

From: REDACTED
Sent: 05/09/2017 9:53:04 PM (-07:00)
To: "predict-surveillance@ucdavis.edu" <predict-surveillance@UCDAVIS.EDU>
Cc: "Catherine Machalaba" <machalaba@ecohealthalliance.org>; "William B. Karesh" <karesh@ecohealthalliance.org>; "Jonna Mazet" <jkmazet@UCDAVIS.EDU>
Subject: PREDICT surveillance team call Thurs, May 11th, 2017 @ 10am PT/1pm ET
Attachments: WHO standard precautions.pdf, CDC Best practices PPE.PDF, 4.27.2017 surveillance call notes.docx

Hi Surveillance Team,

Our next surveillance call is this **Thurs, May 11th, 2017 @ 10am PT/1pm ET**. Notes from our last meeting are attached, let us know if you have any corrections before we share with CCs at the end of this week.

NEW CALL IN INFORMATION – please save this new info in your calendars/notes/etc. If you will be calling in via the weblink on your computer, please visit the website linked ahead of time, as you may need to download an add-on to your web browser.

Join from **PC, Mac, Linux, iOS or Android:** REDACTED

Or **iPhone one-tap** (US Toll): + REDACTED

Or **Telephone:**

Dial: REDACTED (US Toll) or REDACTED (US Toll)

Meeting ID: REDACTED

International numbers available:

REDACTED

Draft agenda

1. Risk characterization for M&E now & in the future
2. WHO and CDC guidelines for PPE
3. Sample testing prioritization
4. EIDITH updates
5. Asia country updates; field and lab activities updates, GHSA highlights, zoonotic disease prioritization workshops, update on data entry and any hurdles/concerns.

Thank you,
Megan

REDACTED

Research Associate
EpiCenter for Disease Dynamics
One Health Institute
UC Davis School of Veterinary Medicine

REDACTED

skype: REDACTED



Guidance for the Selection and Use of Personal Protective Equipment (PPE) in Healthcare Settings

SAFER • HEALTHIER • PEOPLE™



PPE Use in Healthcare Settings: Program Goal

Improve personnel safety in the healthcare environment through appropriate use of PPE.

PPE Use in Healthcare Settings

The goal of this program is to improve personnel safety in the healthcare environment through appropriate use of PPE.



PPE Use in Healthcare Settings: Program Objectives

- Provide information on the selection and use of PPE in healthcare settings
- Practice how to safely don and remove PPE

PPE Use in Healthcare Settings

The objectives of this program are to provide information on the selection and use of PPE in healthcare settings and to allow time for participants to practice the correct way to don and remove PPE.



Personal Protective Equipment Definition

“specialized clothing or equipment worn by an employee for protection against infectious materials” (OSHA)

PPE Use in Healthcare Settings

Personal protective equipment, or PPE, as defined by the Occupational Safety and Health Administration, or OSHA, is “specialized clothing or equipment, worn by an employee for protection against infectious materials.”



Regulations and Recommendations for PPE



- OSHA issues workplace health and safety regulations. Regarding PPE, employers must:
 - Provide appropriate PPE for employees
 - Ensure that PPE is disposed or reusable PPE is cleaned, laundered, repaired and stored after use
- OSHA also specifies circumstances for which PPE is indicated
- CDC recommends when, what and how to use PPE

PPE Use in Healthcare Settings

OSHA issues regulations for workplace health and safety. These regulations require use of PPE in healthcare settings to protect healthcare personnel from exposure to bloodborne pathogens and *Mycobacterium tuberculosis*. However, under OSHA's General Duty Clause PPE is required for any potential infectious disease exposure. Employers must provide their employees with appropriate PPE and ensure that PPE is disposed or, if reusable, that it is properly cleaned or laundered, repaired and stored after use.

The Centers for Disease Control and Prevention (CDC) issues recommendations for when and what PPE should be used to prevent exposure to infectious diseases. This presentation will cover those recommendations, beginning with the hierarchy of safety and health controls.



Hierarchy of Safety and Health Controls

- Training and administrative controls
- Engineering controls
- Work practice controls
- Personal protective equipment

PPE Use in Healthcare Settings

The protection of healthcare personnel from infectious disease exposures in the workplace requires a combination of controls, one of which is the use of PPE. It is important to recognize that your protection as a healthcare worker also involves other prevention strategies. There are four major components to healthcare worker safety programs. First are training, such as you're receiving today, and administrative controls, like isolation policies and procedures, and procedures for recognizing patients with a communicable disease before they expose workers. Second are engineering controls like negative pressure rooms for patients with airborne diseases such as TB; third are work practice controls such as not recapping needles, and finally personal protective equipment. While PPE is last in the hierarchy of prevention, it is very important for protecting healthcare workers from disease transmission.



Types of PPE Used in Healthcare Settings



- Gloves – protect hands
- Gowns/aprons – protect skin and/or clothing
- Masks and respirators– protect mouth/nose
 - Respirators – protect respiratory tract from airborne infectious agents
- Goggles – protect eyes
- Face shields – protect face, mouth, nose, and eyes

PPE Use in Healthcare Settings

All of the PPE listed here prevent contact with the infectious agent, or body fluid that may contain the infectious agent, by creating a barrier between the worker and the infectious material. Gloves, protect the hands, gowns or aprons protect the skin and/or clothing, masks and respirators protect the mouth and nose, goggles protect the eyes, and face shields protect the entire face.

The respirator, has been designed to also protect the respiratory tract from airborne transmission of infectious agents. We'll discuss this in more detail later.



Factors Influencing PPE Selection

- Type of exposure anticipated
 - Splash/spray versus touch
 - Category of isolation precautions
- Durability and appropriateness for the task
- Fit

PPE Use in Healthcare Settings

When you are selecting PPE, consider three key things.

First is the type of anticipated exposure. This is determined by the type of anticipated exposure, such as touch, splashes or sprays, or large volumes of blood or body fluids that might penetrate the clothing. PPE selection, in particular the combination of PPE, also is determined by the category of isolation precautions a patient is on.

Second, and very much linked to the first, is the **durability and appropriateness of the PPE for the task.** This will affect, for example, whether a gown or apron is selected for PPE, or, if a gown is selected, whether it needs to be fluid resistant, fluid proof, or neither.

Third is fit. (optional question) How many of you have seen someone trying to work in PPE that is too small or large? PPE must fit the individual user, and it is up to the employer to ensure that all PPE are available in sizes appropriate for the workforce that must be protected.

(Segue to next slide) With this as background, let's now discuss how to select and use specific PPE. After that we'll talk about which PPE is recommended for Standard Precautions and the various Isolation Precaution categories.



Gloves

- Purpose – patient care, environmental services, other
- Glove material – vinyl, latex, nitrile, other
- Sterile or nonsterile
- One or two pair
- Single use or reusable

PPE Use in Healthcare Settings

Gloves are the most common type of PPE used in healthcare settings. As you can see here, there are several things to consider when selecting the right glove for a specified purpose.



Gloves

- Purpose – **patient care**, environmental services, other
- Glove material – **vinyl, latex, nitrile**, other
- Sterile or **non-sterile**
- **One** or two pair
- **Single use** or reusable

PPE Use in Healthcare Settings

Most patient care activities require the use of a single pair of nonsterile gloves made of either latex, nitrile, or vinyl. However, because of allergy concerns, some facilities have eliminated or limited latex products, including gloves, and now use gloves made of nitrile or other material. Vinyl gloves are also frequently available and work well if there is limited patient contact. However, some gloves do not provide a snug fit on the hand, especially around the wrist, and therefore should not be used if extensive contact is likely.

Gloves should fit the user's hands comfortably – they should not be too loose or too tight. They also should not tear or damage easily. Gloves are sometimes worn for several hours and need to stand up to the task.

Who uses the other glove options? Sterile surgical gloves are worn by surgeons and other healthcare personnel who perform invasive patient procedures. During some surgical procedures, two pair of gloves may be worn. Environmental services personnel often wear reusable heavy duty gloves made of latex or nitrile to work with caustic disinfectants when cleaning environmental surfaces. However, they sometimes use patient care gloves too.



Do's and Don'ts of Glove Use

- Work from “clean to dirty”
- Limit opportunities for “touch contamination” - protect yourself, others, and the environment
 - Don't touch your face or adjust PPE with contaminated gloves
 - Don't touch environmental surfaces except as necessary during patient care

PPE Use in Healthcare Settings

Gloves protect you against contact with infectious materials. However, once contaminated, gloves can become a means for spreading infectious materials to yourself, other patients or environmental surfaces. Therefore, the way YOU use gloves can influence the risk of disease transmission in your healthcare setting. These are the most important do's and don'ts of glove use.

Work from clean to dirty. This is a basic principle of infection control. In this instance it refers to touching clean body sites or surfaces before you touch dirty or heavily contaminated areas.

Limit opportunities for “touch contamination” - protect yourself, others and environmental surfaces. How many times have you seen someone adjust their glasses, rub their nose or touch their face with gloves that have been in contact with a patient? This is one example of “touch contamination” that can potentially expose oneself to infectious agents. Think about environmental surfaces too and avoid unnecessarily touching them with contaminated gloves. Surfaces such as light switches, door and cabinet knobs can become contaminated if touched by soiled gloves.



Do's and Don'ts of Glove Use (cont'd)

- Change gloves
 - During use if torn and when heavily soiled (even during use on the same patient)
 - After use on each patient
- Discard in appropriate receptacle
 - Never wash or reuse disposable gloves

PPE Use in Healthcare Settings

Change gloves as needed. If gloves become torn or heavily soiled and additional patient care tasks must be performed, then change the gloves before starting the next task. **Always** change gloves after use on each patient, and discard them in the nearest appropriate receptacle. Patient care gloves should never be washed and used again. Washing gloves does not necessarily make them safe for reuse; it may not be possible to eliminate all microorganisms and washing can make the gloves more prone to tearing or leaking.



Gowns or Aprons

- Purpose of use
- Material –
 - Natural or man-made
 - Reusable or disposable
 - Resistance to fluid penetration
- Clean or sterile

PPE Use in Healthcare Settings

There are three factors that influence the selection of a gown or apron as PPE. First is the purpose of use. Isolation gowns are generally the preferred PPE for clothing but aprons occasionally are used where limited contamination is anticipated. If contamination of the arms can be anticipated, a gown should be selected. Gowns should fully cover the torso, fit comfortably over the body, and have long sleeves that fit snugly at the wrist.

Second are the material properties of the gown. Isolation gowns are made either of cotton or a spun synthetic material that dictate whether they can be laundered and reused or must be disposed. Cotton and spun synthetic isolation gowns vary in their degree of fluid resistance, another factor that must be considered in the selection of this garb. If fluid penetration is likely, a fluid resistant gown should be used.

The last factor concerns patient risks and whether a clean, rather than sterile gown, can be used. Clean gowns are generally used for isolation. Sterile gowns are only necessary for performing invasive procedures, such as inserting a central line. In this case, a sterile gown would serve purposes of patient and healthcare worker protection.



Face Protection

- Masks – protect nose and mouth
 - Should fully cover nose and mouth and prevent fluid penetration
- Goggles – protect eyes
 - Should fit snugly over and around eyes
 - Personal glasses not a substitute for goggles
 - Antifog feature improves clarity

PPE Use in Healthcare Settings

A combination of PPE types is available to protect all or parts of the face from contact with potentially infectious material. The selection of facial PPE is determined by the isolation precautions required for the patient and/or the nature of the patient contact. This will be discussed later.

Masks should fully cover the nose and mouth and prevent fluid penetration. Masks should fit snugly over the nose and mouth. For this reason, masks that have a flexible nose piece and can be secured to the head with string ties or elastic are preferable.

Goggles provide barrier protection for the eyes; personal prescription lenses do not provide optimal eye protection and should not be used as a substitute for goggles. Goggles should fit snugly over and around the eyes or personal prescription lenses. Goggles with antifog features will help maintain clarity of vision.



Face Protection

- Face shields – protect face, nose, mouth, and eyes
 - Should cover forehead, extend below chin and wrap around side of face

PPE Use in Healthcare Settings

When skin protection, in addition to mouth, nose, and eye protection, is needed or desired, for example, when irrigating a wound or suctioning copious secretions, a face shield can be used as a substitute to wearing a mask or goggles. The face shield should cover the forehead, extend below the chin, and wrap around the side of the face.



