/moderate disease (i.e. + milder pneumonia). Among severe cases reported to date, 13.4% have died. Early identification of cases and contacts allows for earlier treatment.

The China response

Upon the detection of a cluster of pneumonia cases of unknown etiology in Wuhan, the CPC Central Committee and the State Council launched the national emergency response. A **Central Leadership Group for Epidemic Response** and the **Joint Prevention and Control Mechanism** of the State Council were established. General Secretary Xi Jinping personally directed and deployed the prevention and control work and requested that the prevention and control of the COVID-19 outbreak be the top priority of government at all levels. Prime Minister Li Keqiang headed the Central Leading Group for Epidemic Response and went to Wuhan to inspect and coordinate the prevention and control work of relevant departments and provinces (autonomous regions and municipalities) across the country. Vice Premier Sun Chunlan, who has been working on the frontlines in Wuhan, has led and coordinated the frontline prevention and control of the outbreak.

The prevention and control measures have been implemented rapidly, from the early stages in Wuhan and other key areas of Hubei, to the current overall national epidemic. It has been undertaken in **three main phases**, with two important events defining those phases. First, COVID-19 was included in the statutory report of Class B infectious diseases and border health quarantine infectious diseases on 20 January 2020, which marked the transition from the initial partial control approach to the comprehensive adoption of various control measures in accordance with the law. The second event was the State Council's issuing, on 8 February 2020, of The Notice on Orderly Resuming Production and Resuming Production in Enterprises, which indicated that China's national epidemic control work had entered a stage of overall epidemic prevention and control together with the restoration of normal social and economic operations.

The first stage

During the early stage of the outbreak, the main strategy focused on preventing the exportation of cases from Wuhan and other priority areas of Hubei Province, and preventing the importation of cases by other provinces; the overall aim was to control the source of infection, block transmission and prevent further spread. The response mechanism was initiated with multi-sectoral involvement in joint prevention and control measures. Wet markets were closed, and efforts were made to identify the zoonotic source. Information on the epidemic was notified to WHO on 3 January, and whole genome sequences of the COVID-19 virus were shared with WHO on 10 January. Protocols for COVID-19 diagnosis and

treatment, surveillance, epidemiological investigation, management of close contacts, and laboratory testing were formulated, and relevant surveillance activities and epidemiological investigations conducted. Diagnostic testing kits were developed, and wildlife and live poultry markets were placed under strict supervision and control measures.

The second stage

During the second stage of the outbreak, the main strategy was to reduce the intensity of the epidemic and to slow down the increase in cases. In Wuhan and other priority areas of Hubei Province, the focus was on actively treating patients, reducing deaths, and preventing exportations. In other provinces, the focus was on preventing importations, curbing the spread of the disease and implementing joint prevention and control measures. Nationally, wildlife markets were closed and wildlife captive-breeding facilities were cordoned off. On 20 January, COVID-19 was included in the notifiable report of Class B infectious diseases and border health quarantine infectious diseases, with temperature checks, health care declarations, and quarantine against COVID-19 instituted at transportation depots in accordance with the law. On 23 January, Wuhan implemented strict traffic restrictions. The protocols for diagnosis, treatment and epidemic prevention and control were improved; case isolation and treatment were strengthened.

Measures were taken to ensure that all cases were treated, and close contacts were isolated and put under medical observation. Other measures implemented included the extension of the Spring Festival holiday, traffic controls, and the control of transportation capacity to reduce the movement of people; mass gathering activities were also cancelled. Information about the epidemic and prevention and control measures was regularly released. Public risk communications and health education were strengthened; allocation of medical supplies was coordinated, new hospitals were built, reserve beds were used and relevant premises were repurposed to ensure that all cases could be treated; efforts were made to maintain a stable supply of commodities and their prices to ensure the smooth operation of society.

The third stage

The third stage of the outbreak focused on reducing clusters of cases, thoroughly controlling the epidemic, and striking a balance between epidemic prevention and control, sustainable economic and social development, the unified command, standardized guidance, and scientific evidence-based policy implementation. For Wuhan and other priority areas of Hubei Province, the focus was on patient treatment and the interruption of transmission, with an emphasis on concrete steps to fully implement relevant measures for the testing, admitting and treating of all patients. A risk-based prevention and control approach was adopted with differentiated prevention and control measures for different regions of the country and provinces. Relevant measures were strengthened in the areas of epidemiological investigation, case management and epidemic prevention in high-risk public places.

New technologies were applied such as the use of big data and artificial intelligence (AI) to strengthen contact tracing and the management of priority populations. Relevant health insurance policies were promulgated on "health insurance payment, off-site settlement, and financial compensation". All provinces provided support to Wuhan and priority areas in Hubei Province in an effort to quickly curb the spread of the disease and provide timely clinical treatment. Pre-school preparation was improved, and work resumed in phases and

batches. Health and welfare services were provided to returning workers in a targeted and 'one-stop' manner. Normal social operations are being restored in a stepwise fashion; knowledge about disease prevention is being popularized to improve public health literacy and skills; and a comprehensive program of emergency scientific research is being carried out to develop diagnostics, therapeutics and vaccines, delineate the spectrum of the disease, and identify the source of the virus.

Knowledge gaps

Since the start of the COVID-19 outbreak, there have been extensive attempts to better understand the virus and the disease in China. It is remarkable how much knowledge about a new virus has been gained in such a short time. However, as with all new diseases, and only 7 weeks after this outbreak began, key knowledge gaps remain. Annex D summarizes the key unknowns in a number of areas including the source of infection, pathogenesis and virulence of the virus, transmissibility, risk factors for infection and disease progression, surveillance, diagnostics, clinical management of severe and critically ill patients, and the effectiveness of prevention and control measures. The timely filling of these knowledge gaps is imperative to enhance control strategies.

III. Assessment

The Joint Mission drew four major conclusions from its work in China and four major conclusions from its knowledge of the broader global response to COVID-19. Recommendations are offered in five major areas to inform the ongoing response globally and in China.

The China Response & Next Steps

1. **In the face of a previously unknown virus, China has rolled out perhaps the most ambitious, agile and aggressive disease containment effort in history. The strategy that underpinned this containment effort was initially a national approach that promoted universal temperature monitoring, masking, and hand washing. However, as the outbreak evolved, and knowledge was gained, a science and risk-based approach was taken to tailor implementation. Specific containment measures were adjusted to the provincial, county and even community context, the capacity of the setting, and the nature of novel coronavirus transmission there.**

   While the fundamental principles of this strategy have been consistent since its launch, there has been constant refinement of specific aspects to incorporate new knowledge on the novel coronavirus, the COVID-19 disease, and COVID-19 containment, as rapidly as that knowledge has emerged. The remarkable speed with which Chinese scientists and public health experts isolated the causative virus, established diagnostic tools, and determined key transmission parameters, such as the route of spread and incubation period, provided the vital evidence base for China's strategy, gaining invaluable time for the response.

As striking, has been the uncompromising rigor of strategy application that proved to be a hallmark in every setting and context where it was examined. There has also been a relentless focus on improving key performance indicators, for example constantly enhancing the speed of case detection, isolation and early treatment. The implementation of these containment measures has been supported and enabled by the innovative and aggressive use of cutting edge technologies, from shifting to online medical platforms for routine care and schooling, to the use of 5G platforms to support rural response operations.

2. **Achieving China's exceptional coverage with and adherence to these containment measures has only been possible due to the deep commitment of the Chinese people to collective action in the face of this common threat. At a community level this is reflected in the remarkable solidarity of provinces and cities in support of the most vulnerable populations and communities. Despite ongoing outbreaks in their own areas, Governors and Mayors have continued to send thousands of health care workers and tons of vital PPE supplies into Hubei province and Wuhan city.**

   At the individual level, the Chinese people have reacted to this outbreak with courage and conviction. They have accepted and adhered to the starkest of containment measures – whether the suspension of public gatherings, the month-long 'stay at home' advisories or prohibitions on travel. Throughout an intensive 9-days of site visits across China, in frank discussions from the level of local community mobilizers and frontline health care providers to top scientists, Governors and Mayors, the Joint Mission was struck by the sincerity and dedication that each brings to this COVID-19 response.

3. **China's bold approach to contain the rapid spread of this new respiratory pathogen has changed the course of a rapidly escalating and deadly epidemic. A particularly compelling statistic is that on the first day of the advance team's work there were 2478 newly confirmed cases of COVID-19 reported in China. Two weeks later, on the final day of this Mission, China reported 409 newly confirmed cases. This decline in COVID-19 cases across China is real.**

   Several sources of data support this conclusion, including the steep decline in fever clinic visits, the opening up of treatment beds as cured patients are discharged, and the challenges to recruiting new patients for clinical trials. Based on a comparison of crude attack rates across provinces, the Joint Mission estimates that this truly all-of-Government and all-of-society approach that has been taken in China has averted or at least delayed hundreds of thousands of COVID-19 cases in the country. By extension, the reduction that has been achieved in the force of COVID-19 infection in China has also played a significant role in protecting the global community and creating a stronger first line of defense against international spread. Containing this outbreak, however, has come at great cost and sacrifice by China and its people, in both human and material terms.

   While the scale and impact of China's COVID-19 operation has been remarkable, it has also highlighted areas for improvement in public health emergency response capacity.

These include overcoming any obstacles to act immediately on early alerts, to massively scale-up capacity for isolation and care, to optimize the protection of frontline health care workers in all settings, to enhance collaborative action on priority gaps in knowledge and tools, and to more clearly communicate key data and developments internationally.

