January 25th, 2017 Surveillance Team Call

Action Items and Reminders for next call:

- 1. Next meeting -- February 8th, 2018
- Please review concurrent site maps in EIDITH to ensure all sites are labeled correctly (https://project.eidith.org/Maps/ConcurrentSiteMap.aspx)
- 3. Country teams should work with global leads to identify if the issue with Question 29/31 in the Human Questionnaire affected their entry of human data. See full details in these notes & contact IM team if you have further questions.
- 4. Africa country updates on next call; field and lab activities updates, GHSA highlights, zoonotic disease prioritization workshops, update on data entry and any hurdles/concerns.

Participants: Jim Ayukekbong, Ava Sullivan, Patrick Dawson, Emma Lane, Sabah, Stephanie Martinez, Leticia Gutierriez, Mindy Rostal, Jason Euren, Matt LeBreton, Dave McIver, Dawn Zimmerman, Sarah Olson, Chris K Johnson, Marcy Uhart, Megan Doyle, Woutrina Smith, Jaber Belkhiria, Brian Bird, Terra Kelly, Tammie O'Rourke, Karen Saylors

Brussels read out – risk characterization, surveillance priorities, etc.

- The main goal of surveillance and laboratory priorities presented in Brussels is to be sure we can deliver products we didn't have by the end of P1, including testing, all results released by governments in every country, etc around viral discovery and risk characterization. We are also on the hook to report out risk factors and interfaces as our main surveillance deliverable for Monitoring and Evaluation (M&E).
- The risk characterization exercise revealed lots of issues with concurrent site names please review that any additions/modifications you have requested IM team to fix have been mapped correctly. It is very important to ensure that teams understand concurrent site designations, so that when they are entering NEW data, they are selecting the correct concurrent site label otherwise we will continue having issues with the labels. The maps in EIDITH are useful for training teams which concurrent site name to use (Log in, then go to Maps>Concurrent Site maps or follow this link https://project.eidith.org/Maps/ConcurrentSiteMap.aspx).

Training deck for risk characterization – Tanzania example

We shared an example risk characterization training deck David developed for Tanzania to help
the team start understanding their data. Some other teams have created similar risk
characterization training materials. If there is interest, we may be able to create a short template
with some of the elements in the training deck and include question numbers, legends with
definitions and insight into how we are thinking to interpret these risk characterization figures
and graphs.

PPE best practices

The international standard is increasingly that Tyvek should be worn for all activities when
handling wild animals directly for surveillance of deadly pathogens. Our protocols currently
designate that we should be wearing Tyvek when handling bats, rodents, primates, and while

- performing other high-risk tasks, and provide the option for wearing dedicated clothing that is immediately removed, washed, and disinfected after field activities.
- We will likely need to update the PPE section in each of the protocols to reflect expectations for appropriate PPE, including wearing Tyvek for field activities whenever there is direct contact with animals. Capacity Team will draft some recommendations for PPE to be shared for feedback and input to help balance both what is safe and practical with the that our protocols and training guides will continue on in our countries without PREDICT.
- Ahead of this, we wanted to open up the discussion to the group to get a sense of the issues that
 are important to each partner and should be considered. We will need to follow up with EB for a
 final decision. A summary of comments from the call are provided below:

EHA: Tyvek is hard to acquire in some countries so the capacity building after we leave can be an issue. It can also tear.... Exposes skin etc... some teams have purchased washing machine for their lab... after field, get washed all together. EHA in general is confident in how they have trained and prepared... use of Virkon to decontaminate clothes... Gloves make handling animals difficult in hot/humid areas due to perspiration...

Sustainability - Tyvek suits are convenient but expensive and not easy to get in all countries after our project is over. We need to make sure countries are able to continue the work by adapting available materials in a safe and sustainable way.... Evidence - Is there any data the shows Tyvek reduces infection rates when compared to alternative properly used protection? In our experience, Tyvek easily tears and allows exposure to undergarments or skin.

Protection - For bats and rodents, dedicated clothing and nitrile gloves are sufficient to protect against scratches and bites. The mask and eye protection protect the primary routes of infection: the eyes, nose, and mouth. There's no evidence of infection with viruses like Nipah or Ebola through contact with intact skin, so getting droplets on an outer layer of clothes should still be safe.....Team morale - If people are uncomfortable, they will be more likely to make mistakes that can cause exposure or injury. We should decide on the level of PPE based on overall risk, and not just default to maximum PPE in all situations.

MB: When sampling in caves, teams use Tyvek... other activities have transitioned to use of dedicated clothing. Working in urban markets to sample bushmeat -- wearing Tyvek would not be culturally appropriate and would make it difficult (if not impossible) to sample in marketplaces. Village sampling around houses, rodents and bats, the dedicated clothing is more practical and acceptable. Also, Tyvek is not waterproof. MSF uses Tychem in VHF situations as its waterproof. Is there is very strong evidence that this is the norm, like a paper that categorically says that this is the standard? Or is it a tendency to overprotect. Overall, implementing Tyvek everywhere would mean less samples, which could ultimately be the more risky strategy given how we would miss so many sampling opportunities.