Respiratory Protection

- Purpose – protect from inhalation of infectious aerosols (e.g., *Mycobacterium tuberculosis*)
- PPE types for respiratory protection
 - Particulate respirators
 - Half- or full-face elastomeric respirators
 - Powered air purifying respirators (PAPR)

PPE Use in Healthcare Settings

PPE also is used to protect healthcare workers' from hazardous or infectious aerosols, such as *Mycobacterium tuberculosis*. Respirators that filter the air before it is inhaled should be used for respiratory protection.

The most commonly used respirators in healthcare settings are the N95, N99, or N100 particulate respirators. The device has a sub-micron filter capable of excluding particles that are less than 5 microns in diameter.

Respirators are approved by the CDC's National Institute for Occupational Safety and Health.

Like other PPE, the selection of a respirator type must consider the nature of the exposure and risk involved. For example, N95 particulate respirators might be worn by personnel entering the room of a patient with infectious tuberculosis. However, if a bronchoscopy is performed on the patient, the healthcare provider might wear a higher level of respiratory protection, such as a powered air-purifying respirator or PAPR.



Elements of a Respiratory Protection Program

- Medical evaluation
- Fit testing
- Training
- Fit checking before use

PPE Use in Healthcare Settings

Prior to your using a respirator, your employer is required to have you medically evaluated to determine that it is safe for you to wear a respirator, to fit test you for the appropriate respirator size and type, and to train you on how and when to use a respirator. YOU are responsible for fit checking your respirator before use to make sure it has a proper seal.



For additional information on respirators....

- <http://www.cdc.gov/niosh/npptl/respirators/respsars.html>
- <http://www.cdc.gov/niosh/99-143.html>
- <http://www.cdc.gov/niosh/topics/respirators>

PPE Use in Healthcare Settings

These websites can provide you with the most up-to-date information on respirators.



PPE Use in Healthcare Settings: How to Safely Don, Use, and Remove PPE

SAFER • HEALTHIER • PEOPLE™

This next segment will address how to safely don, use, and remove PPE.

NOTE TO TRAINER: Consider having a participant demonstrate donning and removing PPE as you go through this section.



Key Points About PPE

- Don before contact with the patient, generally before entering the room
- Use carefully – don't spread contamination
- Remove and discard carefully, either at the doorway or immediately outside patient room; remove respirator outside room
- Immediately perform hand hygiene

PPE Use in Healthcare Settings

There are four key points to remember about PPE use. First, don it before you have any contact with the patient, generally before entering the room. Once you have PPE on, use it carefully to prevent spreading contamination. When you have completed your tasks, remove the PPE carefully and discard it in the receptacles provided. Then immediately perform hand hygiene before going on to the next patient.



Sequence* for Donning PPE

- Gown first
- Mask or respirator
- Goggles or face shield
- Gloves

***Combination of PPE will affect sequence – be practical**

PPE Use in Healthcare Settings

The gown should be donned first. The mask or respirator should be put on next and properly adjusted to fit; remember to fit check the respirator. The goggles or face shield should be donned next and the gloves are donned last. Keep in mind, the combination of PPE used, and therefore the sequence for donning, will be determined by the precautions that need to be taken.



How to Don a Gown

- Select appropriate type and size
- Opening is in the back
- Secure at neck and waist
- If gown is too small, use two gowns
 - Gown #1 ties in front
 - Gown #2 ties in back



PPE Use in Healthcare Settings

To don a gown, first select the appropriate type for the task and the right size for you. The opening of the gown should be in the back; secure the gown at the neck and waist. If the gown is too small to fully cover your torso, use two gowns. Put on the first gown with the opening in front and the second gown over the first with the opening in the back.



How to Don a Mask

- Place over nose, mouth and chin
- Fit flexible nose piece over nose bridge
- Secure on head with ties or elastic
- Adjust to fit



PPE Use in Healthcare Settings

Some masks are fastened with ties, others with elastic. If the mask has ties, place the mask over your mouth, nose and chin. Fit the flexible nose piece to the form of your nose bridge; tie the upper set at the back of your head and the lower set at the base of your neck.

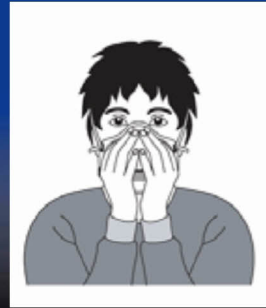
If a mask has elastic head bands, separate the two bands, hold the mask in one hand and the bands in the other. Place and hold the mask over your nose, mouth, and chin, then stretch the bands over your head and secure them comfortably as shown; one band on the upper back of your head, the other below the ears at the base of the neck.

Adjust the mask to fit. Remember, you don't want to be touching it during use so take the few seconds needed to make sure it is secure on your head and fits snugly around your face so there are no gaps.



How to Don a Particulate Respirator

- Select a fit tested respirator
- Place over nose, mouth and chin
- Fit flexible nose piece over nose bridge
- Secure on head with elastic
- Adjust to fit
- Perform a fit check –
 - Inhale – respirator should collapse
 - Exhale – check for leakage around face



PPE Use in Healthcare Settings

The technique for donning a particulate respirator, such as an N95, N99 or N100, is similar to putting on a pre-formed mask with elastic head bands. Key differences, however, are 1) the need to first select a respirator for which you have been fit tested and 2) fit checking the device, as you have been instructed, before entering an area where there may be airborne infectious disease. Be sure to follow the manufacturer's instructions for donning the device. In some instances, the manufacturer's instructions may differ slightly from this presentation.

You may also be asked to wear an elastomeric or powered air purifying respirator, or PAPR. Guidance on how to use these devices is not included in this presentation. You will need instruction locally to properly use these devices.



How to Don Eye and Face Protection

- Position goggles over eyes and secure to the head using the ear pieces or headband
- Position face shield over face and secure on brow with headband
- Adjust to fit comfortably



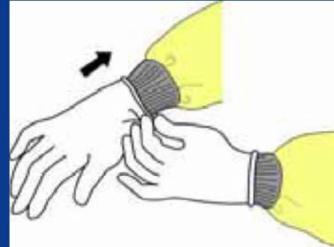
PPE Use in Healthcare Settings

If eye protection is needed, either goggles or a face shield should be worn. Position either device over the face and/or eyes and secure to head using the attached ear pieces or head band. Adjust to fit comfortably. Goggles should feel snug but not tight.



How to Don Gloves

- Don gloves last
- Select correct type and size
- Insert hands into gloves
- Extend gloves over isolation gown cuffs



PPE Use in Healthcare Settings

The last item of PPE to be donned is a pair of gloves. Be sure to select the type of glove needed for the task in the size that best fits you. Insert each hand into the appropriate glove and adjust as needed for comfort and dexterity. If you are wearing an isolation gown, tuck the gown cuffs securely under each glove. This provides a continuous barrier protection for your skin.



How to Safely Use PPE

- Keep gloved hands away from face
- Avoid touching or adjusting other PPE
- Remove gloves if they become torn; perform hand hygiene before donning new gloves
- Limit surfaces and items touched

PPE Use in Healthcare Settings

In addition to wearing PPE, you should also use safe work practices. Avoid contaminating yourself by keeping your hands away from your face and not touching or adjusting PPE. Also, remove your gloves if they become torn and perform hand hygiene before putting on a new pair of gloves. You should also avoid spreading contamination by limiting surfaces and items touched with contaminated gloves.



PPE Use in Healthcare Settings: How to Safely Remove PPE

SAFER • HEALTHIER • PEOPLE™

We've talked about donning and using PPE. Now we'll discuss how to safely remove PPE to protect you, your colleagues, and patients from exposure to contaminated materials.



“Contaminated” and “Clean” Areas of PPE

- Contaminated – outside front
 - Areas of PPE that have or are likely to have been in contact with body sites, materials, or environmental surfaces where the infectious organism may reside
- Clean – inside, outside back, ties on head and back
 - Areas of PPE that are not likely to have been in contact with the infectious organism

PPE Use in Healthcare Settings

To remove PEP safely, you must first be able to identify what sites are considered “clean” and what are “contaminated.” In general, the outside front and sleeves of the isolation gown and outside front of the goggles, mask, respirator and face shield are considered “contaminated,” regardless of whether there is visible soil. Also, the outside of the gloves are contaminated.

The areas that are considered “clean” are the parts that will be touched when removing PPE. These include inside the gloves; inside and back of the gown, including the ties; and the ties, elastic, or ear pieces of the mask, goggles and face shield.



Sequence for Removing PPE

- Gloves
- Face shield or goggles
- Gown
- Mask or respirator

PPE Use in Healthcare Settings

The sequence for removing PPE is intended to limit opportunities for self-contamination. The gloves are considered the most contaminated pieces of PPE and are therefore removed first. The face shield or goggles are next because they are more cumbersome and would interfere with removal of other PPE. The gown is third in the sequence, followed by the mask or respirator.



Where to Remove PPE

- At doorway, before leaving patient room or in anteroom*
- Remove respirator outside room, after door has been closed*

* Ensure that hand hygiene facilities are available at the point needed, e.g., sink or alcohol-based hand rub

PPE Use in Healthcare Settings

The location for removing PPE will depend on the amount and type of PPE worn and the category of isolation a patient is on, if applicable. If only gloves are worn as PPE, it is safe to remove and discard them in the patient room. When a gown or full PPE is worn, PPE should be removed at the doorway or in an anteroom. Respirators should always be removed outside the patient room, after the door is closed. Hand hygiene should be performed after all PPE is removed.



How to Remove Gloves (1)



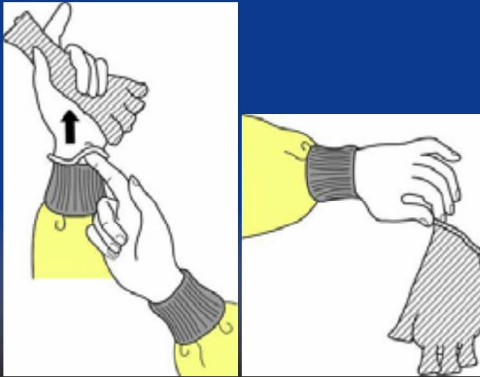
- Grasp outside edge near wrist
- Peel away from hand, turning glove inside-out
- Hold in opposite gloved hand

PPE Use in Healthcare Settings

Using one gloved hand, grasp the outside of the opposite glove near the wrist. Pull and peel the glove away from the hand. The glove should now be turned inside-out, with the contaminated side now on the inside. Hold the removed glove in the opposite gloved hand.



How to Remove Gloves (2)



- Slide ungloved finger under the wrist of the remaining glove
- Peel off from inside, creating a bag for both gloves
- Discard

PPE Use in Healthcare Settings

Slide one or two fingers of the ungloved hand under the wrist of the remaining glove. Peel glove off from the inside, creating a bag for both gloves. Discard in waste container.



Remove Goggles or Face Shield



- Grasp ear or head pieces with ungloved hands
- Lift away from face
- Place in designated receptacle for reprocessing or disposal

PPE Use in Healthcare Settings

Using ungloved hands, grasp the “clean” ear or head pieces and lift away from face. If goggle or face shield are reusable, place them in a designated receptacle for subsequent reprocessing. Otherwise, discard them in the waste receptacle.



Removing Isolation Gown



- Unfasten ties
- Peel gown away from neck and shoulder
- Turn contaminated outside toward the inside
- Fold or roll into a bundle
- Discard

PPE Use in Healthcare Settings

Unfasten the gown ties with the ungloved hands. Slip hands underneath the gown at the neck and shoulder, peel away from the shoulders. Slip the fingers of one hand under the cuff of the opposite arm. Pull the hand into the sleeve, grasping the gown from inside. Reach across and push the sleeve off the opposite arm. Fold the gown towards the inside and fold or roll into a bundle. (Only the “clean” part of the gown should be visible.) Discard into waste or linen container, as appropriate.



Removing a Mask



- Untie the bottom, then top, tie
- Remove from face
- Discard



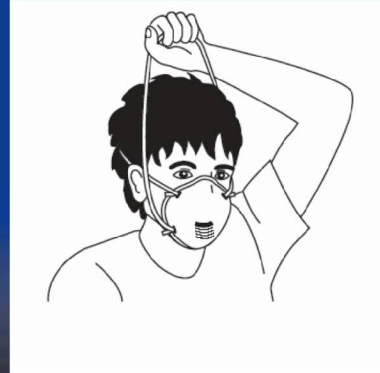
PPE Use in Healthcare Settings

The front of the mask is considered contaminated and should not be touched. Remove by handling only the ties or elastic bands starting with the bottom then top tie or band. Lift the mask or respirator away from the face and discard it into the designated waste receptacle.



Removing a Particulate Respirator

- Lift the bottom elastic over your head first
- Then lift off the top elastic
- Discard



PPE Use in Healthcare Settings

The bottom elastic should be lifted over the head first. Then remove the top elastic. This should be done slowly to prevent the respirator from “snapping” off the face.