4. **China is already, and rightfully, working to bolster its economy, reopen its schools and return to a more normal semblance of its society, even as it works to contain the remaining chains of COVID-19 transmission. Appropriately, a science-based, risk-informed and phased approach is being taken, with a clear recognition and readiness of the need to immediately react to any new COVID-19 cases or clusters as key elements of the containment strategy are lifted.**

   Despite the declining case numbers, across China every province, city and community visited is urgently escalating their investments in acute care beds and public health capacity. It is crucial that this continues. Fifty thousand infected COVID-19 patient are still under treatment, across the country. However, the Joint Mission has come to understand the substantial knowledge, experience and capacities that China has rapidly built during this crisis. Consequently, it endorses China's working assumption that in most provinces and municipalities it should soon be possible to manage a resurgence in COVID-19 cases, using even more tailored and sustainable approaches that are anchored in very rapid case detection, instant activation of key containment activities, direct oversight by top leadership, and broad community engagement.

   As China works to resume a more normal level of societal and economic activity, it is essential that the world recognizes and reacts positively to the rapidly changing, and decreasing, risk of COVID-19 in the country. China's rapid return to full connectivity with the world, and to full productivity and economic output, is vital to China and to the world. The world urgently needs access to China's experience in responding to COVID-19, as well as the material goods it brings to the global response. It is even more urgent now, with escalating COVID-19 outbreaks outside of China, to constantly reassess any restrictions on travel and/or trade to China that go beyond the recommendations of the IHR Emergency Committee on COVID-19.

The Global Response & Next Steps

1. **The COVID-19 virus is a new pathogen that is highly contagious, can spread quickly, and must be considered capable of causing enormous health, economic and societal impacts in any setting. It is not SARS and it is not influenza. Building scenarios and strategies only on the basis of well-known pathogens risks failing to exploit all possible measures to slow transmission of the COVID-19 virus, reduce disease and save lives.**

   COVID-19 is not SARS and it is not influenza. It is a new virus with its own characteristics. For example, COVID-19 transmission in children appears to be limited compared with influenza, while the clinical picture differs from SARS. Such differences, while based on limited data, may be playing a role in the apparent efficacy of rigorously

applied non-pharmaceutical, public health measures to interrupt chains of human-to-human transmission in a range of settings in China. The COVID-19 virus is unique among human coronaviruses in its combination of high transmissibility, substantial fatal outcomes in some high-risk groups, and ability to cause huge societal and economic disruption. For planning purposes, it must be assumed that the global population is susceptible to this virus. As the animal origin of the COVID-19 virus is unknown at present, the risk of reintroduction into previously infected areas must be constantly considered.

The novel nature, and our continuously evolving understanding, of this coronavirus demands a tremendous agility in our capacity to rapidly adapt and change our readiness and response planning as has been done continually in China. This is an extraordinary feat for a country of 1.4 billion people.

2. **China's uncompromising and rigorous use of non-pharmaceutical measures to contain transmission of the COVID-19 virus in multiple settings provides vital lessons for the global response. This rather unique and unprecedented public health response in China reversed the escalating cases in both Hubei, where there has been widespread community transmission, and in the importation provinces, where family clusters appear to have driven the outbreak.**

   Although the timing of the outbreak in China has been relatively similar across the country, transmission chains were established in a wide diversity of settings, from mega-cities in the north and south of the country, to remote communities. However, the rapid adaptation and tailoring of China's strategy demonstrated that containment can be adapted and successfully operationalized in a wide range of settings.

   China's experience strongly supports the efficacy and effectiveness of anchoring COVID-19 readiness and rapid response plans in a thorough assessment of local risks and of utilizing a differentiated risk-based containment strategy to manage the outbreak in areas with no cases vs. sporadic cases vs. clusters of cases vs. community-level transmission. Such a strategy is essential for ensuring a sustainable approach while minimizing the socio-economic impact.

3. **Much of the global community is not yet ready, in mindset and materially, to implement the measures that have been employed to contain COVID-19 in China. These are the only measures that are currently proven to interrupt or minimize transmission chains in humans. Fundamental to these measures is extremely proactive surveillance to immediately detect cases, very rapid diagnosis and immediate case isolation, rigorous tracking and quarantine of close contacts, and an exceptionally high degree of population understanding and acceptance of these measures.**

   Achieving the high quality of implementation needed to be successful with such measures requires an unusual and unprecedented speed of decision-making by top leaders, operational thoroughness by public health systems, and engagement of society.

Given the damage that can be caused by uncontrolled, community-level transmission of this virus, such an approach is warranted to save lives and to gain the weeks and months needed for the testing of therapeutics and vaccine development. Furthermore, as the majority of new cases outside of China are currently occurring in high and middle-income countries, a rigorous commitment to slowing transmission in such settings with non-pharmaceutical measures is vital to achieving a second line of defense to protect low income countries that have weaker health systems and coping capacities.

The time that can be gained through the full application of these measures – even if just days or weeks – can be invaluable in ultimately reducing COVID-19 illness and deaths. This is apparent in the huge increase in knowledge, approaches and even tools that has taken place in just the 7 weeks since this virus was discovered through the rapid scientific work that has been done in China.

4. **The time gained by rigorously applying COVID-19 containment measures must be used more effectively to urgently enhance global readiness and rapidly develop the specific tools that are needed to ultimately stop this virus.**

   COVID-19 is spreading with astonishing speed; COVID-19 outbreaks in any setting have very serious consequences; and there is now strong evidence that non-pharmaceutical interventions can reduce and even interrupt transmission. Concerningly, global and national preparedness planning is often ambivalent about such interventions. However, to reduce COVID-19 illness and death, near-term readiness planning must embrace the large-scale implementation of high-quality, non-pharmaceutical public health measures. These measures must fully incorporate immediate case detection and isolation, rigorous close contact tracing and monitoring/quarantine, and direct population/community engagement.

   A huge array of COVID-19 studies, scientific research projects and product R&D efforts are ongoing in China and globally. This is essential and to be encouraged and supported. However, such a large number of projects and products needs to be prioritized. Without prioritizing, this risks compromising the concentration of attention and resources and collaboration required to cut timelines by precious weeks and months. While progress has been made, the urgency of the COVID-19 situation supports an even more ruthless prioritization of research in the areas of diagnostics, therapeutics and vaccines.

   Similarly, there is a long list of proposed studies on the origins of COVID-19, the natural history of the disease, and the virus's transmission dynamics. However, the urgency of responding to cases and saving lives makes it difficult for policy makers to consider and act on such comprehensive lists. This can be addressed by balancing studies with the immediate public health and clinical needs of the response. Studies can be prioritized in terms of the largest knowledge gaps that can be most rapidly addressed to have greatest immediate impact on response operations and patient management. This suggests prioritizing studies to identify risk factors for transmission in households, institutions and the community; convenience sampling for this virus in the population using existing surveillance systems; age-stratified sero-epidemiologic surveys; the analysis of clinical case series; and cluster investigations.

IV. Major Recommendations

For China

1. Maintain an appropriate level of emergency management protocols, depending on the assessed risk in each area and recognizing the real risk of new cases and clusters of COVID-19 as economic activity resumes, movement restrictions are lifted, and schools reopen;

2. Carefully monitor the phased lifting of the current restrictions on movement and public gatherings, beginning with the return of workers and migrant labor, followed by the eventual reopening of schools and lifting other measures;

3. Further strengthen the readiness of emergency management mechanisms, public health institutions (e.g. CDCs), medical facilities, and community engagement mechanisms to ensure sustained capacity to immediately launch containment activities in response to any resurgence in cases;

4. Prioritize research that rapidly informs response and risk management decisions, particularly household and health care facility studies, age-stratified sero-epidemiologic surveys and rigorous investigation of the animal-human interface; establish a centralized research program to fast-track the most promising rapid diagnostics and serologic assays, the testing of potential antivirals and vaccine candidates, and Chinese engagement in selected multi-country trials; and

5. As the country with the greatest knowledge on COVID-19, further enhance the systematic and real-time sharing of epidemiologic data, clinical results and experience to inform the global response.

For countries with imported cases and/or outbreaks of COVID-19

1. Immediately activate the highest level of national Response Management protocols to ensure the all-of-government and all-of-society approach needed to contain COVID-19 with non-pharmaceutical public health measures;

2. Prioritize active, exhaustive case finding and immediate testing and isolation, painstaking contact tracing and rigorous quarantine of close contacts;

3. Fully educate the general public on the seriousness of COVID-19 and their role in preventing its spread;

4. Immediately expand surveillance to detect COVID-19 transmission chains, by testing all patients with atypical pneumonias, conducting screening in some patients with upper respiratory illnesses and/or recent COVID-19 exposure, and adding testing for the COVID-19 virus to existing surveillance systems (e.g. systems for influenza-like-illness and SARI); and

5. Conduct multi-sector scenario planning and simulations for the deployment of even more stringent measures to interrupt transmission chains as needed (e.g. the suspension of large-scale gatherings and the closure of schools and workplaces).

For uninfected countries

1. Prepare to immediately activate the highest level of emergency response mechanisms to trigger the all-of-government and all-of society approach that is essential for early containment of a COVID-19 outbreak;

2. Rapidly test national preparedness plans in light of new knowledge on the effectiveness of non-pharmaceutical measures against COVID-19; incorporate rapid detection, largescale case isolation and respiratory support capacities, and rigorous contact tracing and management in national COVID-19 readiness and response plans and capacities;

3. Immediately enhance surveillance for COVID-19 as rapid detection is crucial to containing spread; consider testing all patients with atypical pneumonia for the COVID-19 virus, and adding testing for the virus to existing influenza surveillance systems;

4. Begin now to enforce rigorous application of infection prevention and control measures in all healthcare facilities, especially in emergency departments and outpatient clinics, as this is where COVID-19 will enter the health system; and

5. Rapidly assess the general population's understanding of COVID-19, adjust national health promotion materials and activities accordingly, and engage clinical champions to communicate with the media.