UCD: teams are already using Tyvek during all rodent and bat sampling.

Human questionnaire Q29/31 issue** -- action item

• IM recently noticed that for questions 29/31 in human questionnaire – the order of the answers in the bubble form were out of order with the answers in the web application. If the bubble forms

were scanned and uploaded into the app, there would be no errors as the bubble form upload process does not depend on position of the answers. However teams who entered the data from bubble forms and relied on the position of the bubble to choose the response may be affected. IM team checked data for select for DRC and did not find any problems with the data. Some countries IM spoke to said they were aware of the difference in order and compensated for it

Human questionnaire data entered after Dec 20th, 2017 would not be affected by this issue.
 Country teams should work with global leads to identify whether this affects their data ASAP. We will be flagging data entered before Dec 20th so please update the IM team once you have reviewed your data.

Order of answers in the **application**:

29. In your lifetime, have you ever had an unusual illness with any of the following symptoms? Select all that apply.
□ no
 fever with bleeding or bruising not related to injury (hemorrhagic fever)
 fever with cough and shortness of breath or difficulty breathing (SARI)
fever with diarrhea or vomiting
 fever with headache and severe fatigue or weakness (encephalitis)
fever with muscle aches, cough, or sore throat (ILI)
☐ fever with rash
persistent rash or sores on skin
yes, but none of these symptoms

Order in the **bubble** form:

20. Have you ever had an unusual illness with any of the following symptoms:
29. Have you ever had an unusual illness with any of the following symptoms:
Select all that apply. (READ ONLY SYMPTOMS)
fever with headache and severe fatigue or weakness (encephalitis)
fever with bleeding or bruising not related to injury (hemorrhagic fever)
fever with cough and shortness of breath or difficulty breathing (SARI)
fever with muscle aches, cough, or sore throat (ILI)
fever with diarrhea or vomiting
fever with rash
persistent rash or sores on skin
no (Skip to question 33)
yes but, none of these symptoms-describe:

EIDITH updates

 IM team released a new functionality to enter and upload animal barcoding results to EIDITH, either directly in the app or through Excel templates – please see Tammie's EIDITH Tip of the Week for email dated January 19th 2018 for more details.

Indicator	Total NewInLast2Weeks	
# countries with data	30	0
# animals sampled	52359	316
# humans sampled	6520	368
# specimens	298058	4366
# tests	175592	6600
# animals tested	17409	
# humans tested	1297	
# animal specimens tested	30833	
# human specimens tested	2135	
# tests active testing ongoing	1432	
# tests waiting interpretation	612	
average days between event and data submission	85	
average days between event and data submission for data submitted in last 2 weeks	41	
number of events/test batches waiting for country input	10	
number of events/test batches waiting for IM review	18	

Asia country updates

Mongolia – Quarterly updates going out regularly. Completed Al surveillance with over 1000 samples. Diagnostics complete for Y3 samples.

Viet Nam –Busy with syndromic surveillance and qualitative research, wildlife sampling (rodents and bats). Testing is ramping up.

Myanmar -- Finishing dry season sampling, moving on testing – working to get reagents and primers through customs. Human samples already extracted. One lab is having trouble with pricing and agreements. Ongoing issue with GoM – govt has not given permission to release recent test results. Cambodia – 615 bat and 413 rodent samples screened for corona-, hanta-, and rhabdoviruses. 181 human samples for alpha-, influenza-, flavi-, filo-, hanta-, and rhabdoviruses. Completed rodent, bat, human, and domestic animal sampling at one site. Enrolled 445 patients in hospital. Government report released.

Laos PDR – Getting ethical clearances up to date.

Indonesia – Began syndromic surveillance in Oct 2017, 15 cases enrolled. MOU with health district to conduct human syndromic surveillance completed, collected samples from 25 participants in community. Completed testing for over 50% of all Y3 samples.

Thailand – Currently testing macaque and rodent specimens and recently uploaded test results from bats from 3 events. 78 syndromic human cases enrolled & testing has been completed. Sampled 115 people in community study. Received approval for first P2 government report.

Malaysia – No human sampling until new IRBs in place. In Sabah, collected samples from 50 animals in OA site. Ongoing animal sampling in Peninsular. Team was in field Jan 2018, ongoing testing of domestic animal testing as there FAO does not work in country.

Bangladesh – FAO sampled 100 livestock in North. Team starting community enrollment towards end of Jan 2018. H5N1 results released.

China — Lab testing focus for last few months — completed Y2 samples and all in EIDITH. Received second government approval for releasing results. Paused field work for contract issues.

India –Wildlife sampling commenced, sampled 3 taxa. Syndromic surveillance planned for February 2018. PREDICT team attended GHSA annual review in Delhi.

Nepal – Recently sampled 234 bats in rural community that consumes bats. Human community and wildlife sampling planned for February. Testing ongoing.