Hand Hygiene

- Perform hand hygiene immediately after removing PPE.
 - If hands become visibly contaminated during PPE removal, wash hands before continuing to remove PPE
 - Wash hands with soap and water or use an alcohol-based hand rub
- * Ensure that hand hygiene facilities are available at the point needed, e.g., sink or alcohol-based hand rub

PPE Use in Healthcare Settings

Hand hygiene is the cornerstone of preventing infection transmission. You should perform hand hygiene immediately after removing PPE. If your hands become visibly contaminated during PPE removal, wash hands before continuing to remove PPE. Wash your hands thoroughly with soap and warm water or, if hands are not visibly contaminated, use an alcohol-based hand rub.



PPE Use in Healthcare Settings: When to Use PPE

SAFER • HEALTHIER • PEOPLE™

Thus far we have discussed the various types of PPE, considered various factors that go into selecting appropriate PPE, and described how to don, use, and remove PPE safely. This last segment of this presentation will discuss **WHEN** to use which PPE.



Standard and Expanded Isolation Precautions

SAFER • HEALTHIER • PEOPLE™

Decisions regarding when and which type of PPE should be worn are determined by CDC recommendations for Standard Precautions and Expanded Isolation Precautions.



Standard Precautions

- Previously called Universal Precautions
- Assumes blood and body fluid of ANY patient could be infectious
- Recommends PPE and other infection control practices to prevent transmission in any healthcare setting
- Decisions about PPE use determined by type of clinical interaction with patient

PPE Use in Healthcare Settings

Standard Precautions is an outgrowth of Universal Precautions. Universal Precautions was first recommended in 1987 to prevent the transmission of bloodborne pathogens to healthcare personnel. In 1996, the application of the concept was expanded and renamed “Standard Precautions.” Standard Precautions is intended to prevent the transmission of common infectious agents to healthcare personnel, patients and visitors in any healthcare setting. During care for any patient, one should assume that an infectious agent could be present in the patient’s blood or body fluids, including all secretions and excretions except tears and sweat. Therefore appropriate precautions, including use of PPE, must be taken. Whether PPE is needed, and if so, which type, is determined by the type of clinical interaction with the patient and the degree of blood and body fluid contact that can be reasonably anticipated and by whether the patient has been placed on isolation precautions such as Contact or Droplet Precautions or Airborne Infection Isolation.



PPE for Standard Precautions (1)

- **Gloves** – Use when touching blood, body fluids, secretions, excretions, contaminated items; for touching mucus membranes and nonintact skin
- **Gowns** – Use during procedures and patient care activities when contact of clothing/ exposed skin with blood/body fluids, secretions, or excretions is anticipated

PPE Use in Healthcare Settings

Under Standard Precautions, **gloves** should be used when touching blood, body fluids, secretions, excretions, or contaminated items and for touching mucous membranes and nonintact skin. A **gown** should be used during procedures and patient care activities when contact of clothing and/or exposed skin with blood, body fluids, secretions, or excretions is anticipated. Aprons are sometimes used as PPE over scrubs, such as in hemodialysis centers when inserting a needle into a fistula.



PPE for Standard Precautions (2)

- **Mask and goggles or a face shield** – Use during patient care activities likely to generate splashes or sprays of blood, body fluids, secretions, or excretions

PPE Use in Healthcare Settings

Mask and goggles or a face shield should be used during patient care activities that are likely to generate splashes and sprays of blood, body fluids, secretions, or excretions.



What Type of PPE Would You Wear?

- Giving a bed bath?
- Suctioning oral secretions?
- Transporting a patient in a wheel chair?
- Responding to an emergency where blood is spurting?
- Drawing blood from a vein?
- Cleaning an incontinent patient with diarrhea?
- Irrigating a wound?
- Taking vital signs?

PPE Use in Healthcare Settings

Listed here are several patient care activities that could indicate a need to wear PPE. What PPE would you wear for the following?

Giving a bed bath? (generally none)

Suctioning oral secretions? (gloves and mask/goggles or a face shield) (Respondents may correctly note that this may depend on whether open or closed suction is being used)

Transporting a patient in a wheelchair? (generally none)

Responding to an emergency where blood is spurting? (gloves, fluid-resistant gown, mask/goggles or a face shield)


Drawing blood from a vein? (gloves)

Cleaning an incontinent patient with diarrhea? (gloves and generally a gown)

Irrigating a wound? (gloves, gown, and mask/goggles or a face shield)

Taking vital signs? (generally none)

NOTE TO TRAINER: Encourage discussion of how healthcare personnel decide for themselves which PPE will be worn. Do they over- or under-protect themselves? If a question is raised about use of gloves for giving an injection, indicate that this is largely a matter of local or state policy. OSHA does not require use of gloves for giving an injection.



What Type of PPE Would *You* Wear?

- Giving a bed bath?
 - Generally none
- Suctioning oral secretions?
 - Gloves and mask/goggles or a face shield – sometimes gown
- Transporting a patient in a wheel chair?
 - Generally none required
- Responding to an emergency where blood is spurting?
 - Gloves, fluid-resistant gown, mask/goggles or a face shield
- Drawing blood from a vein?
 - Gloves
- Cleaning an incontinent patient with diarrhea?
 - Gloves w/wo gown
- Irrigating a wound?
 - Gloves, gown, mask/goggles or a face shield
- Taking vital signs?
 - Generally none

PPE Use in Healthcare Settings

Listed here are several patient care activities that could indicate a need to wear PPE. What PPE would you wear for the following?

Giving a bed bath? (generally none)

Suctioning oral secretions? (gloves and mask/goggles or a face shield) (Respondents may correctly note that this may depend on whether open or closed suction is being used)

Transporting a patient in a wheelchair? (generally none)

Responding to an emergency where blood is spurting? (gloves, fluid-resistant gown, and mask/goggles or a face shield)

Drawing blood from a vein? (gloves)

Cleaning an incontinent patient with diarrhea? (gloves and generally a gown)

Irrigating a wound? (gloves, gown, and mask/goggles or a face shield)

Taking vital signs? (generally none)

NOTE TO TRAINER: Encourage discussion of how healthcare personnel decide for themselves which PPE will be worn. Do they over- or under-protect themselves?



PPE for Expanded Precautions

- Expanded Precautions include
 - Contact Precautions
 - Droplet Precautions
 - Airborne Infection Isolation

PPE Use in Healthcare Settings

In some instances, healthcare personnel are required to wear PPE in addition to that recommended for Standard Precautions. The three Expanded Precaution categories (formerly called Transmission-Based Precautions) where this applies are Contact and Droplet Precautions and Airborne Infection Isolation.



Use of PPE for Expanded Precautions

- Contact Precautions – Gown and gloves for contact with patient or environment of care (e.g., medical equipment, environmental surfaces)
 - In some instances these are required for entering patient's environment
- Droplet Precautions – Surgical masks within 3 feet of patient
- Airborne Infection Isolation – Particulate respirator*

*Negative pressure isolation room also required

PPE Use in Healthcare Settings

Contact Precautions requires gloves and gown for contact with the patient and/or the environment of care; in some instances, use of this PPE is recommended for even entering the patient's environment. Droplet Precautions requires the use of a surgical mask, and Airborne Infection Isolation requires that only a respirator be worn.



Hand Hygiene

- Required for Standard and Expanded Precautions
- Perform...
 - Immediately after removing PPE
 - Between patient contacts
- Wash hands thoroughly with soap and water or use alcohol-based hand rub

PPE Use in Healthcare Settings

Hand hygiene has been mentioned several times during this presentation. Hand hygiene is an essential infection control practice to protect patients, healthcare personnel and visitors and is required for both Standard and Expanded Precautions. Hand hygiene should be performed immediately after removing PPE, even during PPE changes and removal if necessary, and between patient contacts. Wash your hands thoroughly with soap and warm water or, if hands are not visibly soiled, use an alcohol-based hand rub.



PPE Use in Healthcare Settings: Final Thoughts

- PPE is available to protect you from exposure to infectious agents in the healthcare workplace
- Know what type of PPE is necessary for the duties you perform and use it correctly

SAFER • HEALTHIER • PEOPLE™

These are a few final thoughts before ending today's presentation. Remember, PPE is available to protect you from exposure to infectious agents during healthcare. It is important that you know what type of PPE is necessary for the procedures you perform AND that you use it correctly.

Thank you for your attention and participation. Are there any questions?

April 27th, 2017 Surveillance Team Call

Action Items and Reminders for next call:

1. We will be switching from the teleconference line to Zoom for future surveillance calls. Please see new call in instructions.
2. Asia 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: Damien Joly, Patrick Dawson, Alice Latinne, Allison White, Emily Hagan, Hongying Li, Leilani Francisco, Mindy Rostal, Tammie O'Rourke, Dan O'Rourke, Denise Greig, Megan Vodzak, Leti Gutierrez, Catherine Machalaba, REDACTED Woutrina Smith, Brian Bird, Kirsten Gilardi, Corina Monagin, Matt LeBreton, Jon Epstein, Karen Saylor, Jim Ayukekbong, Frantz Jean Louis, Taylor Gabourie, REDACTED Chris Kreuder Johnson

Semi-annual report/data dashboard

- Project activities and achievements for the semi-annual report and M&E will be summarized from data entered into EIDITH up until April 30th. We are developing dashboards that will show high level information (e.g. # animals and humans sampled to date) for each country as well as a quick 1-3 line impact statement, and will be shared with country leads for edits before final submission to USAID.

Risk Characterization for M&E

- The monitoring and evaluation (M&E) report will be submitted along with the semi-annual report. In addition to sampling number for animals and humans, the main indicator for M&E that surveillance team is required to report on is risk characterization. As we have done in the past, we will be pulling risk factors/interfaces identified from publications produced under PREDICT. Please send David and Taylor any publications especially in the last 6 months that should be on the master publication list and we will compile risk factors and high risk interfaces from these.
- We are currently developing tables that can be generated from data in EIDITH for our country teams to use to start to characterize risk, using key metrics in the site characterization forms, and animal and human data collected at each sampling event.
- Together, we'll evaluate the sites and interfaces to characterize risk and move towards metrics and visuals that can be used for both reporting and for countries to be able to evaluate patterns in their data.

Site naming protocol

- There are still some issues and substantial inconsistency with naming sites and subsites, and there is concern we are losing the ability to show where we are sampling concurrently. In general, we should be targeting 2-3 sites per country and with the way data are entered, some countries have many, many more sites than that meaning documenting concurrent surveillance could pose difficult. Rather

than continuing to try to rename sites, we will be adding a field to the site characterization form for teams to assign site ID's as a 'Concurrent site' or 'Independent site'.

- a. **Concurrent site**, a site we have sampled both animals and humans in proximity in both time and space to detect disease transmission among spillover and amplification hosts being targeted. We are hypothesizing that each site has several taxa of wildlife that are sharing viruses with each other and humans due to close proximity contact or effective contact between wildlife shedding viruses in saliva, urine, or feces and susceptible people nearby.

Example: Country X sampled bats and non-human primates, and people a site within 2 weeks and 5 km of each other. Sampling was done in several seasons over several years. People meeting specific clinical case definitions are being sampled at a nearby clinic (with 15 km) year round. Given multiple sampling trips, these events will be grouped around a single site to demonstrate viral spillover and amplification and identify risk factors for spillover and spread.

- b. **Independent site**, any site we sampled outside of the original planned/targeted sites, or where no concurrent sampling there is planned or has occurred;

Examples: sites where we have sampled in response to a government request for assistance during an outbreak, or where we sampled early on in the project at a site that is not in one of our main sites. This data is still very important, however labeling these independent sites now will help us constrain our data when we need to analyze risk for spillover and spread.

- We'll also need to retrospectively label past data concurrent or independent manually, as if sampling occurred 1-2 days outside the decided time period, we still want to be able label that sampling as concurrent. As this rolls out we'll continue discussing as a team.

Any issues with rodent sampling technique?

- Let us know if there are any issues transitioning to the new rodent blood sampling techniques.

Saline for sampling small animals

- Updates to e-book sent out several months ago advised teams to stop using VTM as a lubricant for rectal and urogenital swabs, likely over concern about tissue damage and pain caused to animals if Trizol was mistakenly used instead. Mindy and others suggested teams should use saline for lubrication to reduce discomfort especially for small mammals and will update the protocol.