For the public

1. Recognize that COVID-19 is a new and concerning disease, but that outbreaks can managed with the right response and that the vast majority of infected people will recover;

2. Begin now to adopt and rigorously practice the most important preventive measures for COVID-19 by frequent hand washing and always covering your mouth and nose when sneezing or coughing;

3. Continually update yourself on COVID-19 and its signs and symptoms (i.e. fever and dry cough), because the strategies and response activities will constantly improve as new information on this disease is accumulating every day; and

4. Be prepared to actively support a response to COVID-19 in a variety of ways, including the adoption of more stringent 'social distancing' practices and helping the high-risk elderly population.

For the international community

1. Recognize that true solidarity and collaboration is essential between nations to tackle the common threat that COVID-19 represents and operationalize this principle;

2. Rapidly share information as required under the International Health Regulations (IHR) including detailed information about imported cases to facilitate contact tracing and inform containment measures that span countries;

3. Recognize the rapidly changing risk profile of COVID-19 affected countries and continually monitor outbreak trends and control capacities to reassess any 'additional health measures' that significantly interfere with international travel and trade.

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Annexes

A. WHO-China Joint Mission Members

Bruce AYLWARD	Team Lead WHO-China Joint Mission on COVID-19, Senior Advisor to the Director-General, World Health Organization, Geneva, Switzerland
Wannian LIANG	Team Lead WHO-China Joint Mission on COVID-19, Head of Expert Panel, National Health Commission
Xiaoping DONG	Director and Researcher, Center for Global Public Health, Chinese Center for Disease Control and Prevention
Tim ECKMANNS	Head of Unit, Healthcare-associated Infections, Surveillance of Antibiotic Resistance and Consumption, Robert Koch Institute, Berlin, Germany
Dale FISHER	Professor of Medicine, Yong Loo Lin School of Medicine, National University of Singapore, Singapore, Singapore
Chikwe IHEKWEAZU	Director General, Nigeria Centre for Disease Control, Nigeria Centre for Disease Control, Abuja, Nigeria
Clifford LANE	Clinical Director, National Institute of Allergy and Infectious Diseases, US National Institutes of Health, Bethesda, United States
Jong-Koo LEE	Professor of Family Medicine, Seoul National University College of Medicine, Seoul, Republic of Korea
Gabriel LEUNG	Dean of Medicine, Helen and Francis Zimmern Professor in Population Health, The University of Hong Kong, Hong Kong SAR, China
Jiangtao LIN	Director and Professor, Department of Pulmonary and Critical Care Medicine, China-Japan Friendship Hospital, National Clinical Research Center for Respiratory Diseases, Beijing
Haiying LIU	Deputy Director and Researcher, Institute of Pathogen Biology, Chinese Academy of Medical Sciences, Beijing China
Natalia PSHENICHNAYA	Head of International Department and Consultant, Center of Infectious Diseases, National Medical Research Center of Phthisiopulmonology and Infectious Diseases, Moscow, Russia
Aleksandr SEMENOV	Deputy Director, Saint Petersburg Pasteur Institute, Saint Petersburg, Russia
Hitoshi TAKAHASHI	Senior Research Scientist, Influenza Virus Research Center, National Institute of Infectious Diseases, Tokyo, Japan
Maria VAN KERKHOVE	Head of Unit, Emerging Diseases & Zoonoses, Global Infectious Hazard Preparedness, World Health Organization, Geneva, Switzerland
Bin WANG	Deputy Team Leader, Deputy Director General, Disease Prevention and Control Bureau, National Health Commission
Guangfa WANG	Director, Department of Respiratory and Critical Care Medicine, Peking University First Hospital
Fan WU	Vice Dean, Shanghai Medical College, Fudan University
Zhongze WU	Director, Compliance and Enforcement Division, Department of Wildlife Conservation, National Forestry and Grassland Administration
Zunyou WU	Chief Epidemiologist, Chinese Center for Disease Control and Prevention
Jun XING	Head of Unit, Country Capacity for International Health Regulations, Health Security Preparedness, World Health Organization, Geneva, Switzerland
Kwok-Yung YUEN	Chair Professor and Co-Director of State Key Laboratory of Emerging Infectious Diseases, Department of Microbiology, The University of Hong Kong
Weigong ZHOU	Medical Officer, Influenza Division, National Center for Immunization and Respiratory Diseases, US Centers for Disease Control and Prevention, Atlanta, United States
Yong ZHANG	Assistant Director and Researcher, National Institute for Viral Disease Control and prevention, Chinese Center for Disease Control and Prevention.
Lei ZHOU	Chief and Researcher, Branch for Emerging Infectious Disease, Public Health Emergency Center, Chinese Center for Disease Control and Prevention

B. Summary Agenda of the Mission

Dates	Location	Activities
10-15 February 2020 (Advance Team)	Beijing	Advance Team and WHO Country team meetings with national counterparts and institutions
16 February 2020	Beijing	Meeting with the full international team for briefing at the WHO Country office
	Beijing	Workshop at the National Health Commission (NHC) with relevant departments of the Joint Prevention and Control Mechanism of the State Council
17 February 2020	Beijing	Site visit to Beijing Ditan Hospital
	Beijing	Site visit to Anhuali community and health service station, Anzhen street, Chaoyang District, Beijing
	Beijing	Workshop with Chinese Center for Disease Control and Prevention
18 February 2020 (Guangdong Team)	Shenzhen, Guangdong	Shenzhen customs at the airport
	Shenzhen, Guangdong	Shenzhen No.3 People's Hospital
	Shenzhen, Guangdong	Shenzhen Center for Disease Control and Prevention
	Shenzhen, Guangdong	Meeting at Tencent
19 February 2020 (Guangdong Team)	Shenzhen, Guangdong	Qiaoxiang community
	Shenzhen to Guangzhou	Visit to Futian High-speed Train Station, and travel to Guangzhou by train
	Guangzhou	Guangzhou Panyu Sanatorium
	Guangzhou	Guangdong Laboratory of Regenerative Medicine and Health
	Guangzhou	Guangzhou Tiyudongzhihui wet market
	Guangzhou	First Workshop with The People's government of Guangdong Province
20 February 2020 (Guangdong Team)	Guangzhou	Guangdong Provincial Center for Disease Control and Prevention
	Guangzhou	Renmin road campus of Guangzhou Women and Children Medical Center
	Guangzhou	The second Workshop with The People's government of Guangdong Province
18 February 2020 (Sichuan Team)	Beijing to Chengdu	
	Sichuan	Site visit to Chengdu Shuangliu International Airport
		Meeting with the Governor of Sichuan Provincial People's Government
		Site visit to Yong'an Township Central hospital with fever clinic
		Site visit to home community of Yong'an township
19 February 2020 (Sichuan Team)		Symposium with provincial and municipal authorities
		Sichuan Center for Disease Control and Prevention
		Site visit to West China Hospital- Designated COVID-19 hospital
20 February 2020 (Sichuan Team)		Site visit to Chengdu Women and Children's hospital
		Site visit to Pharmaceutical Logistics center
		Site visit to East Chengdu railway station

		Site visit to Chengdu Public Health Clinical Centre- Designated COVID 19 hospital
Sichuan and Guangdong teams reconvene in Guangzhou		
21-24 February 2020		Analyze major findings; Meetings of the WHO-China Joint mission to finalize the report
Feb 22 (Wuhan Team)	Guangzhou to Wuhan	Select team members only
23 February (Wuhan Team)		Site visit to Guanggu Campus of Wuhan Tongji Hospital
		Site visit to Mobile Cabin Hospital in Wuhan Sports Center
		Workshop with relevant departments of the Joint Prevention and Control Mechanism of Hubei Province
		Feedback Meeting with Minister Ma, NHC at the Wuhan Conference Center
24 February 2020	Guangzhou to Beijing	Finalize report, WHO-Joint Press conference in Beijing

C. Detailed Technical Findings

Response management, case and contact management, risk communication and community engagement

The response structures in China were rapidly put in place according to existing emergency plans and aligned from the top to the bottom. This was replicated at the four levels of government (national provincial, prefecture and county/district).

Organizational structure and response mechanism

Response activation at the national level: COVID-19 prevention and control mechanisms were initiated immediately after the outbreak was declared and nine working groups were set up to coordinate the response: a) Coordination b) Epidemic prevention and control c) Medical treatment d) Research e) Public communication f) Foreign affairs g) Medical material support h) Life maintenance supplies and i) Social stability. Each working group has a ministerial level leader. Emergency response laws and regulations for the emergency response to public health emergencies, prevention and control of infectious diseases have been developed or updated to guide the response.

Response activation in provinces: Each province set up a similar structure to manage the outbreak. The response is organized at the levels of national, provincial, prefecture, county/district and the community. By 29 January, all provinces across China had launched the highest level of response for major public health emergencies.

Response Strategy

A clear strategy was developed, and goals were well articulated and communicated across the entire response architecture. This strategy was rapidly adapted and adjusted to the outbreak, both in terms of the epidemiological situation over time and in different parts of the country.

The epidemiological situation has been used to define location into four areas:

- In areas without cases, the strategy in these areas is to "strictly prevent introduction". This includes quarantine arrangements in transportation hubs, monitoring for temperature changes, strengthening of triage arrangements, use of fever clinics, and ensuring normal economic and social operations.
- In areas with sporadic cases, the strategy is focused on "reducing importation, stopping transmission and providing appropriate treatment".
- In areas with community clusters, the strategy is focussed on "stopping transmission, preventing exportation, and strengthening treatment".
- In areas with community transmission, the strictest prevention and control strategies are being implemented, the entry and exit of people from these areas has been stopped and public health and medical treatment measures are comprehensively strengthened.