Animal morphometric data in EIDITH

- In an effort to increase efficiency in the field, the bat specialists of PREDICT have proposed updating the sampling protocol to describe the minimum data needed while sampling bats. Some issues that need addressing are, what is the appropriate level of detail we need when we are sampling many bats we know very well? Often times, teams know exactly what species they are sampling, so are looking to streamline the process. Briefly, some proposed updates:
 - Jon: Measuring mass and forearm length, palpating for a fetus, and looking at secondary sexual characteristics (most obvious in the fruit bats) are most important both to help

differentiate adults from juveniles, assess pregnancy (and reproductive season info), and know how much blood to safely collect. After collecting this data from 10 or 15 similar individuals, then we can stop measuring forearm and just get weight, sex, age (if possible) and pregnancy status - all pretty quick, and then focus on sampling.

- However any time a field team is uncertain about a bat species, we should go through the effort of taking all measurements and take photos to assist with species ID. These data can be very helpful in the event a species does not have genetic data to enable barcoding.

EIDITH updates

- IM team received over 200 submissions on Thursday. Next call we'll discuss how the data entry went for teams.

Indicator	Total	NewInLast2Weeks
# countries with data	28	0
# animal sampled	29728	934
# human sampled	1257	178
# specimens	144246	4544
# tests	43697	1357
average days between event and data submission	94	
average days between event and data submission for data submitted in last 2 weeks	45	
number of events/test batches waiting for country input	12	
number of events/test batches waiting for IM review	216	

Note: Upcoming Country Planning for Health Security Processes

Joint External Evaluations:

- May: Myanmar, Cameroon and Mongolia
- June: Thailand and Uganda

Country action planning:

- May: Ethiopia
- June: Senegal
- July: Liberia and Bangladesh

Africa Updates

Egypt – sampled n=244 bats on two trips, sampled and surveyed 150 humans; all data in EIDITH is up to date and site names are all sorted. Lab testing will begin after Ramadan.

Jordan – Will start sequencing next month. During 4 bat sampling trips collected n=141 bat samples (or individuals?); all data is in EIDITH; turnaround time on data submission is about 10 days. (Go Jordan!!)

Ethiopia – starting human surveillance component soon and continuing bat and primate sampling, but nothing specifically to report from last few weeks.

Kenya – currently sampling camels in Turkana; also non-invasive sampling of primates, bats, and rodents; IRB is being resubmitted.

Tanzania – sampling in the Lake zone (bats) and conducting FGs and interviews.

Uganda – team is in the field now, all data through March 31st is in EIDITH; human data that was lost has been resubmitted; awaiting new testing partner subcontract approval.

Eastern DRC – surveillance contract approved. Update on North Kivu province outbreak from proMED latest info is malaria as diagnosed by MSF.

DRC – A total 403 animals sampled, including 2259 samples; completed questionnaires and collected samples from 79 hospital participants; Ethnographic interviews completed during recent field trip to Buta (one of our sites) as well as 2 focus group (participants size of 12 & and 13). During this Buta trip, 35 rodents, 28 NHP and 2 bats were sampled. Uploading all data into EIDITH now and some is in review.

RoC -- focused on human behavioral activities in bush meat markets in Brazzaville, and completed 12 human questionnaires and are in the process of uploading this data into EIDITH.

Cameroon – IRB still pending, awaiting approval letter; during trip to Ebolowa, team sampled 28 NHP/35 rodents and in Sangmelima 20 NHP/38 rodents /68 bats. EPT2 partner meeting conducted capacity building in one health –biosafety, biosecurity, and management; total of 1694 animals sampled so far, including 7457 samples.

Guinea -- completed 3 field trips in April (n=130) bats; invited to JEE meeting.

Sierra Leone – working on data; responded to MPX outbreak – collected samples from rodents, bats, NHPs

Cote d’Ivoire – collected samples from n=152 bats and n=54 rodents

Liberia – 2 field trips, now in Lofa county. Rodent training in May. 1100 samples sent to Columbia U and are being processed. Update on the cluster of GI cases in Sinoe county – Ebola has been ruled out. Teams (not PREDICT) are looking at tox and bacterial screens now.

Senegal – IRB approved, awaiting supplies; human sampling at the end of May. Animal permits not yet approved, sampling hopefully starting in June. Mission communication requested reports from CC, did not include global or USAID/Washington.

Ghana – Terra traveling at the moment.

Next Call
Thursday, May 11th, 2017
@ 10am PT/1pm ET

Standard precautions in health care

Background

Standard precautions are meant to reduce the risk of transmission of bloodborne and other pathogens from both recognized and unrecognized sources.

They are the basic level of infection control precautions which are to be used, as a minimum, in the care of all patients.

Hand hygiene is a major component of standard precautions and one of the most effective methods to prevent transmission of pathogens associated with health care. In addition to hand hygiene, the use of **personal protective equipment** should be guided by **risk assessment** and the extent of contact anticipated with blood and body fluids, or pathogens.

In addition to practices carried out by health workers when providing care, all individuals (including patients and visitors) should comply with infection control practices in health-care settings. The control of spread of pathogens from the source is key to avoid transmission. Among source control measures, **respiratory hygiene/cough etiquette**, developed during the severe acute respiratory syndrome (SARS) outbreak, is now considered as part of standard precautions.

Worldwide escalation of the use of standard precautions would reduce unnecessary risks associated with health care. Promotion of an **institutional safety climate** helps to improve conformity with recommended measures and thus subsequent risk reduction. Provision of adequate staff and supplies, together with leadership and education of health workers, patients, and visitors, is critical for an enhanced safety climate in health-care settings.

Important advice

- Promotion of a safety climate is a cornerstone of prevention of transmission of pathogens in health care.
- Standard precautions should be the minimum level of precautions used when providing care for all patients.
- Risk assessment is critical. Assess all health-care activities to determine the personal protection that is indicated.
- Implement source control measures for all persons with respiratory symptoms through promotion of respiratory hygiene and cough etiquette.

✓ Checklist

Health policy

- Promote a safety climate.
- Develop policies which facilitate the implementation of infection control measures.

Hand hygiene

- Perform hand hygiene by means of hand rubbing or hand washing (see detailed indications in table).
- Perform hand washing with soap and water if hands are visibly soiled, or exposure to spore-forming organisms is proven or strongly suspected, or after using the restroom. Otherwise, if resources permit, perform hand rubbing with an alcohol-based preparation.
- Ensure availability of hand-washing facilities with clean running water.
- Ensure availability of hand hygiene products (clean water, soap, single use clean towels, alcohol-based hand rub). Alcohol-based hand rubs should ideally be available at the point of care.

Personal protective equipment (PPE)

- ASSESS THE RISK of exposure to body substances or contaminated surfaces BEFORE any health-care activity. **Make this a routine!**
- Select PPE based on the assessment of risk:
 - clean non-sterile gloves
 - clean, non-sterile fluid-resistant gown
 - mask and eye protection or a face shield.

Respiratory hygiene and cough etiquette

- Education of health workers, patients and visitors.
- Covering mouth and nose when coughing or sneezing.
- Hand hygiene after contact with respiratory secretions.
- Spatial separation of persons with acute febrile respiratory symptoms.

Health-care facility recommendations for standard precautions

KEY ELEMENTS AT A GLANCE

1. Hand hygiene¹

Summary technique:

- Hand washing (40–60 sec): wet hands and apply soap; rub all surfaces; rinse hands and dry thoroughly with a single use towel; use towel to turn off faucet.
- Hand rubbing (20–30 sec): apply enough product to cover all areas of the hands; rub hands until dry.

Summary indications:

- Before and after any direct patient contact and between patients, whether or not gloves are worn.
- Immediately after gloves are removed.
- Before handling an invasive device.
- After touching blood, body fluids, secretions, excretions, non-intact skin, and contaminated items, even if gloves are worn.
- During patient care, when moving from a contaminated to a clean body site of the patient.
- After contact with inanimate objects in the immediate vicinity of the patient.

2. Gloves

- Wear when touching blood, body fluids, secretions, excretions, mucous membranes, nonintact skin.
- Change between tasks and procedures on the same patient after contact with potentially infectious material.
- Remove after use, before touching non-contaminated items and surfaces, and before going to another patient. Perform hand hygiene immediately after removal.

3. Facial protection (eyes, nose, and mouth)

- Wear (1) a surgical or procedure mask and eye protection (eye visor, goggles) or (2) a face shield to protect mucous membranes of the eyes, nose, and mouth during activities that are likely to generate splashes or sprays of blood, body fluids, secretions, and excretions.

4. Gown

- Wear to protect skin and prevent soiling of clothing during activities that are likely to generate splashes or sprays of blood, body fluids, secretions, or excretions.
- Remove soiled gown as soon as possible, and perform hand hygiene.

5. Prevention of needle stick and injuries from other sharp instruments²

Use care when:

- Handling needles, scalpels, and other sharp instruments or devices.
- Cleaning used instruments.
- Disposing of used needles and other sharp instruments.

6. Respiratory hygiene and cough etiquette

Persons with respiratory symptoms should apply source control measures:

- Cover their nose and mouth when coughing/sneezing with tissue or mask, dispose of used tissues and masks, and perform hand hygiene after contact with respiratory secretions.

Health-care facilities should:

- Place acute febrile respiratory symptomatic patients at least 1 metre (3 feet) away from others in common waiting areas, if possible.
- Post visual alerts at the entrance to health-care facilities instructing persons with respiratory symptoms to practise respiratory hygiene/cough etiquette.
- Consider making hand hygiene resources, tissues and masks available in common areas and areas used for the evaluation of patients with respiratory illnesses.

7. Environmental cleaning

- Use adequate procedures for the routine cleaning and disinfection of environmental and other frequently touched surfaces.

8. Linens

Handle, transport, and process used linen in a manner which:

- Prevents skin and mucous membrane exposures and contamination of clothing.
- Avoids transfer of pathogens to other patients and or the environment.

9. Waste disposal

- Ensure safe waste management.
- Treat waste contaminated with blood, body fluids, secretions and excretions as clinical waste, in accordance with local regulations.
- Human tissues and laboratory waste that is directly associated with specimen processing should also be treated as clinical waste.
- Discard single use items properly.

10. Patient care equipment

- Handle equipment soiled with blood, body fluids, secretions, and excretions in a manner that prevents skin and mucous membrane exposures, contamination of clothing, and transfer of pathogens to other patients or the environment.
- Clean, disinfect, and reprocess reusable equipment appropriately before use with another patient.

¹ For more details, see: WHO Guidelines on Hand Hygiene in Health Care (Advanced draft), at: http://www.who.int/patientsafety/information_centre/ghhad_download/en/index.html.

² The SIGN Alliance at: http://www.who.int/injection_safety/sign/en/

From: "Jonna Mazet" <jkmazet@ucdavis.edu>
Sent: 07/14/2020 10:32:12 AM (-07:00)
To: "Christine Kreuder Johnson" <ckjohnson@ucdavis.edu>
Cc: "Ava Sullivan" <sullivan@ecohealthalliance.org>; "Aleksi MacDurian" <chmura@ecohealthalliance.org>; "Kevin Olival" <Olival@ecohealthalliance.org>; "Tammie O'Rourke" <torourke@metabiota.com>; "William B. Karesh" <karesh@ecohealthalliance.org>; "David John Wolking" <djwolking@ucdavis.edu>
Subject: Re: Reminder: P2 EB Call - Monday July 6th @ 11AM Pacific

----- Message truncated -----

From: Jonna Mazet <jkmazet@ucdavis.edu>
To: Katie Leasure <kaleasure@ucdavis.edu>
Sent: 1/3/2017 8:46:03 AM
Subject: Fwd: John MacK. flight

----- Forwarded message -----

From: **William B. Karesh** <karesh@ecohealthalliance.org>
Date: Tue, Jan 3, 2017 at 7:56 AM
Subject: John MacK. flight
To: Elizabeth Leasure <ealeasure@ucdavis.edu>, Jonna Mazet <jkmazet@ucdavis.edu>

Any way that we can get John MacKenzie on a business class flight. It is a long trip (like 14-15 hours) and he is also older and **REDACTED**

He wrote to say that if he has to fly coach class, he will not be able to make the trip.

BK

William B. Karesh, D.V.M
Executive Vice President for Health and Policy

EcoHealth Alliance
460 West 34th Street - 17th Floor
New York, NY 10001 USA

+1.212.380.4463 (direct)
+1.212.380.4465 (fax)
www.ecohealthalliance.org

President, OIE Working Group on Wildlife

Co-chair, IUCN Species Survival Commission - Wildlife Health Specialist Group

EPT Partners Liaison, USAID Emerging Pandemic Threats - PREDICT-2 Program

EcoHealth Alliance leads cutting-edge research into the critical connections between human and wildlife health and delicate ecosystems. With this science we develop solutions that promote conservation and prevent pandemics.