Main control measures implemented in China

The main control measures implemented in China are as follows and are illustrated in Figures 6A-6D, representing the national level response and examples of the response at the Provincial and municipal levels:

Monitoring and reporting: COVID-19 was included in the statutory reporting of infectious diseases on 20 January and plans were formulated to strengthen diagnosis, monitoring, and reporting.

Strengthening ports of entry and quarantine: The Customs Department launched the emergency plan for public health emergencies at ports across the country and restarted the health declaration card system for entry and exit into cities as well as strict monitoring of the temperature of entry and exit passengers.

Treatment: For severe or critical patients, the principle of "Four Concentrations" was implemented: i.e. concentrating patients, medical experts, resources and treatment into special centres. All cities and districts transformed relevant hospitals, increased the number of designated hospitals, dispatched medical staff, and set up expert groups for consultation, so as to minimise mortality of severe patients. Medical resources from all over China have been mobilized to support the medical treatment of patients in Wuhan.

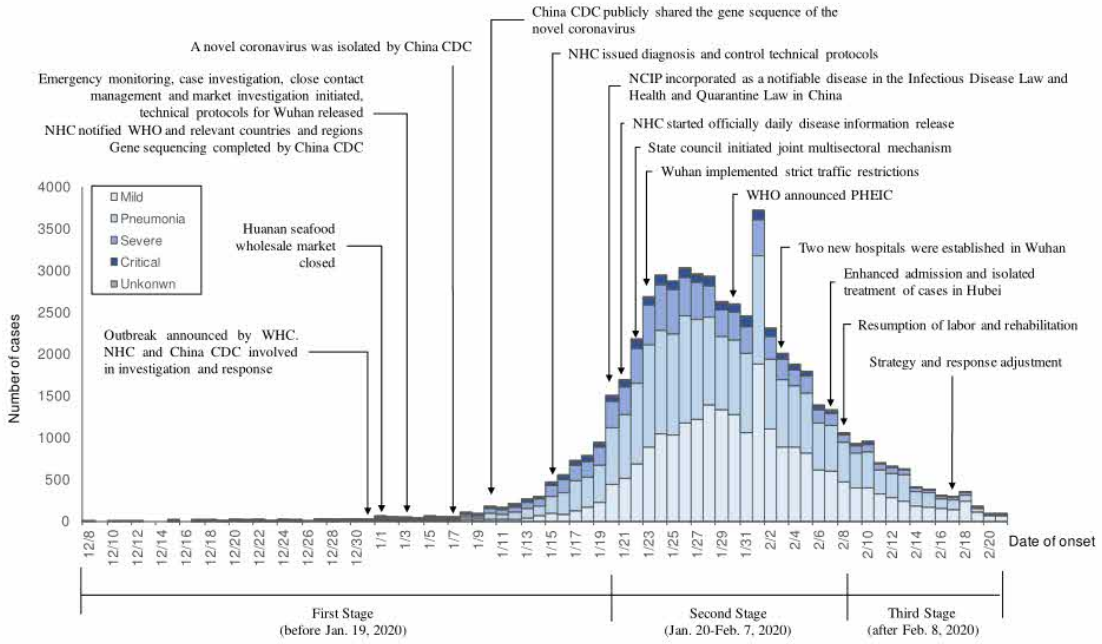
Epidemiological investigation and close contact management: Strong epidemiological investigations are being carried out for cases, clusters, and contacts to identify the source of infection and implement targeted control measures, such as contact tracing.

Social distancing: At the national level, the State Council extended the Spring Festival holiday in 2020, all parts of the country actively cancelled or suspended activities like sport events, cinema, theatre, and schools and colleges in all parts of the country postponed re-opening after the holiday. Enterprises and institutions have staggered their return to work. Transportation Departments setup thousands of health and quarantine stations in national service areas, and in entrances and exits for passengers at stations. Hubei Province adopted the most stringent traffic control measures, such as suspension of urban public transport, including subway, ferry and long-distance passenger transport. Every citizen has to wear a mask in public. Home support mechanisms were established. As a consequence of all of these measures, public life is very reduced.

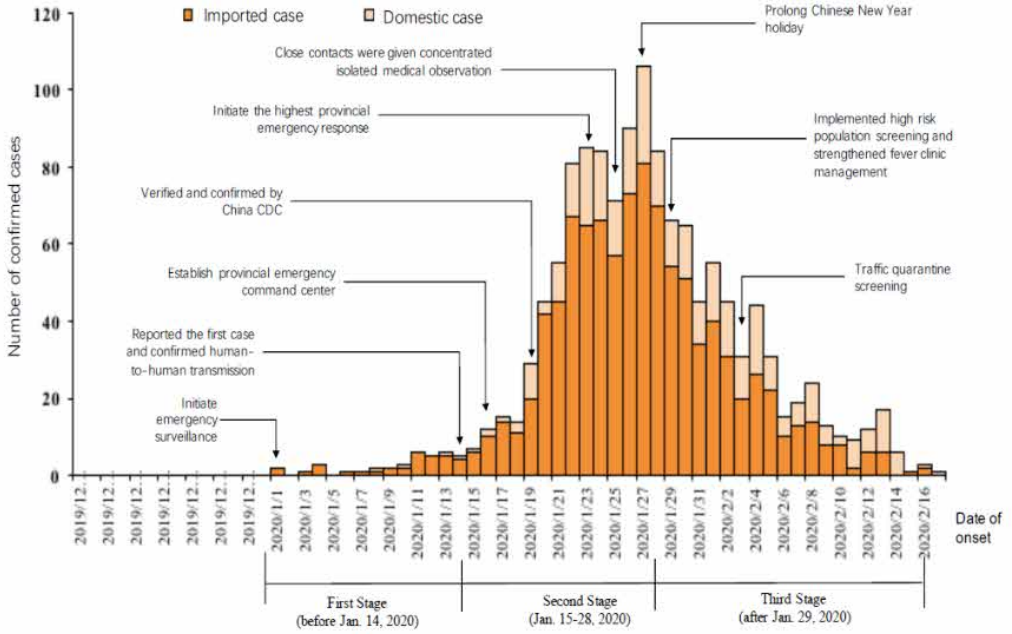
Funding and material support: Payment of health insurance was taken over by the state, as well as the work to improve accessibility and affordability of medical materials, provide personal protection materials, and ensure basic living materials for affected people.

Emergency material support: The government restored production and expanded production capacity, organized key enterprises that have already started to exceed current production capacity, supported local enterprises to expand imports, and used cross-border e-commerce platforms and enterprises to help import medical materials and improve the ability to guarantee supplies.

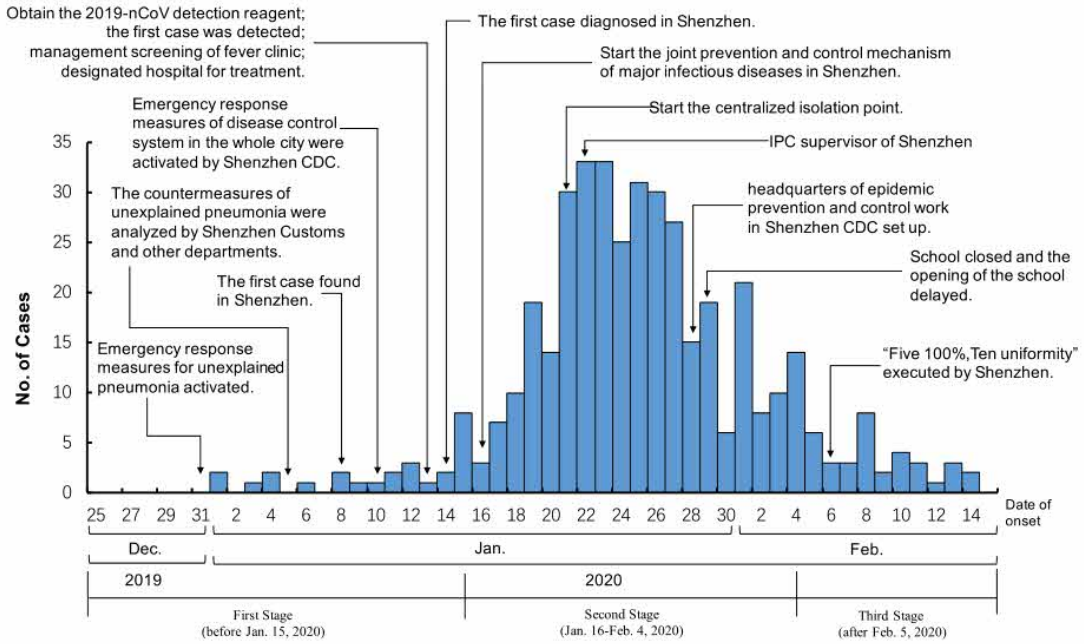
A


China CDC publicly shared the gene sequence of the novel coronavirus
A novel coronavirus was isolated by China CDC
NHC issued diagnosis and control technical protocols
Emergency monitoring, case investigation, close contact management and market investigation initiated, technical protocols for Wuhan released
NHC notified WHO and relevant countries and regions
Gene sequencing completed by China CDC
NCIP incorporated as a notifiable disease in the Infectious Disease Law and Health and Quarantine Law in China
NHC started officially daily disease information release
State council initiated joint multisectoral mechanism
Wuhan implemented strict traffic restrictions
WHO announced PHEIC
Mild
Pneumonia
Severe
Critical
Unkonwn
Huanan seafood wholesale market closed
Two new hospitals were established in Wuhan
Enhanced admission and isolated treatment of cases in Hubei
Outbreak announced by WHC, NHC and China CDC involved in investigation and response
Resumption of labor and rehabilitation
Strategy and response adjustment
Number of cases
Date of onset
First Stage (before Jan. 19, 2020)
Second Stage (Jan. 20-Feb. 7, 2020)
Third Stage (after Feb. 8, 2020)

B


Imported case
Domestic case
Prolong Chinese New Year holiday
Close contacts were given concentrated isolated medical observation
Initiate the highest provincial emergency response
Implemented high risk population screening and strengthened fever clinic management
Verified and confirmed by China CDC
Establish provincial emergency command center
Traffic quarantine screening
Reported the first case and confirmed human-to-human transmission
Initiate emergency surveillance
Number of confirmed cases
Date of onset
First Stage (before Jan. 14, 2020)
Second Stage (Jan. 15-28, 2020)
Third Stage (after Jan. 29, 2020)

C



D

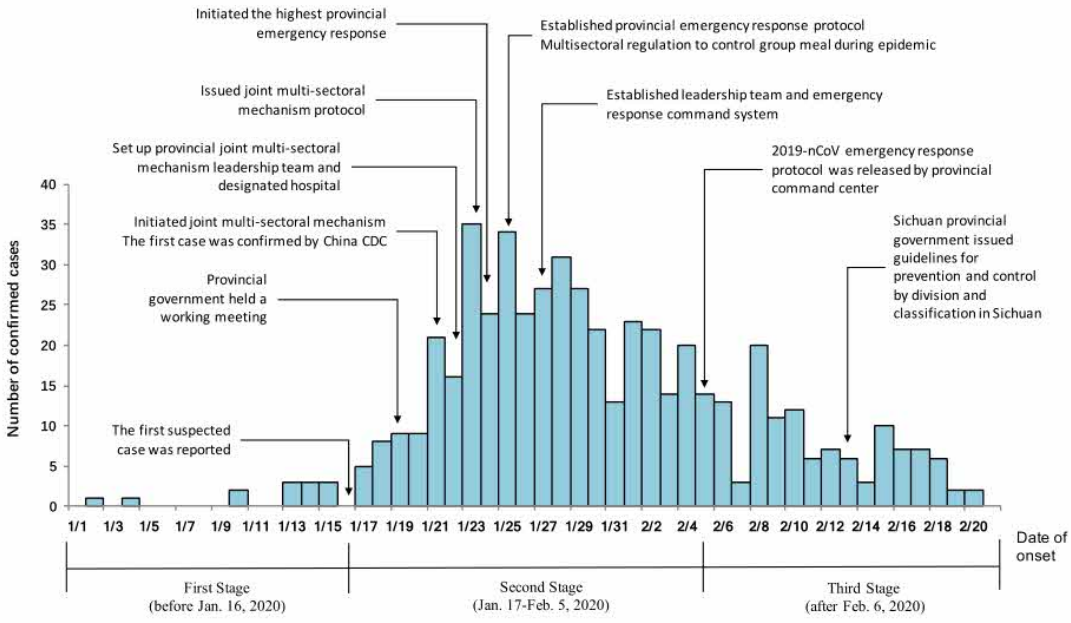


Figure 6. COVID-19 epidemic curves and major intervention measures in China as implemented at a) the national level b) in Guangdong province, c) in Shenzhen municipality and d) in Sichuan province

Risk communications (information release, public and media communications)

International and interregional cooperation and information sharing: From 3 January 2020, information on COVID-19 cases has been reported to WHO daily. Full genome sequences of the new virus were shared with WHO and the international community immediately after the pathogen was identified on 7 January. On 10 January, an expert group involving Hong Kong, Macao and Taiwanese technical experts and a World Health Organization team was invited to visit Wuhan. A set of nucleic acid primers and probes for PCR detection for COVID-19 was released on 21 January.

Daily updates: The National Health Commission announces the epidemic situation every day and holds daily press conferences to respond to emerging issues. The government also frequently invites experts to share scientific knowledge on COVID-19 and to address public concerns.

Psychological care: This is provided to patients and the public. Governments at all levels, NGOs and all sectors of society developed guidelines for emergency psychological crisis intervention and guidelines for public psychological self-support and counselling. A hotline for mental health services has been established for the public.

IT platform: China has capitalized on the use of technology, big data and AI for COVID-19 preparedness, readiness and response. Authoritative and reliable information, medical guidance, access to online services, provision of educational tools and remote work tools have been developed in and used across China. These services have increased accessibility to health services, reduced misinformation and minimized the impact of fake news.

Social mobilization and community engagement

Civil society organizations (community centers and public health centers) have been mobilized to support prevention and response activities. The community has largely accepted the prevention and control measures and is fully participating in the management of self-isolation and enhancement of public compliance. Community volunteers are organized to support self-isolation and help isolated residents at home to solve practical life difficulties. Measures were taken to limit the movement of the population through home-based support. Up to now, outside of Hubei, 30 provinces have registered and managed more than 5 million people coming from Wuhan.

Clinical case management and infection prevention and control

The main **signs and symptoms** of COVID-19 include fever, dry cough, fatigue, sputum production, shortness of breath, myalgia or arthralgia, sore throat, and headache. Nausea or vomiting has been reported in a small percentage of patients (5%). On 14 February, China CDC described the clinical features, outcomes, laboratory and radiologic findings of 44 672 laboratory-confirmed cases. Only 965 (2.2%) were under 20 years of age and there is just one recorded death (0.1%) in this age group. Most patients (77.8%) were aged 30 to 69 years. Patients aged over 80 years had a CFR of 14.8%. The CFR was highest in those with

comorbidities including cardiovascular, diabetes, chronic respiratory disease, hypertension and cancer.

As opposed to Influenza A(H1N1)pdm09, **pregnant women** do not appear to be at higher risk of severe disease. In an investigation of 147 pregnant women (64 confirmed, 82 suspected and 1 asymptomatic), 8% had severe disease and 1% were critical.

Severe cases are defined as tachypnoea (≧30 breaths/ min) or oxygen saturation ≤93% at rest, or PaO2/FIO2 <300 mmHg. **Critical cases** are defined as respiratory failure requiring mechanical ventilation, shock or other organ failure that requires intensive care. About a quarter of severe and critical cases require mechanical ventilation while the remaining 75% require only oxygen supplementation.

China has a principle of **early identification**, early isolation, early diagnosis and early treatment. Early identification of suspect cases is critical to containment efforts and occurs via a process of temperature screening and questioning at entrances to many institutions, communities, travel venues (airports, train stations) and hospitals. Many hospitals have fever clinics that were established and maintained since the SARS outbreak. In China, laboratory tests were originally requested according to the case definitions, which included an epidemiological link to Hubei or other confirmed cases. However, more recently, a more **liberal clinical testing regimen** allows clinicians to test with a low index of suspicion.

Suspect cases are isolated in normal pressure single rooms, wear a surgical mask (for source control). Staff in China wear a cap, eye protection, n95 masks, gown and gloves (single use only). In Wuhan it is necessary for most suspects to be cohorted in a normal pressure isolation ward. Staff wear PPE continuously, changing it only when they leave the ward.

PCR test results are returned the same day. If positive, patients are transported to designated hospitals (including negative pressure ambulances in some cities). All patients, including the mild and asymptomatic, with a positive test are admitted. The designated hospitals are known and are strategically placed with at least one per district/county. Positive cases are cohorted by gender. Negative tested patients are managed based on clinical needs. All patients are evaluated with a respiratory multiplex to look for other diagnoses. This can add to the reassurance that a negative COVID-19 test reflects a lack of infection with COVID-19.

In Wuhan, there are 45 **designated hospitals**, 6 of which are designated for critical patients, and 39 for severe patients and/or any patients >65 years old. There are an additional 10 temporary hospitals reconstructed from gymnasium and exhibition centers, which are for mild patients. Other surge measures undertaken in Wuhan include two new temporary hospitals with 2600 beds, plus many makeshift hospitals to increase bed capacity. Bed capacity within Wuhan has increased to >50,000.

Patients are treated according to the **National Clinical guidelines** (edition 6) released by the China National Health Commission (NHC). There are no specific antiviral or immune modulating agents proven (or recommended) to improve outcomes. All patients are monitored by regular pulse oximetry. The guidelines include supportive care by clinical category (mild, moderate, severe and critical), as well as the role of investigational

treatments such as chloroquine, phosphate, lopinavir/ritonavir, alpha interferon, ribavirin, arbidol. The application of intubation/invasive ventilation and ECMO in critically ill patients can improve survival. The Joint Mission Team was told of ECMO use in four patients at one hospital with one death and three who appeared to be improving. Clearly, though ECMO is very resource consumptive, any health system would need to carefully weigh the benefits. There is widespread use of Traditional Chinese Medicines (TCM), for which the affects must be fully evaluated.

Patients with COVID-19 are not permitted **visitors**. Staff use coveralls, masks, eye cover, and gloves, removing PPE only when they leave the ward.

Patients are discharged after clinical recovery (afebrile >3 days, resolution of symptoms and radiologic improvement) and 2 negative PCR tests taken 24 hours apart. Upon discharge, they are asked to minimise family and social contact and to wear a mask. There are expectations of clinical trial results within a matter of weeks, which will see further opportunities for treatment.

There are guidelines for **elderly care** specifically targeting prevention in individuals and introduction of COVID-19 to nursing homes.

Training programmes by video conference nationally are scaled up to inform staff of best practice and to ensure PPE usage. **Clinical champions** are created to disperse knowledge and provide local expertise.

Maintenance of usual healthcare activities is maintained by hospital zoning (e.g. clean/contaminated sections of the healthcare facility).