From: "William B. Karesh" <karesh@ecohealthalliance.org>
Sent: 02/10/2017 7:58:48 AM (-08:00)
To: "David Wolking" <djwolking@ucdavis.edu>; "Jonna Mazet" <jkmazet@ucdavis.edu>
Cc: "Chris Johnson" <ckjohnson@ucdavis.edu>
Subject: Re: Cancellation of joint EPT2 Field Work

Wow. Alisa said that FAO was still expected to do the concurrent sampling in addition to the new pivot efforts. Subhash is worried about budget though.

Might be worth a call to Alisa if timing is important.

BK

On Feb 10, 2017, at 10:40 AM, David J Wolking <djwolking@ucdavis.edu> wrote:

Hey there,

Thought you'd be keenly interested to hear that FAO/Tanzania has cancelled all fieldwork until further notice, likely the results of the meeting in Rome next week with Dennis, Andrew, and their global team.

We plan to continue with fieldwork as this could drag on indefinitely and the "realignment of the workplan" note is frankly ominous.

David

----- Forwarded message -----

From: Grace Mwangoka [REDACTED]
Date: Fri, Feb 10, 2017 at 2:41 AM
Subject: Re: Cancellation of joint EPT2 Field Work
To: David John Wolking <djwolking@ucdavis.edu>, Taylor Gabourie <tagabourie@ucdavis.edu>
Cc: Zikankuba Sijali [REDACTED], Rudovick Kazwala [REDACTED]
Abel Ekiri <abekiri@ucdavis.edu>, Christopher kilonzo <ckilonzo@ucdavis.edu>, mwokozi mwanzalila <[REDACTED]>, asha makweta <[REDACTED]>

Dear All,

Due to the changes that are happening with our colleagues, FAO, we would need to discuss regarding the concurrent sampling plan for Lake zone trip. From the discussion I had with Dr Niwael Yesterday, she doesn't know when the livestock sampling will continue. So we agreed with Zika to go ahead with the next week trip and will catch up later with FAO once their working plan has been re-established. Though we would still appreciate to get your comments/opinion on this.

Regards

Grace

On Thu, Feb 9, 2017 at 4:56 PM, MtuiMalamsha, Niwael (FAOTZ)

REDACTED wrote:

Dear Colleagues,
the planned EPT 2 joint field work has been put on halt [until further notice] following Reorientation of the Programme's Workplan. We sincerely apologize for any inconvenience caused.

Regards,

Niwael Mtui-Malamsha

National Epidemiologist
Food and Agriculture Organization of the UN

REDACTED

Tel: +

Fax: **REDACTED**

Mob.

Skype: **REDACTED**

Website: www.fao.org

From: Zikankuba Sijali **REDACTED**

Sent: Tuesday, January 31, 2017 1:18 PM

To: Rudovick Kazwala

Cc: MtuiMalamsha, Niwael (FAOTZ); Abel Ekiri; **REDACTED** Christopher kilonzo;

Tadesse, Zelalem (FAOTZ); Sallu, Raphael (FAOTZ)

Subject: Re: Field Work Planning Meeting

Thanks Prof,

Noted.

On Tue, Jan 31, 2017 at 9:23 AM, Rudovick Kazwala

REDACTED <mailto:**REDACTED**> wrote:

Zika,

On the SUA Letter, amend the last line before signature,

It is Bodi ya Taasisi ya Utafiti wa Wanyama Pori and not Bodi ya Utalii.

Thanks

Rudovick R. Kazwala

Professor Ecosystems and Public Health

Department of Veterinary Medicine and Public Health

Sokoine University of Agriculture

REDACTED

Phone: [REDACTED] or

[REDACTED]
Email: [REDACTED] <mailto:[REDACTED]>

On 31 January 2017 at 07:04, Zikankuba Sijali

<[REDACTED] <mailto:[REDACTED]>> wrote:

Dear Dr Mtui and all,

Thanks for sharing the list of households this will help very much the team in planning during site visit, I'm also glad to share the detailed Itinerary and Introduction letter as we are agreed on previous Skype.

We can discuss further at the GEMP trainings thanks.

Zikankuba

On Mon, Jan 30, 2017 at 9:46 AM, MtuiMalamsha, Niwael (FAOTZ)

<[REDACTED] <mailto:[REDACTED]>> wrote:

Dear all,

Kindly find attached list of pre -selected households for villages n Uvinza and Kyerwa as agreed in our last coordination meeting. Very sorry for this delay.

Related to our preparation for the field work, we need to prepare communication letter in advance in that context therefore kindly share with us information to be added to the letter

Regards,

Niwael Mtui-Malamsha

National Epidemiologist

Food and Agriculture Organization of the UN

[REDACTED]

Tel: [REDACTED]

Fax: [REDACTED]

Mob. [REDACTED]

Skype: [REDACTED]

Website: www.fao.org <<http://www.fao.org>>

From: Abel Ekiri [abekiri@ucdavis.edu <<mailto:abekiri@ucdavis.edu>>]

Sent: Thursday, January 19, 2017 3:57 PM

To: MtuiMalamsha, Niwael (FAOTZ); Rudovick Kazwala;

[REDACTED] <mailto:[REDACTED]>; Christopher kilonzo; Zikankuba Sijali

Cc: Tadesse, Zelalem (FAOTZ); Sallu, Raphael (FAOTZ)

Subject: Re: Field Work Planning Meeting

Hi All,

Thank you for making time for today's call. Attached is a summary of minutes and action items from today's Skype call. Feel free to edit as necessary.

Best regards,

Abel

From: MtuiMalamsha, Niwael (FAOTZ)

<[REDACTED]@[REDACTED]>

Sent: Wednesday, January 18, 2017 12:24:49 AM

To: Abel Ekiri; Rudovick Kazwala; [REDACTED]@[REDACTED];
Christopher kilonzo; Zikankuba Sijali

Cc: Tadesse, Zelalem (FAOTZ); Sallu, Raphael (FAOTZ)

Subject: RE: Field Work Planning Meeting

Dear Abel,
thanks for sharing

Regards

Niwael

From: Abel Ekiri [abekiri@ucdavis.edu<mailto:abekiri@ucdavis.edu>]

Sent: Wednesday, January 18, 2017 10:06 AM

To: MtuiMalamsha, Niwael (FAOTZ); Tadesse, Zelalem (FAOTZ); Sallu, Raphael (FAOTZ);
Rudovick Kazwala; [REDACTED]@[REDACTED] <mailto:[REDACTED]>; Christopher kilonzo;
Zikankuba Sijali

Subject: Re: Field Work Planning Meeting

Dear Niwael,

Sharing here the PREDICT team Skype IDs to facilitate linking up on tomorrow's 11am Skype call.

Prof: [REDACTED]

Chris: [REDACTED]

Grace: [REDACTED]

Zika: [REDACTED]

Abel: abel.ekiri1

Thanks,

Abel

From: MtuiMalamsha, Niwael (FAOTZ)
<[REDACTED]@mailto:[REDACTED]>
Sent: Monday, January 16, 2017 5:13:58 AM
To: Abel Ekiri; Tadesse, Zelalem (FAOTZ); Sallu, Raphael (FAOTZ); Rudovick Kazwala;
[REDACTED]@mailto:[REDACTED]; Christopher kilonzo; Zikankuba Sijali
Subject: Field Work Planning Meeting

Dear Abel and All,
thanks for your brief account of your field work plan. Kindly note that FAO will continue to sample domestic animals in 5 villages in Uvinza (Basanza, Chakulu, Malagarasi, Nyangabo and Rukoma) in addition to Mwamila, this will take 5 days. Further discussions will follow during Thursday Skype call at 11am

Regards

Niwael

From: Abel Ekiri [abekiri@ucdavis.edu<mailto:abekiri@ucdavis.edu>]
Sent: Monday, January 16, 2017 12:15 PM
To: MtuiMalamsha, Niwael (FAOTZ); Tadesse, Zelalem (FAOTZ); Sallu, Raphael (FAOTZ); Rudovick Kazwala; [REDACTED]@mailto:[REDACTED]; Christopher kilonzo; Zikankuba Sijali
Subject: Re; Field Work Planning Meeting

Dear Niwael & All,

Following up on our previous discussions on joint FAO-PREDICT Lake Zone field work plans for Feb 2017. Having the Skype call on Thursday January 19th, 2017 will work well for the PREDICT team. Suggested times are 11am or 2pm, let us know which of these work best for the FAO team.

With regards to remaining Uvinza sampling activities, PREDICT plans to continue with wildlife sampling (rodents/bats) in 3 Uvinza villages (Basanza, Mwamila and Chakulu). We already conducted rodent sampling in Mwamila and are left with Basanza and Chakulu but can still do more wildlife sampling in Mwamila if FAO have plans to do more sampling in Mwamila.

After Uvinza the PREDICT team will be moving to Kagera in Kyerwa where we'll sample fruit bats in Murongo Village and rodents in Murongo, Masheshu plus other villages served by Murongo Health Centre. We can discuss further livestock availability in these areas with FAO team on our Skype call. The villages served by Murongo Health Centre are Kibale, Nyamiaga, Rwenkende, Kibingo, Rugasha, Kihinda, Nyakatera, Kigorogoro and Rwabikagate. The PREDICT Human and behavioural teams will be working in these areas as well.

We can discuss further any of the above on the proposed Thursday Skype call.

Thanks,
Abel

--

Zikankuba Sijali (BVM)
Research Scientist
HALI PROJECT

██████████ REDACTED ██████████
Mobile ██████████ REDACTED ██████████

--

Zikankuba Sijali (BVM)
Research Scientist
HALI PROJECT

██████████ REDACTED ██████████
Mobile ██████████ REDACTED ██████████

From: [REDACTED] on behalf of "Jonna Mazet" <jkmazet@ucdavis.edu>
Sent: 02/10/2017 12:03:37 PM (-08:00)
To: "William B. Karesh" <karesh@ecohealthalliance.org>
Cc: "Peter Daszak" <daszak@ecohealthalliance.org>; "Elizabeth S Chase" <eschase@ucdavis.edu>; "Mundaca-Shah, Ceci" <CMundaca@nas.edu>; "Catherine Machalaba" <machalaba@ecohealthalliance.org>; "Amanda Fuchs" <fuchs@ecohealthalliance.org>; "Ogawa, V. Ayano" <VOgawa@nas.edu>
Subject: Re: Introduction of Dr. William Karesh

Wonderful -- welcome aboard!
Jonna

On Fri, Feb 10, 2017 at 8:47 AM, Ogawa, V. Ayano <VOgawa@nas.edu> wrote:

Dear Dr. Karesh,

That is wonderful news! We are delighted that you are able to participate in this important work group. I will be following up in the coming weeks to schedule the next work group call and circulate other relevant materials.

We very much look forward to working with you!

Best regards,

Ayano

From: William B. Karesh [mailto:karesh@ecohealthalliance.org]
Sent: Friday, February 10, 2017 10:18 AM
To: Ogawa, V. Ayano
Cc: Jonna Mazet; Peter Daszak; Elizabeth S Chase; Mundaca-Shah, Ceci; Catherine Machalaba; Amanda Fuchs
Subject: Re: Introduction of Dr. William Karesh

Dear Ms. Ogawa and Dr. Mazet,

Thank you for the invitation to participate in the work group. I would be pleased to participate and support the effort in any way that I can.

All the Best,

William B. Karesh, D.V.M

Executive Vice President for Health and Policy

EcoHealth Alliance

460 West 34th Street - 17th Floor

New York, NY 10001 USA

[+1.212.380.4463](tel:+12123804463) (direct)

[+1.212.380.4465](tel:+12123804465) (fax)

www.ecohealthalliance.org

President, OIE Working Group on Wildlife

Co-chair, IUCN Species Survival Commission - Wildlife Health Specialist Group

EPT Partners Liaison, USAID Emerging Pandemic Threats - PREDICT-2 Program

EcoHealth Alliance leads cutting-edge research into the critical connections between human and wildlife health and delicate ecosystems. With this science we develop solutions that promote conservation and prevent pandemics.

On Feb 10, 2017, at 9:42 AM, Ogawa, V. Ayano <VOgawa@nas.edu> wrote:

Thank you for the introduction, Jonna!

Dr. Karesh, it is very nice to meet you via email. As Jonna alluded to in the email, the Forum on Microbial Threats of the National Academies of Sciences, Engineering, and Medicine is in the process of launching a One Health work group. As outlined in the attached concept note, the work group's objectives are to

engage in a detailed ongoing exploration and information sharing related to One Health topics, and to help facilitate and refine the implementation of the One Health approach needed to leverage existing programs and to better target effective detection, diagnosis, intervention, and prevention of major infectious disease outbreaks. The work group is led by Jonna and comprises of members from the Forum on Microbial Threats and external stakeholders (see attached roster).

As one of the founders and champions of One Health, you have been highly recommended to serve in the work group, and we would be very honored to have you join the group. Your responsibility as a core work group member would be to participate in regular conference calls, and contribute to the development of written products, such as perspective papers that would be distributed by the National Academy of Medicine.

Please let me know if you are interested in serving in the work group. I would be happy to answer any questions you may have.

Thank you for your time and consideration. I look forward to hearing from you soon!

Best regards,

Ayano

V. Ayano Ogawa, S.M.

Associate Program Officer, Forum on Microbial Threats

Board on Global Health | Health and Medicine Division

The National Academies of Sciences, Engineering, and Medicine

500 Fifth Street, NW
Washington, DC 20001

Phone: [202.334.1349](tel:202.334.1349)

<http://www.nationalacademies.org/hmd/>

<image003.jpg>

From: [REDACTED] [mailto:[REDACTED]] **On Behalf Of** Jonna Mazet
Sent: Thursday, February 09, 2017 11:43 PM
To: Ogawa, V. Ayano; Billy Karesh
Cc: daszak@ecohealthalliance.org; eschase@ucdavis.edu; Mundaca-Shah, Ceci
Subject: Introduction of Dr. William Karesh

Dear Ayano,

As we've discussed, I'd like to introduce you to Dr. William Karesh, one of the founders and champions of One Health globally. I believe that he could be an incredible asset to the Academies in advancing the One Health agenda, should he be willing and available to assist our efforts.

Billy, Ayano is doing an amazing job developing an awareness and the agenda for One Health within the Academies. I hope that you will give her and any requests that might arise your utmost consideration.

With this email, I trust that you are well met.

Have a nice weekend,

Jonna

<One Health WG concept note_v4.pdf><OH WG Prelim Roster v3.pdf>

From: REDACTED on behalf of "Jonna Mazet" <jkmazet@ucdavis.edu>
Sent: 02/14/2017 11:06:18 AM (-08:00)
To: "Kevin J. Olival" <olival@ecohealthalliance.org>
Cc: "Peter Daszak" <daszak@ecohealthalliance.org>
Subject: Fwd: NPR: Why Killer Viruses Are On The Rise

Great job, Kevin, on the NPR story!
Good stuff,
J

Why Killer Viruses Are On The Rise
NPR

If you think there are more dangerous infectious diseases than ever, you're right. One big reason: pushing animals like this one out of their homes. [Read the full story](#)

From: "Elizabeth S Chase" <eschase@ucdavis.edu>
Sent: 03/01/2017 12:41:43 PM (-08:00)
To: "Kevin Olival, PhD" <olival@ecohealthalliance.org>; "Damien Joly" <djoly@metabiota.com>; "Christine Kreuder Johnson" <ckjohnson@ucdavis.edu>; "Jonna Mazet" <jkmazet@ucdavis.edu>
Cc: "Peter Daszak" <daszak@ecohealthalliance.org>; "Alison Andre" <andre@ecohealthalliance.org>; "Anna Willoughby" <willoughby@ecohealthalliance.org>
Subject: RE: P2-wide M&A Call, Thursday March 2nd

Greetings,

The call scheduled for March 2, 9am PST/12pm EST is still ok by Jonna's calendar.

Liz Chase

From: Kevin Olival, PhD [mailto:olival@ecohealthalliance.org]
Sent: Wednesday, March 01, 2017 12:28 PM
To: Damien Joly <djoly@metabiota.com>; Christine Kreuder Johnson <ckjohnson@UCDAVIS.EDU>; Jonna Mazet <jkmazet@ucdavis.edu>
Cc: Peter Daszak <daszak@ecohealthalliance.org>; Alison Andre <andre@ecohealthalliance.org>; Elizabeth S Chase <eschase@ucdavis.edu>; Anna Willoughby <willoughby@ecohealthalliance.org>
Subject: Re: P2-wide M&A Call, Thursday March 2nd

CKJ, Damien, Jonna,

Just wanted to confirm that the time tomorrow still works for you guys? If so, I'll circulate a brief agenda later today.

Cheers,
Kevin

Kevin J. Olival, PhD

Associate Vice President for Research

EcoHealth Alliance
460 West 34th Street – 17th floor
New York, NY 10001

1.212.380.4478 (direct)

REDACTED (mobile)

1.212.380.4465 (fax)

@nycbat (twitter)

www.ecohealthalliance.org

EcoHealth Alliance leads cutting-edge research into the critical connections between human and wildlife health and delicate ecosystems. With this science we develop solutions that promote conservation and prevent pandemics.

On Feb 24, 2017, at 10:30 AM, Anna Willoughby <willoughby@ecohealthalliance.org> wrote:

Dear all,

Next week we will have the P2-wide M&A call on Thursday March 2nd at 9 am PST/12 pm EST. The call line is REDACTED (password REDACTED) Please send any agenda items you would like to discuss.

Thank you,
Anna

--

Anna Willoughby

Research Assistant

EcoHealth Alliance
460 West 34th Street – 17th floor
New York, NY 10001

1.646.868.4713 (direct)

1.212.380.4465 (fax)

REDACTED (cell)

www.ecohealthalliance.org

EcoHealth Alliance leads cutting-edge research into the critical connections between human and wildlife health and delicate ecosystems. With this science we develop solutions that promote conservation and prevent pandemics.

From: "Christine Kreuder Johnson" <ckjohnson@ucdavis.edu>
Sent: 03/01/2017 1:24:01 PM (-08:00)
To: "Damien Joly" <djoly@metabiota.com>; "Kevin Olival, PhD" <olival@ecohealthalliance.org>; "Jonna Mazet" <jkmazet@UCDAVIS.EDU>
Cc: "Peter Daszak" <daszak@ecohealthalliance.org>; "Alison Andre" <andre@ecohealthalliance.org>; "Elizabeth S Chase" <eschase@UCDAVIS.EDU>; "Anna Willoughby" <willoughby@ecohealthalliance.org>
Subject: Re: P2-wide M&A Call, Thursday March 2nd

Yes confirmed for tomorrow.

Although, could we look for another time for regularly scheduled calls as I have a conflict for most days going forward?

Thank you

/ckj

From: Damien Joly <djoly@metabiota.com>
Date: Wednesday, March 1, 2017 at 12:46 PM
To: Kevin Olival <olival@ecohealthalliance.org>, Christine Kreuder Johnson <ckjohnson@UCDAVIS.EDU>, Jonna Mazet <jkmazet@ucdavis.edu>
Cc: Peter Daszak <daszak@ecohealthalliance.org>, Alison Andre <andre@ecohealthalliance.org>, Elizabeth S Chase <eschase@ucdavis.edu>, Anna Willoughby <willoughby@ecohealthalliance.org>
Subject: Re: P2-wide M&A Call, Thursday March 2nd

OK with me!

Damien Joly, PhD
Head, Data Products
Metabiota

*Assoc. Adjunct Professor · Dept. of Ecosystem and Public Health · Faculty of Vet. Med. · U. of Calgary
Information Management Coordinator · Emerging Pandemic Threats - PREDICT program*

REDACTED

djoly@metabiota.com · tel: **REDACTED** · skype: **REDACTED**

<http://www.metabiota.com>

CONFIDENTIALITY NOTICE: The information contained in this electronic mail (email) transmission (including attachments), is intended by Metabiota for the use of the named individual or entity to which it is addressed and may contain information that is privileged or otherwise confidential. It is not intended for transmission to, or receipt by, any individual or entity other than the named addressee except as otherwise expressly permitted in this email transmission. If you have received this email in error, please delete it without copying or forwarding it, and notify the sender of the error by email reply.

From: Kevin Olival, PhD <olival@ecohealthalliance.org>
Sent: March 1, 2017 12:27:45 PM
To: Damien Joly; Chris Johnson; Jonna Mazet
Cc: Peter Daszak; Alison Andre; Liz Chase; Anna Willoughby
Subject: Re: P2-wide M&A Call, Thursday March 2nd

CKJ, Damien, Jonna,

Just wanted to confirm that the time tomorrow still works for you guys? If so, I'll circulate a brief agenda later today.

Cheers,
Kevin

Kevin J. Olival, PhD

Associate Vice President for Research

EcoHealth Alliance
460 West 34th Street – 17th floor
New York, NY 10001

1.212.380.4478 (direct)

REDACTED

1.212.380.4465 (fax)

@nycbat (twitter)

www.ecohealthalliance.org

EcoHealth Alliance leads cutting-edge research into the critical connections between human and wildlife health and delicate ecosystems. With this science we develop solutions that promote conservation and prevent pandemics.

On Feb 24, 2017, at 10:30 AM, Anna Willoughby <willoughby@ecohealthalliance.org> wrote:

Dear all,

Next week we will have the P2-wide M&A call on Thursday March 2nd at 9 am PST/12 pm EST. The call line is REDACTED (password REDACTED). Please send any agenda items you would like to discuss.

Thank you,
Anna

--

Anna Willoughby

Research Assistant

EcoHealth Alliance
460 West 34th Street – 17th floor
New York, NY 10001

1.646.868.4713 (direct)

1.212.380.4465 (fax)

REDACTED

www.ecohealthalliance.org

EcoHealth Alliance leads cutting-edge research into the critical connections between human and wildlife health and delicate ecosystems. With this science we develop solutions that promote conservation and prevent pandemics.

From: "David J Wolking" <djwolking@ucdavis.edu>
Sent: 03/05/2017 10:55:13 AM (-08:00)
To: "Christine Kreuder Johnson" <ckjohnson@ucdavis.edu>; "Kirsten Gilardi" <kvgilardi@ucdavis.edu>; "Prof. Jonna Mazet" <jkmazet@ucdavis.edu>; "William Karesh" <karesh@ecohealthalliance.org>
Subject: Fwd: INVITATION TO A WORKSHOP ON PRIORITIZATION OF ZONOTIC DISEASES IN UGANDA

Pretty good outcome I'd say from this workshop on in Uganda. Hoping TZ follows a similar path in a few weeks...

David

----- Forwarded message -----

From: Kirsten Gilardi <kvgilardi@ucdavis.edu>
Date: Sun, Mar 5, 2017 at 01:33
Subject: Re: INVITATION TO A WORKSHOP ON PRIORITIZATION OF ZONOTIC DISEASES IN UGANDA
To: Benard Ssebide <[REDACTED]>
Cc: Mike Cranfield <[REDACTED]>, David John Wolking <djwolking@ucdavis.edu>, Jonna Mazet <jkmazet@ucdavis.edu>

Benard, thanks for the synopsis, and I think this bodes well for PREDICT.... great!

We'll look forward to reading your report.

Thanks,

-K

On Mar 5, 2017, at 11:18 AM, Benard Ssebide <[REDACTED]> wrote:

Dear Kirsten,

It was a well facilitated workshop though at the end some participants were disappointed that what came out as priorities was not necessarily what they expected but this obviously was due to the criteria used and the type of questions set to rank the different diseases. The top 7 priority zoonotic diseases agreed upon are:

1. Anthrax
2. Zoonotic Influenza viruses
3. Viral Hemorrhagic Fever (Ebola, Marburg, CCHF, and RVF)
4. Brucellosis
5. Trypanosomiasis
6. Plague
7. Rabies

A workshop report with notes will be provided.

Benard.

On Fri, Mar 3, 2017 at 9:52 PM, Kirsten Gilardi <kvgilardi@ucdavis.edu> wrote:
Benard, how did this 2-day workshop go? Eager to hear! -K

On Feb 17, 2017, at 7:52 PM, Benard Ssebide <[REDACTED]>
wrote:

Official invitation to the ZDs prioritization workshop.

----- Forwarded message -----

From: **Sheevon Kirabo** <[REDACTED]>
Date: Fri, Feb 17, 2017 at 3:58 PM
Subject: INVITATION TO A WORKSHOP ON PRIORITIZATION OF
ZOONOTIC DISEASES IN UGANDA
To: [REDACTED]
Cc: Winyi Kaboyo <[REDACTED]>

Dear Dr. Benard Sebide,

The Government of Uganda through the National One Health Platform (NOHP) of the Ministry of Agriculture, Animal Industry and Fisheries, Ministry of Health, Ministry of Water and Environment and Uganda Wildlife Authority with support from USAID Preparedness & Response Project and U.S. Centers for Diseases Control and Prevention (CDC), as a member of the One Health Technical Working Group (OHTWG) you are cordially invited to participate in the two day workshop exercise from 2nd to 3rd March 2017 at Hotel Africana, Kampala.