Laboratory, diagnostics and virology

The virus found to cause COVID-19 was initially isolated from a clinical sample on 7 January. It is notable that within weeks following the identification of the virus, a series of reliable and sensitive **diagnostic tools** were developed and deployed. On 16 January, the first RT-PCR assays for COVID-19 were distributed to Hubei. Real-time PCR kits were distributed to all the provinces on 19 January and were provided to Hong Kong SAR and Macao SAR on 21 January. Information regarding viral sequences and PCR primers and probes was shared with WHO and the international community by China CDC on 12 January 2020. To facilitate product development and research on the new virus, COVID-19 virus sequences were uploaded to the GISAID Database by China.

By 23 February, there were 10 kits for detection of COVID-19 approved in China by the NMPA, including 6 RT-PCR kits, 1 isothermal amplification kit, 1 virus sequencing product and 2 colloidal gold antibody detection kits. Several other tests are entered in the emergency approval procedure. Currently, there are at least 6 local producers of PCR test kits approved by NMPA. Overall, producers have the capacity to produce and distribute as many as 1,650,000 tests/week.

Specimens from both the upper respiratory tract (URT; nasopharyngeal and oropharyngeal) and lower respiratory tract (LRT; expectorated sputum, endotracheal aspirate, or bronchoalveolar lavage) are collected for COVID-19 testing by PCR.

COVID-19 virus has been detected in respiratory, fecal and blood specimens. According to preliminary data from Guangzhou CDC as of 20 February, virus can initially be detected in upper respiratory samples 1-2 days prior to symptom onset and persist for 7-12 days in moderate cases and up to 2 weeks in severe cases. Viral RNA has been detected in feces in up to 30% of patients from day 5 following onset of symptoms and has been noted for up to 4-5 weeks in moderate cases. However, it is not clear whether this correlates with the presence of infectious virus. While live virus has been cultured from stool in some cases, the role of fecal-oral transmission is not yet well understood. COVID-19 has been isolated from the clinical specimens using human airway epithelial cells, Vero E6 and Huh-7 cell lines.

Serological diagnostics are rapidly being developed but are not yet widely used. Joint Mission members met with local research teams at the China CDC, Guangzhou Regenerative Medicine and Health Guangdong Laboratory. The teams reported on the development of tests for IgM, IgG and IgM+IgG using rapid test platforms utilizing chemiluminiscence. ELISA assays are also under development.

Research & Development

The government of China has initiated a series of major emergency research programs on virus genomics, antivirals, traditional Chinese medicines, clinical trials, vaccines, diagnostics and animal models. Research includes fundamental basic research and human subjects research. For the purpose of this report, human studies are limited to those involving IRB approval and informed consent. Other forms of human subjects investigations are included in the sections on epidemiology in this report. Well-focused, robust research conducted in the setting of an outbreak has the potential of saving many lives by identifying the most effective ways to prevent, diagnose and treat disease.

Since the COVID-19 virus has a genome identity of 96% to a bat SARS-like coronavirus and 86%-92% to a pangolin SARS-like coronavirus, an animal source for COVID-19 is highly likely. This was corroborated by the high number of RT-PCR positive environmental samples taken from the Huanan Seafood Market in Wuhan.

At least 8 **nucleic acid-based methods** for direct detection of COVID-19 and two colloidal gold antibody detection kits have been approved in China by the NMPA. Several other tests are close to approval. It will be important to compare the sensitivities and specificities of these and future serologic tests. Development of rapid and accurate **point-of-care tests** which perform well in field settings are especially useful if the test can be incorporated into presently commercially available multiplex respiratory virus panels. This would markedly improve early detection and isolation of infected patients and, by extension, identification of contacts. **Rapid IgM and IgG antibody testing** are also important ways to facilitate early diagnosis. Standard serologic testing can be used for retrospective diagnoses in the context of serosurveys that help better understand the full spectrum of COVID-19 infection.

A variety of **repurposed drugs and investigational drugs** have been identified. Screening NMPA approved drug libraries and other chemical libraries have identified novel agents. Hundreds of clinical trials involving remdesivir, chloroquine, favipiravir, chloroquine, convalescent plasma, TCM and other interventions are planned or underway. Rapid completion of the most important of these studies is critical to identifying truly effective therapies. However, evaluation of investigational agents requires adequately powered, randomized, controlled trials with realistic eligibility criteria and appropriate stratification of patients. It is important for there to be a degree of coordination between those conducting studies within and beyond China.

The development of a safe and effective **vaccine** for this highly communicable respiratory virus is an important epidemic control measure. Recombinant protein, mRNA, DNA, inactivated whole virus and recombinant adenovirus vaccines are being developed and some are now entering animal studies. Vaccine safety is of prime concern in the area of coronavirus infection in view of the past experience of disease enhancement by inactivated whole virus measles vaccine and similar reports in animal experiments with SARS coronavirus vaccines. It will be important that these vaccine candidates rapidly move into appropriate clinical trials.

The ideal **animal model** for studying routes of virus transmission, pathogenesis, antiviral therapy, vaccine and immune responses has yet to be found. The ACE2 transgenic mouse model and Macaca Rhesus model are already used in research laboratories. Systematically addressing which models can accurately mimic human infection is required.

There is a global rush for masks, hand hygiene products and other personal protective equipment. The relative importance of **non-pharmaceutical control measures** including masks, hand hygiene, and social distancing require further research to quantify their impact.

There are distinct patterns of intra-familial transmission of COVID-19. It is unclear whether or not there are host factors, including genetic factors, that influence susceptibility or disease course. COVID-19 has a varied clinical course and a precise description of that course is not available. In addition, the long-term consequences of COVID-19 are unknown. An observational cohort study of patients with COVID-19 enrolled from the time of diagnosis (with appropriate controls) could provide in-depth information about clinical, virologic and immunologic characteristics of COVID-19. Table 1 summarizes priority research areas with immediate to longer term goals.

Table 1 Priority research areas with immediate, intermediate and longer-term goals

Immediate Goals	Intermediate Goals	Long-term goals
Diagnostics: RNA assays, antibody & antigen assays, point of care detection	Diagnostics: Multiplex diagnostic platforms	Diagnostics: Prognostic markers
Therapeutics: Remdesivir, favipiravir, chloroquine, plasma, TCM	Therapeutics: intravenous immunoglobulin (IVIg)	Therapeutics: Innovative approaches (CRISPR-CAS; RNAi; Cell-based; positive hits from library screening)
Vaccines: Development of animal models	Vaccines: mRNA candidates and candidate viral vectors	Vaccines: inactivated candidates and subunit candidates

D. Knowledge Gaps

Knowledge gaps and key questions to be answered to guide control strategies include:

Source of infection

- Animal origin and natural reservoir of the virus
- Human-animal interface of the original event
- Early cases whose exposure could not be identified

The pathogenesis and virulence evolution of the virus

Transmission dynamics

- Modes of Transmission:
    - Role of aerosol transmission in non-health care settings
    - Role of fecal-oral transmission
- Viral shedding in various periods of the clinical course in different biological samples (i.e. upper and lower respiratory tract, saliva, faeces, urine)
    - Before symptom onset and among asymptomatic cases
    - During the symptomatic period
    - After the symptomatic period / during clinical recovery

Risk factors for infection

- Behavioral and socio-economic risk factors for infection in
    - Households / institutions
    - the Community
- Risk factors for asymptomatic infection
- Risk factors for nosocomial infection
    - among health care workers
    - among patients

Surveillance and monitoring

- Monitoring community transmission through existing
    - ILI surveillance
    - SARI surveillance
- The outbreak trend and intervention dynamics
    - Basic reproduction numbers in various stages of the epidemic
    - The epidemic's relation to seasonality

Laboratory and diagnostics

- Sensitivity and specificity of different nucleic acid (PCR, NAATs and rapid tests), antibody and antigen tests
- Post-infection antibody titers and the duration of protection
- Sero-prevalence among
    - Health care workers
    - General population
    - Children

Clinical management of severe and critically ill patients

- Value of ECMO in the management of critically ill patients
- Best practice using mechanical ventilation in the management of critically ill patients
- Re-evaluation of the role of steroids in the management of severe and critically ill patients
- Identification of factors associated with successful clinical management and outcome
- Determination of the effectiveness of Traditional Chinese Medicines (TCM)
- Determination the effectiveness of additional investigational treatment options (e.g. intravenous immunoglobulin/IVIg, convalescent plasma)

Prevention and control measures

- Key epidemic indicators that inform evidence-based control strategy decision making and adjustments
- Effectiveness of infection prevention and control (IPC) measures in various health care settings
- Effectiveness of entry and exit screening
- Effectiveness of the public health control measures and their socio-economic impact
    - Restriction of movement
    - Social distancing
    - School and workplace closures
    - Wearing mask in general public
    - Mandatory quarantine
    - Voluntary quarantine with active surveillance

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E. Operational & Technical Recommendations

Operational/programmatic recommendations

- Reassess risk and capacities based on different stages of the outbreak; approve different measures during the different phases of the response; assess different stages of the response; reach a balance between response and social development
- Initiate a timely scientific evidence based, efficient and flexible joint multi-sectoral mechanism, which is driven by strong government leadership

Technical recommendations

Epidemiology and transmission

- Continue enhanced surveillance across the country through existing respiratory disease systems, including ILI, SARI or pneumonia surveillance systems
- Prioritize early investigations, including household transmission studies, age-stratified sero-epidemiologic surveys including children, case-control studies, cluster investigations, and serologic studies in health care workers

Severity

- Continue to share information on patient management, disease progression and factors leading to severe disease and favorable outcomes
- Review and analyze the possible factors associated with the disease severity, which may include:
    - natural history studies to better understand disease progression in mild, severe and fatal patients
    - medical chart reviews about disease severity among vulnerable groups, (e.g. those with underlying conditions, older age groups, pregnant women and children) to develop appropriate standards of care
    - evaluation of factors leading to favorable outcomes (e.g. early identification and care)