Attached is your invitation letter and draft Uganda Zoonoses list.

Program/Agenda for the two days will be sent shortly.

Kindly reply to confirm your attendance.

Thank you

Regards
Sheevon Kirabo
Admin
USAID Preparedness & Response Project
Emerging Pandemic Threat Program 2 (EPT 2)
Tel: [REDACTED]
Email [REDACTED]

The DAI email disclaimer can be found at <http://www.dai.com/disclaimer>.

<DR. BENARD SEBIDDE.pdf><DRAFT UGANDA ZOONOSES LIST.pdf>

--
Sent from Gmail Mobile

From: [REDACTED] on behalf of "Jonna Mazet" <jkmazet@ucdavis.edu>
Sent: 03/23/2017 9:51:31 AM (-07:00)
To: "William B. Karesh" <karesh@ecohealthalliance.org>
Cc: "David Wolking" <djwolking@ucdavis.edu>; "Chris Johnson" <ckjohnson@ucdavis.edu>; "Eddy Rubin" <erubin@metabiota.com>; "Jon Epstein" <epstein@ecohealthalliance.org>; "Leilani Francisco" <francisco@ecohealthalliance.org>; "Peter Daszak" <daszak@ecohealthalliance.org>; "Alison Andre" <andre@ecohealthalliance.org>; "Amanda Fuchs" <fuchs@ecohealthalliance.org>; "Ava Sullivan" <sullivan@ecohealthalliance.org>; "Evelyn Luciano" <luciano@ecohealthalliance.org>; "Emma Lane" <lane@ecohealthalliance.org>; "Molly Turner" <turner@ecohealthalliance.org>
Subject: Re: PMAC Abstract from Jordan: PREDICT EB Call - Wednesday March 23, 2017 @ 9:00AM PDT/12:00PM EDT

Looks great -- thanks!
Jonna

On Tue, Mar 21, 2017 at 3:01 PM, William B. Karesh <karesh@ecohealthalliance.org> wrote:
Hi everyone,

I'm not sure we need to discuss this on EB, but attached is a draft abstract for PMAC from the Jordan team. I'm not sure who the authors will be, our POC at the USAID/J Mission may be the lead author and presenter as she asked the team to put this together for PMAC.

BK

From: [REDACTED] on behalf of "Jonna Mazet" <jkmazet@ucdavis.edu>
Sent: 03/28/2017 8:23:53 PM (-07:00)
To: "Tracey Goldstein" <tgoldstein@ucdavis.edu>; "Christine Kreuder Johnson" <ckjohnson@ucdavis.edu>; "Brian Bird" <bhbird@ucdavis.edu>; "Jon Epstein" <epstein@ecohealthalliance.org>; "William B. Karesh, D.V.M" <karesh@ecohealthalliance.org>; "Karen Saylor" <ksaylor@metabiota.com>; "Frantz Jean Louis" <fjeanlouis@metabiota.com>; "Anthony, Simon J." <sja2127@cumc.columbia.edu>; "David J Wolking" <djwolking@ucdavis.edu>; "Aiah Gbakima" [REDACTED]
Subject: EHP Abstract for PMAC 2018
Attachments: Mazet PMAC EHP 2018 Abstract.docx

Dear all,

Very sorry for the extremely late notice. I have decided to submit an abstract to PMAC on our focused ebola work. I have pulled language from our already agreed-upon and edited regional briefing document.

If I don't hear from you by Thursday noon, I will assume that you would like to be included as an author. If you have comments or edits (or would prefer not to be included), please let me know as soon as you can. Also if you think someone else should be a co-author, please let me know.

Have a nice day,

Jonna

PS -- Abstract is limited to 300 words, and there is a possibility that I won't be able to submit, as the PMAC site isn't currently accepting abstracts (even though the deadline has not yet passed).

Proactively identifying hosts of ebolaviruses and promoting prevention of spillover in the three most-affected West African countries

Developing and operationalizing strategies to reduce zoonotic pathogen spillover, amplification, and spread are nowhere more relevant than in Sierra Leone, Guinea, and Liberia. The devastation left by the Ebola virus outbreak revealed the urgent need for increased animal and public health sector capacity strengthening. Put into historical context, this epidemic was more than 60 times larger than any previous Ebola outbreak, spread to 7 additional countries, and stretched emergency response efforts to the utmost limits of capacity. Due to the impact on these three countries, USAID's PREDICT Project developed a focused effort to better address the threat of Ebola by understanding the virus' animal origins, while strengthening capacity to build and reinforce emerging disease surveillance and detection systems. PREDICT is working to improve understanding of the wildlife reservoir, spillover hosts, and origins of Ebola virus; ascertain the potential of virus-spillover into other non-typical hosts, such as livestock or companion animals; gain a greater understanding of high-risk human behavioral activities; and improve disease surveillance and laboratory capacities through workforce development in line with Global Health Security Agenda priorities. The challenge in controlling future Ebola virus outbreaks in West Africa is dependent on how widely distributed the virus may be across the region and which animal populations are now involved as hosts. Without identifying reservoirs of infection, prevention programs to reduce transmission from animals to people will have limited impact, and it is likely that future spillover of ebolaviruses from animals into humans will continue to occur. As we have seen over the years in Central and Eastern Africa where filovirus outbreaks have repeatedly occurred, effective control of these rare spillover" events is possible and, when the right technical capacities are in place, can even be limited to a small number of human cases.

From: "William B. Karesh" <karesh@ecohealthalliance.org>
Sent: 04/04/2017 11:23:59 AM (-07:00)
To: "V. Ayano Ogawa" <VOgawa@nas.edu>; "JMHUGHE@emory.edu" <jmhughe@emory.edu>; "Gail Hansen" [REDACTED] "Casey Barton Behravesh" <dlx9@cdc.gov>; "Cardwell, Kitty" <kitty.cardwell@okstate.edu>; "Mundaca-Shah, Ceci" <CMundaca@nas.edu>; "Tran, Thu Anh" <TTran@nas.edu>; "Stephanie Calderone" <Stephanie.Calderone@asu.edu>; "Elizabeth S Chase" <eschase@ucdavis.edu>; "Alison Andre" <andre@ecohealthalliance.org>; "dmrizzo@ucdavis.edu" <dmrizzo@ucdavis.edu>; "George Poste" <george.poste@asu.edu>; "jeff.duchin@kingcounty.gov" <jeff.duchin@kingcounty.gov>; "mary_wilson@harvard.edu" <mary_wilson@harvard.edu>; [REDACTED] [REDACTED] "Jennifer.gardy@bccdc.ca" <Jennifer.gardy@bccdc.ca>; "Jonna Mazet" <jkmazet@ucdavis.edu>; "Peter Daszak" <daszak@ecohealthalliance.org>; "Amanda Andre" <amanda.andre@ecohealthalliance.org>; "William B. Karesh" <karesh@ecohealthalliance.org>
Subject: G20 Statement on Improving Global Health
Attachments: G 20 Statement on Improving Gliobal Health.pdf, ATT00001.htm
Importance: High

Hi Everyone,

You may already have this but the Academies of Science from the G20 released the attached statement on global health and mention One Health in the final recommendations.

Billy

Endorsing Academies

Prof. Dr. Roberto J.J. Williams
President Academia Nacional de Ciencias Exactas, Físicas y Naturales Argentina

Prof. Dr. Andrew Holmes
President Australian Academy of Science

Prof. Dr. Luiz Davidovich
President Brazilian Academy of Sciences

Prof. Dr. Maryse Lassonde
President Royal Society of Canada

Prof. Dr. Chunli Bai
President Chinese Academy of Sciences

Prof. Dr. Sébastien Candel
President Académie des Sciences France

Prof. Dr. Jörg Hacker
President Nationale Akademie der Wissenschaften Leopoldina Germany

Prof. Dr. Ajay K. Sood
President Indian National Science Academy

Prof. Dr. Sangkot Marzuki
President Indonesian Academy of Sciences

Prof. Dr. Alberto Quadrio-Curzio
President Accademia Nazionale dei Lincei, Italy

Prof. Dr. Takashi Onishi
President Science Council of Japan

Prof. Dr. Jaime Urrutia Fucugauchi
President Academia Mexicana de Ciencias

Prof. Dr. Vladimir E. Fortov
President Russian Academy of Sciences

HRH Prince Dr. Turki bin Saud bin Mohammed Al-Saud
President King Abdulaziz City for Science and Technology, Saudi Arabia

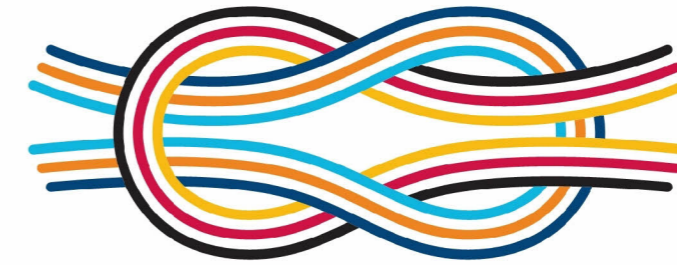
Prof. Dr. Jonathan Jansen
President Academy of Science of South Africa

Prof. Dr. Myung Chul Lee
President Korean Academy of Science and Technology South Korea

Prof. Dr. Ahmet Cevat Acar
President Turkish Academy of Sciences

Prof. Dr. Venkatraman Ramakrishnan
President Royal Society United Kingdom

Prof. Dr. Marcia McNutt
President National Academy of Sciences, USA



G20 GERMANY 2017
SCIENCE 20 DIALOGUE

IMPROVING GLOBAL HEALTH

STRATEGIES AND TOOLS TO
COMBAT COMMUNICABLE AND
NON-COMMUNICABLE DISEASES

Executive Summary

Communicable (infectious) and non-communicable (non-infectious) diseases seriously endanger individual wellbeing and global health, and threaten the global economy. Strong short- and long-term evidence-based strategies are needed. The G20 Academies of Sciences call for (1) the strengthening of healthcare and public health systems, (2) applying existing and emerging knowledge, (3) addressing the broader social and environmental determinants of health, (4) reducing serious risk factors for disease through education and promotion of healthy life styles, (5) ensuring access to health resources globally, and (6) enhancing and extending robust strategies for surveillance and information-sharing. Furthering research is a prerequisite for providing knowledge and new tools to meet these challenges.

Communicable diseases (CDs) and non-communicable diseases (NCDs) continue to burden all nations and require urgent action. Around the globe, their impact is devastating, leading not only to individual and family suffering, but also to tremendous healthcare costs, loss of workforce, and declines in productivity and prosperity. Together these present a serious and continuously growing threat to healthcare and public health systems, economic growth, social cohesion and equity, and even to international security.

The recent Ebola and Zika epidemics have shown that a disease in one country can have serious effects on other countries around the globe. Preparedness for future outbreaks of emerging and re-emerging diseases urgently needs improvement. In addition, the interrelationship between CDs and NCDs can no longer be ignored: at least 15 percent of all new cancer cases worldwide (17.5 million in 2015) are caused by infectious agents.^{1,2} In turn, NCDs may also increase an individual's risk of certain infectious diseases: for example, 15 percent of the tuberculosis burden may be linked to type II diabetes.³

Scientific research continues to improve the understanding of the causes and contexts of different diseases and how they are interrelated. This knowledge leads to more effective measures for prevention, medical interventions and disease control. Application of existing knowledge has been inadequate, however.

In order to reduce the burden of disease, the following areas require particular attention: public health and living conditions, risk factors and healthy lifestyles, interactions between CDs and NCDs.

Public health measures such as vaccination, sanitation, water treatment and supply, and waste management have improved the lives of billions of people, but their implementation is still not adequate. In addition, there are many challenges that interfere with good **living conditions** and good health, and these must be addressed: e.g. poverty and inequality, population growth, climate change, armed conflicts, population displacement, natural and man-made

disasters, megacities, violence, traffic and other injuries, environmental degradation and pollution, as well as loss of biodiversity.

Scientific research has shown the overarching and growing importance of **risk factors** associated with major NCDs (e.g. cancer, cardiovascular diseases, mental illnesses). Treatable or preventable risk factors include overweight, malnutrition, frailty, abuse of substances such as tobacco, alcohol and drugs, lack of physical activity, dysfunctional microbiota, and infectious agents. One single risk factor can be linked to various diseases: for example, smoking is a major risk factor associated with cancer, cardiovascular diseases, asthma and chronic obstructive pulmonary disease (COPD).