Clinical care and infection prevention and control

- Suspect patients who have not yet been tested should be isolated in single normal pressure rooms; cohorting of positive cases is acceptable
- Physicians and all health care workers need to maintain a high level of clinical alert for COVID-19
- For affected countries, standardize training for clinical care and IPC and scale with the development of local (e.g. district level) experts
- Ensure concurrent testing for other viral pathogens to support a negative COVID-19 test
- Ensure maintenance of usual and essential services during the outbreak

- Ensure processes are in place for infection prevention among the most vulnerable, including the elderly
- Ensure readiness to provide clinical care and to meet IPC needs, including:
    a. anticipated respiratory support requirements (e.g. pulse oximeters, oxygen, and invasive support where appropriate)
    b. national guidelines for clinical care and IPC, revised for COVID-19
    c. nationally standardised trainings for disease understanding and PPE use for HCWs
    d. community engagement
    e. PPE and Medication stockpiles
    f. early identification protocols; triage, temperature screening, holding bays (triage, including pulse oximetry)
    g. treatment protocols including designated facilities, patient transportation
    h. enhanced uptake of influenza and pneumococcal vaccine according to national guidelines
    i. laboratory testing
    j. rapid response teams

Laboratory and virology

- Continue to perform whole genome analysis of COVID-19 viruses isolated from different times and places, to evaluate virus evolution
- Conduct pathogenesis studies using biopsy/post-mortem specimens of COVID-19 patients or infected animal models
- Evaluate available nucleic acid PCR diagnostics
- Rapidly develop and evaluate rapid/point-of-care diagnostics and serologic assays
- Conduct further study to interpret the result of positive COVID-19 RNA detection in feces in patients recovering from COVID-19
- Enhance international cooperation, especially in terms of biosafety and information sharing for increased understanding of the COVID-19 virus and traceability of the virus
- Consider monitoring proinflammatory cytokines via multiplex assays to predict the development of “cytokine storm”

Research and development

- Additional effort should be made to find the animal source, including the natural reservoir and any intermediate amplification host, to prevent any new epidemic foci or resurgence of similar epidemics

- Efforts should be made to consistently evaluate existing and future diagnostic tests for detection of COVID-19 using a harmonized set of standards for laboratory tests and a biorepository that can be used for evaluating these tests
- Consider the establishment of a centralized research program in China to oversee that portfolio and ensure the most promising research (vaccines, treatments, pathogenesis) are adequately supported and studied first; program staff dedicated to the clinical research would work at the clinical research site(s) to decrease the research workload of the clinicians at the site
- Consider including one or more sites within China in the ongoing and future multi-center, international trials; Chinese investigators should be actively engaged in international trials
- Continue to develop additional animal models, making every effort to ensure these mimic human infection and virus transmission as closely as possible
- Conduct studies to determine which of the commonly used forms of PPE are most effective in controlling the spread of COVID-19

_____

From: Jong-koo Lee
Sent: Tue, 3 Mar 2020 07:22:10 +0000
To: AYLWARD Raymond Bruce J.;docmohw@snu.ac.kr;Alexander SEMENOV (alexvsemeno;Chikwe IHEKWEAZU (chikwe.ihekw;Clifford LANE (cliff.lane@nih.;Zhou, Weigong (CDC/DDID/NCIRD/ID);Dale FISHER (mdcfda@nus.edu.sg;Dr Hitoshi TAKAHASHI (takajin@;Natalia PSHENICHNAYA (natalia-;Tim ECKMANNS (EckmannsT@rki.de;XING Jun;gmleung
Cc: Dr VAN KERKHOVE Maria;Zunyou Wu;(SPmig) LEI ZHOU;wsjkwlwn@163.com;liangwn@nhc.gov.cn;wangbin20081234@163.com
Subject: RE: RE: Possible SPAM detected: RE: WITH ATTACHMENTS: WHO-China Joint Mission on CO
Attachments: Korea 0303.docx

Dear All

This is progress of Korea situation

JK LEE

---------- 원본 메일 ----------

보낸사람 : "AYLWARD, Raymond Bruce J." <aylwardb@who.int>

받는사람 : "docmohw@snu.ac.kr" <docmohw@snu.ac.kr>, "Alexander SEMENOV (alexvsemeno" (b)(6) "Chikwe IHEKWEAZU (chikwe.ihekw" <chikwe.ihekweazu@ncdc.gov.ng>, "Clifford LANE (cliff.lane@nih." <cliff.lane@nih.gov>, "Zhou Weigong (CDC/DDID/NCIRD/" <waz6@cdc.gov>, "Dale FISHER (mdcfda@nus.edu.sg" <mdcfda@nus.edu.sg>, "Dr Hitoshi TAKAHASHI (takajin@" <takajin@nih.go.jp>, "Natalia PSHENICHNAYA (natalia-" <natalia-pshenichnaya@yandex.ru>, "Tim ECKMANNS (EckmannsT@rki.de" <EckmannsT@rki.de>, "XING, Jun" <xingj@who.int>, gmleung <gmleung@hku.hk>

참조 : "Dr VAN KERKHOVE, Maria" <vankerkhovem@who.int>, Zunyou Wu <wuzy@263.net>, "(SPmig) LEI ZHOU" <zhoulei@chinacdc.cn>, "wsjkwlwn@163.com" <wsjkwlwn@163.com>, "liangwn@nhc.gov.cn" <liangwn@nhc.gov.cn>, "wangbin20081234@163.com" <wangbin20081234@163.com>

받은날짜 : 2020-03-03 (화) 04:32:31

제목 : RE: Possible SPAM detected: RE: WITH ATTACHMENTS: WHO-China Joint Mission on CO

Dear Jong-Koo – really helpful to have this further information and insights on the Korea situation. Thank you so much. B

From: docmohw@snu.ac.kr <docmohw@snu.ac.kr>
Sent: Monday, March 2, 2020 00:53
To: AYLWARD, Raymond Bruce J. <aylwardb@who.int>; "Alexander SEMENOV (alexvsemeno" (b)(6) "Chikwe IHEKWEAZU (chikwe.ihekw" <chikwe.ihekweazu@ncdc.gov.ng>; "Clifford LANE (cliff.lane@nih." <cliff.lane@nih.gov>; "Zhou

Weigong (CDC/DDID/NCIRD/" <waz6@cdc.gov>; "Dale FISHER (mdcfda@nus.edu.sg" <mdcfda@nus.edu.sg>; "Dr Hitoshi TAKAHASHI (takajin@" <takajin@nih.go.jp>; "LEE Jong-Koo (docmohw@snu.ac.k" <docmohw@snu.ac.kr>; "Natalia PSHENICHNAYA (natalia-" <natalia-pshenichnaya@yandex.ru>; "Tim ECKMANNS (EckmannsT@rki.de" <EckmannsT@rki.de>; XING, Jun <xingj@who.int>; gmleung <gmleung@hku.hk>
Cc: Dr VAN KERKHOVE, Maria <vankerkhovem@who.int>; Zunyou Wu <wuzy@263.net>; (SPmig) LEI ZHOU <zhoulei@chinacdc.cn>; "wsjkwlwn@163.com" <wsjkwlwn@163.com>; "liangwn@nhc.gov.cn" <liangwn@nhc.gov.cn>; "wangbin20081234@163.com" <wangbin20081234@163.com>
Subject: Possible SPAM detected: RE: WITH ATTACHMENTS: WHO-China Joint Mission on COVID-19

Dear All

By the our report and experience of joint mission observation, we can accelerate the measures against outbreak of Republic Korea
I have contacted high level policymaker during Guangzhou in just time, Maria advised me

Outbreak of our country is progressing and evolving,
and we find that outbreak is associate with close contact history in relative close space in church and they are passionate, shoulder to shoulder and hand to hand, and outbreak in chronic mental health hospital we did not confirm relationship between church and hospital, but church peoples went to hospital due to funeral ceremony, dead of pneumonia case(aspiration?) of relative of church January.

I attach summery of press briefing and informal contact of KCDC staffs for your understanding only

Thanks for your advice and WHO colleagues

Jong-koo LEE MD, MPH, PhD

Director, Center for Healthy Society and Education
Professor, Department of Family Medicine
Seoul National University College of Medicine
Ihwajang-gil 71, Jongno-gu, Seoul, 110-810, Republic of Korea
Tel +82-2-740-8867, +82-2-3668-7350
Fax +82-2-766-1185
email : docmohw@snu.ac.kr (b)(6)

---------- 원본 메일 ----------

보낸사람 : "AYLWARD, Raymond Bruce J." <aylwardb@who.int>
받는사람 : "Alexander SEMENOV (alexvsemeno" (b)(6) "Chikwe IHEKWEAZU (chikwe.ihekw" <chikwe.ihekweazu@ncdc.gov.ng>, "Clifford LANE (cliff.lane@nih." <cliff.lane@nih.gov>, "Zhou, Weigong (CDC/DDID/NCIRD/" <waz6@cdc.gov>, "Dale FISHER (mdcfda@nus.edu.sg" <mdcfda@nus.edu.sg>, "Dr Hitoshi TAKAHASHI (takajin@" <takajin@nih.go.jp>, "LEE Jong-Koo (docmohw@snu.ac.k" <docmohw@snu.ac.kr>, "Natalia PSHENICHNAYA (natalia-" <natalia-pshenichnaya@yandex.ru>, "Tim ECKMANNS (EckmannsT@rki.de" <EckmannsT@rki.de>, "XING, Jun" <xingj@who.int>, gmleung <gmleung@hku.hk>
참조 : "Dr VAN KERKHOVE, Maria" <vankerkhovem@who.int>, Zunyou Wu <wuzy@263.net>, "(SPmig) LEI ZHOU" <zhoulei@chinacdc.cn>, "wsjkwlwn@163.com" <wsjkwlwn@163.com>, "liangwn@nhc.gov.cn" <liangwn@nhc.gov.cn>, "wangbin20081234@163.com" <wangbin20081234@163.com>
받은날짜 : 2020-03-02 (월) 03:44:04
제목 : WITH ATTACHMENTS: WHO-China Joint Mission on COVID-19

Dear International Members of the Joint Mission,

Clearly I need to get more sleep! Maria just pointed out that I had forgotten to send the attachments – please find the message/attachments again here:

I trust (hope!) that everyone remains in good health as you approach Day 7 since your departures from China. I have now had a 2nd test here in Geneva and am – of course – negative (thanks to the good care of our Chinese hosts).

Congratulations to those of you who have been on the frontlines of managing new cases and importations such as Chikwe in Nigeria.

I'm writing tonight to share with you three things:

1. the official **Chinese version of the Joint Mission report** that WHO received from the National Health Commission and which will be posted on our site;

2. the **WHO website links for the English version** of the report in case helpful:
   - in the section of WHO Coronavirus page: https://www.who.int/emergencies/diseases/novel-coronavirus-2019
   - direct link to the report in English: https://www.who.int/docs/default-source/coronaviruse/who-china-joint-mission-on-covid-19-final-report.pdf

3. a **short overview presentation** I quickly put together to share some of the key findings of the report in a VC with RD/WPRO and the WPRO Ministers of Health on Friday morning.

Please note, **I have added 3 slides on 'key epi/technical insights'** from our Mission to the end of the presentation. Maria and I put these together and WU Zunyou did a quick check/correction of them earlier this evening for us. **I would be most grateful if you might have a look at the 3 'technical insight' slides and provide any thoughts/corrections from your side**. I am not trying to be comprehensive but just to find a few key points that are important to understanding the evolving epi and containment impact in China.

I have also cc'd Dr LIANG, Dr WANG Bin, Dr Wu Zunyou and Dr Zhou Lei so that they can 'hear' the conversation (where all of them remain in quarantine at the Presidential Hotel in Beijing….).

With very best regards to all,

Bruce

From: AYLWARD, Raymond Bruce J.
Sent: Friday, February 28, 2020 10:58
To: GHEBREYESUS, Tedros Adhanom <drtedros@who.int>
Cc: KASAI, Takeshi <kasait@who.int>; GALEA, Gauden <galeag@who.int>; wsjkwlwn@163.com; liangwn@nhc.gov.cn; liangwn@nhc.gov.cn; wangbin20081234@163.com; LI Juan (lijuan@nhc.gov.cn) <lijuan@nhc.gov.cn>; zhangyang@nhc.gov.cn; Alexander SEMENOV (b)(6) (b)(6) Chikwe IHEKWEAZU (chikwe.ihekweazu@ncdc.gov.ng) <chikwe.ihekweazu@ncdc.gov.ng>; Clifford LANE (cliff.lane@nih.gov) <cliff.lane@nih.gov>; Zhou, Weigong (CDC/DDID/NCIRD/ID) <waz6@cdc.gov>; Dale FISHER (mdcfda@nus.edu.sg) <mdcfda@nus.edu.sg>; Dr Hitoshi TAKAHASHI (takajin@nih.go.jp) <takajin@nih.go.jp>; LEE Jong-Koo (docmohw@snu.ac.kr) <docmohw@snu.ac.kr>; Natalia PSHENICHNAYA (natalia-pshenichnaya@yandex.ru) <natalia-pshenichnaya@yandex.ru>; Tim ECKMANNS (EckmannsT@rki.de) <EckmannsT@rki.de>; XING, Jun <xingj@who.int>; gmleung <gmleung@hku.hk>; Dr VAN KERKHOVE, Maria <vankerkhovem@who.int>; RYAN, Michael J. <ryanm@who.int>; SCHWARTLANDER, Bernhard F. <schwartlanderb@who.int>; MINHAS, Raman <minhasr@who.int>; SNIDER, Paige Anne <sniderp@who.int>; ALEXANDER, Nyka <alexandern@who.int>; STERN, Gabriella <sterng@who.int>

Subject: NEW - FOR PUBLIC RELEASE: WHO-China Joint Mission on COVID-19
Importance: High

Dr Tedros & colleagues,

Our eagle-eyed counterparts spotted a tiny edit I had inadvertently overlooked in the version just sent (an updated section now has six sub-sections but I had forgotten to say '6' instead of '5' in the preambular para).

I would be most grateful if the attached version be used as the 'final final' (with time stamp of 1100hr in the file name).

Apologies to all for any inconvenience.

Bruce

From: AYLWARD, Raymond Bruce J.
Sent: Friday, February 28, 2020 10:22
To: GHEBREYESUS, Tedros Adhanom <drtedros@who.int>
Cc: KASAI, Takeshi <kasait@who.int>; wsjkwlwn@163.com; liangwn@nhc.gov.cn; liangwn@nhc.gov.cn; wangbin20081234@163.com; LI Juan (lijuan@nhc.gov.cn) <lijuan@nhc.gov.cn>; zhangyang@nhc.gov.cn; Alexander SEMENOV (b)(6) (b)(6) Chikwe IHEKWEAZU (chikwe.ihekweazu@ncdc.gov.ng) <chikwe.ihekweazu@ncdc.gov.ng>; Clifford LANE (cliff.lane@nih.gov) <cliff.lane@nih.gov>; Zhou, Weigong (CDC/DDID/NCIRD/ID) <waz6@cdc.gov>; Dale FISHER (mdcfda@nus.edu.sg) <mdcfda@nus.edu.sg>; Dr Hitoshi TAKAHASHI (takajin@nih.go.jp) <takajin@nih.go.jp>; LEE Jong-Koo (docmohw@snu.ac.kr) <docmohw@snu.ac.kr>; Natalia PSHENICHNAYA (natalia-pshenichnaya@yandex.ru) <natalia-pshenichnaya@yandex.ru>; Tim ECKMANNS (EckmannsT@rki.de) <EckmannsT@rki.de>; XING, Jun <xingj@who.int>; gmleung <gmleung@hku.hk>; Dr VAN KERKHOVE, Maria <vankerkhovem@who.int>; RYAN, Michael J. <ryanm@who.int>; SCHWARTLANDER, Bernhard F. <schwartlanderb@who.int>; MINHAS, Raman <minhasr@who.int>; SNIDER, Paige Anne <sniderp@who.int>; ALEXANDER, Nyka <alexandern@who.int>; STERN, Gabriella <sterng@who.int>
Subject: FOR PUBLIC RELEASE: WHO-China Joint Mission on COVID-19
Importance: High

Dear Dr Tedros,

It is my honor to share with you the attached, final version of the ***Report of the WHO-China Joint Mission on COVID-19***, on behalf of myself, my Co-Lead Dr LIANG Wannian, our Deputy Team Leader Dr WANG Bin, and the entire Joint Team of Chinese national and international members.

I am pleased to inform you that in the 24 hours since sharing a preliminary version of this report, the China and international members have fully aligned the language of the English and Chinese versions, allowing the release of both versions today.

It is agreed with our Chinese counterparts that the English version can be released immediately, given the urgency of sharing these findings with the international community. The Honorable Minister of Health, Dr MA Xiaowei, will release the Chinese version within hours.

In closing, I would like to reiterate my personal gratitude to Dr LIANG for his deep experience and guidance as we consolidated our findings, and to the entire Team for their tremendous contributions throughout. As you and I have discussed, this was truly a Joint Mission and the quality of this report reflects the world-class expertise of all team members, both national and international. The attached findings and recommendations reflect the collective opinion of the entire team, all of whom have been closely engaged in its writing and finalization.

It is our common hope and belief that the findings contained herein can inform the global work you are leading to stem the ongoing international spread of COVID-19.

Regards

Bruce

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(b)(5)

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From: KHUT, Qiu Yi
Sent: Fri, 10 Apr 2020 03:33:49 +0000
To: WP RO Health Ops and Technical;ZHOU, Weigong;Zhou, Weigong (CDC/DDID/NCIRD/ID)
Cc: MAHAMUD, Abdi Rahman
Subject: NPI and physical/social distancing guidance docs - which direction to take?
Attachments: Exit strategy indicators Draft V3 09Apr2020 .docx, Post-peak NPIs-COVID-19_guidance_6April2020.docx, Options for physical distancing_2020.03.29.docx

Hi all,
Further to the discussion in the Health Ops team meeting today, here are the 3 different guidance/option papers being circulated on non-pharmaceutical interventions and physical/social distancing. There's a lot of overlap between all the documents. Can we get direction from RD/IM on which direction to take?

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It's worth pointing out that (b)(5)

(b)(5)

I'm also cc'ing in Weigong Zhou who is in Manila supporting WPRO as of the end of last week - he's a pro on this! Weigong's is seconded from USCDC and was on the WHO-China mission with Bruce Alyward in February. He's previously been seconded to WHO twice, first in WPRO with Dr Kasai from 2004-2009 in the old CSR unit (Communicable Disease Surveillance and Response), and then HQ in the Global Influenza Programme where he worked on pandemic planning and led the development of the 2019 HQ guidance on Non-pharmaceutical public health measures for mitigating the risk and impact of epidemic and pandemic influenza.
Best regards,
Qiu Yi

Qiu Yi Khut
COVID-19 Response
World Health Organization | Regional Office for the Western Pacific | Manila, Philippines

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