Measures to reduce CDs will also reduce NCD-based mortality: highly effective strategies already exist for the diagnosis, therapy and prevention of most infections that are known to increase the risk of cancer. These strategies include vaccination programmes as well as treatments using antimicrobials against infectious agents such as *Helicobacter pylori*, human papillomavirus, hepatitis B virus or hepatitis C virus.*

References

1. Remais, J. V., Zeng, G., Li, G., Tian, L. & Engelgau, M. M. Convergence of non-communicable and infectious diseases in low- and middle-income countries. *International Journal of Epidemiology*. 42, 221–227 (2013).
2. Fitzmaurice, C. et al. Global, Regional, and National Cancer Incidence, Mortality, Years of Life Lost, Years Lived With Disability, and Disability-Adjusted Life-years for 32 Cancer Groups, 1990 to 2015: A Systematic Analysis for the Global Burden of Disease Study. *JAMA Oncology*. (2016). doi:10.1001/jamaoncol.2016.5688
3. WHO: Diabetes & TB – fact sheet. (2016). http://www.who.int/tb/publications/diabetes_tb.pdf [accessed 30 January 2017].

* For some cancer-associated viruses (e.g. Epstein-Barr virus) treatment or preventive vaccine is not yet available.

In view of these challenges, the **Science20 network recommends actions in the following areas:**

1. Provide reliable and resilient health systems

- Ensure strong systems for health that include
 - robust public health services encompassing disease surveillance, epidemiology, laboratory capacity, prevention, education and risk reduction programmes.
 - accessible, appropriate and comprehensive primary and other medical care, including quality vaccination.
- Apply existing knowledge to prevent
 - infection-associated cancer (e.g. cervical carcinoma, hepatoma and stomach cancer) by preventive vaccination (human papillomavirus and hepatitis B virus) or other treatment (hepatitis C virus and *Helicobacter pylori*).
 - diseases related to alcohol or tobacco by regulation and education.
 - diseases such as type II diabetes or cardiovascular diseases by treating hypertension and reducing obesity.

2. Address social, environmental and economic determinants of health

- Ensure clean air and water (including wastewater treatment and waste management), sanitation, adequate and safe housing, and liveable healthy cities.
- Beginning in early childhood, promote health literacy and knowledge about risk factors and adequate hygiene.
- Facilitate programmes to empower and educate multipliers such as family heads, peers, health workers, employers and teachers.
- Eliminate malnutrition and improve dietary education, e.g. in schools, by raising awareness about nutrition and food quality, as well as support access to appropriate diets.

3. Strategic instruments

- Implementing global access to quality vaccines, diagnostics, medical devices and therapeutic drugs at affordable prices. This would also help to reduce the misuse of antibiotics and, consequently, antimicrobial resistance.
- Educating on the evidence-based safety and the benefits of vaccinations to increase confidence in vaccines.
- Developing of combined strategies for global surveillance to detect, track and control CDs and NCDs. This includes strengthening and extending disease reporting, laboratory capacity, syndromic surveillance, and innovative data mining strategies, as well as information sharing. Better coordination of human, animal and environmental health systems (“One Health concept”) is important, especially with respect to early detection of and response to threats.
- Support of robust, active surveillance networks and facilitating of prompt reporting about outbreaks:
 - Provide incentives for immediate response and access to financial support.
 - Ensure that evidence-based scientific data and sound public health policies define actions taken by countries directly and indirectly affected by outbreaks.
- Support basic and applied research, within and among countries, because research is vital for providing knowledge and new tools for current and future challenges.

William B. Karesh, D.V.M

Executive Vice President for Health and Policy

EcoHealth Alliance
460 West 34th Street - 17th Floor
New York, NY 10001 USA

+1.212.380.4463 (direct)

+1.212.380.4465 (fax)

www.ecohealthalliance.org

President, OIE Working Group on Wildlife

Co-chair, IUCN Species Survival Commission - Wildlife Health Specialist Group

EPT Partners Liaison, USAID Emerging Pandemic Threats - PREDICT-2 Program

EcoHealth Alliance leads cutting-edge research into the critical connections between human and wildlife health and delicate ecosystems. With this science we develop solutions that promote conservation and prevent pandemics.

On Mar 22, 2017, at 10:32 AM, Ogawa, V. Ayano <VOgawa@nas.edu> wrote:

Dear One Health Work Group,

In preparation for the upcoming work group call on next Wednesday, March 29 at 1pm (ET), please review the following three documents (all attached).

1. **Meeting agenda:** Please take a look at the topics we will cover during the call.
2. **Preliminary background references document:** This document presents background information on the topics discussed during the first call.
3. **Work group info packet:** This document includes the concept note, work group roster and bios, and a list of relevant external stakeholders who the work group can reach out to on an ad hoc basis depending on the project.

To call in to the meeting, please follow the instructions below:

U.S./Canada toll free number: **REDACTED**

Participant passcode: **REDACTED**

[*Eduardo, please call the toll free number from Peru **REDACTED** and use the same passcode as above]

Please let me know if you have any questions. We look forward to speaking with you on the 29th!

Best,
Ayano

V. Ayano Ogawa, S.M.

Associate Program Officer, Forum on Microbial Threats
Board on Global Health | Health and Medicine Division

The National Academies of Sciences, Engineering, and Medicine
500 Fifth Street, NW
Washington, DC 20001
Phone: 202.334.1349
<http://www.nationalacademies.org/hmd/>

<image003.jpg>

<1. OH WG Call 2 Agenda_March 29 2017 Final.pdf><2. One Health Prelim Background
Refs.pdf><3. One Health Work Group Info Packet.pdf>

From: "Ogawa, V. Ayano" <VOgawa@nas.edu>
Sent: 04/04/2017 12:59:58 PM (-07:00)
To: "William B. Karesh" <karesh@ecohealthalliance.org>; "JMHUGHE@emory.edu" <jmhughe@emory.edu>; "Gail Hansen" [REDACTED]; "Casey Barton Behravesh" <dlx9@cdc.gov>; "Cardwell, Kitty" <kitty.cardwell@okstate.edu>; "Mundaca-Shah, Ceci" <CMundaca@nas.edu>; "Tran, Thu Anh" <TTran@nas.edu>; "Stephanie Calderone" <Stephanie.Calderone@asu.edu>; "Elizabeth S Chase" <eschase@ucdavis.edu>; "Alison Andre" <andre@ecohealthalliance.org>; "dmrizzo@ucdavis.edu" <dmrizzo@ucdavis.edu>; "George Poste" <george.poste@asu.edu>; "jeff.duchin@kingcounty.gov" <jeff.duchin@kingcounty.gov>; "mary_wilson@harvard.edu" <mary_wilson@harvard.edu>; [REDACTED]; "Jennifer.gardy@bccdc.ca" <Jennifer.gardy@bccdc.ca>; "Jonna Mazet" <jkmazet@ucdavis.edu>; "Peter Daszak" <daszak@ecohealthalliance.org>; "Amanda Andre" <amanda.andre@ecohealthalliance.org>
Subject: RE: G20 Statement on Improving Global Health

This is great, thanks for circulating the statement, Billy!

From: William B. Karesh [mailto:karesh@ecohealthalliance.org]
Sent: Tuesday, April 04, 2017 2:24 PM
To: Ogawa, V. Ayano; JMHUGHE@emory.edu; Gail Hansen; Casey Barton Behravesh; Cardwell, Kitty; Mundaca-Shah, Ceci; Tran, Thu Anh; Stephanie Calderone; Elizabeth S Chase; Alison Andre; dmrizzo@ucdavis.edu; George Poste; jeff.duchin@kingcounty.gov; mary_wilson@harvard.edu; [REDACTED]; Jennifer.gardy@bccdc.ca; Jonna Mazet; Peter Daszak; Amanda Andre; William B. Karesh
Subject: G20 Statement on Improving Global Health
Importance: High

Hi Everyone,

You may already have this but the Academies of Science from the G20 released the attached statement on global health and mention One Health in the final recommendations.

Billy

From: "Jonna Mazet" [REDACTED]
Sent: 04/13/2017 7:57:02 AM (-07:00)
To: wil2001@columbia.edu
Subject: Invitation to participate in virus risk ranking assessment
Attachments: RiskRankingParticipantWorksheet.xlsx

Dear Prof. Ian Lipkin,

We write today to solicit your expert opinion and request your participation in a short multidisciplinary process to assess spillover risk from newly detected viruses. As you may have heard, the USAID-supported PREDICT project (www.predict.global) has identified short sequences from nearly 1000 unique viral taxonomic units (by consensus PCR followed by sanger sequencing) from viral families known to have members that cause zoonotic diseases. These viruses have been detected in samples collected from animals in more than 20 countries in tropical regions considered to be hotspots for emerging zoonotic disease risk.

As a globally renowned scientist in the field of infectious diseases, we would like to incorporate your expert opinion into an evaluation of the relative impact that select host, environmental, and viral factors contribute to the risk of a new human viral spillover or epidemic event that might originate from novel or known viruses of animal origin. At this point, we are primarily interested in how much each parameter contributes to the overall risk of such an event occurring. The levels of severity within each of the parameters will be evaluated through a different process. We anticipate the time allocation to this exercise will be **10 to 20 minutes**.

The expert opinion you provide will be combined with that of other top experts in the field and is intended to contribute to a risk ranking module that will be distributed to and evaluated by the scientific community both through the peer-reviewed publication process and via an interactive web application. All contributions to this exercise are voluntary, and identifying information will not be published or be otherwise made available unless you let us know that it is acceptable/desirable to acknowledge you. We are only soliciting opinions from a select group of professionals with relevant expertise; therefore, we ask that the attached worksheet remain confidential and not to be shared with others.

Instructions:

1. Please open and save the worksheet with your initials in the title (i.e. RiskRankingParticipantWorksheet_ZG.xlsx)
2. Complete the 'Demographic Information' at the top of the spreadsheet
3. Answer all categories for 'CONTRIBUTION TO THE RISK OF A NEW HUMAN VIRAL SPILLOVER OR EPIDEMIC EVENT OF ANIMAL-ORIGIN' and 'LEVEL OF EXPERTISE' using provided dropdown options
4. Please return your completed worksheet to [REDACTED] by **April 28th 2017**.

We sincerely hope that we can count on your important involvement in the process and that you will accept our gratitude for your time and contribution to scientific collaboration.

Sincerely,

Prof. Jonna Mazet

Global Director, PREDICT USAID

[REDACTED]

Project Scientist, PREDICT USAID

Professor of Disease Ecology and
Epidemiology
One Health Institute
School of Veterinary Medicine
University of California Davis
1089 Veterinary Medicine Drive
Davis, CA 95616, USA
jkmazet@ucdavis.edu

Postdoctoral Researcher in Disease Ecology
One Health Institute
School of Veterinary Medicine
University of California Davis
1089 Veterinary Medicine Drive
Davis, CA 95616, USA

REDACTED

From: "Jonna Mazet" [REDACTED]
Sent: 05/03/2017 2:26:48 PM (-07:00)
To: daszak@ecohealthalliance.org
Cc: [REDACTED]
Subject: Reminder: Invitation to participate in virus risk ranking assessment
Attachments: RiskRankingParticipantWorksheet.xlsx

Dear Dr. Peter Daszak,

We hope that you previously received our email soliciting your expert opinion and requesting your participation in a short multidisciplinary process to assess spillover risk from newly detected viruses. As an expert in the field of infectious diseases, your contribution to this exercise would be highly valued and appreciated. If possible, please take a moment of your time to review the information below, and complete the attached worksheet. We anticipate the time allocation to this exercise will be **10 to 20 minutes**.

As you may have heard, the USAID-supported PREDICT project (www.predict.global) has identified short sequences from nearly 1000 unique viral taxonomic units (by consensus PCR followed by sanger sequencing) from viral families known to have members that cause zoonotic diseases. These viruses have been detected in samples collected from animals in more than 20 countries in tropical regions considered to be hotspots for emerging zoonotic disease risk.

As a globally renowned scientist in the field of infectious diseases, we would like to incorporate your expert opinion into an evaluation of the relative impact that select host, environmental, and viral factors contribute to the risk of a new human viral spillover or epidemic event that might originate from novel or known viruses of animal origin. At this point, we are primarily interested in how much each parameter contributes to the overall risk of such an event occurring. The levels of severity within each of the parameters will be evaluated through a different process.

The expert opinion you provide will be combined with that of other top experts in the field and is intended to contribute to a risk ranking module that will be distributed to and evaluated by the scientific community both through the peer-reviewed publication process and via an interactive web application. All contributions to this exercise are voluntary, and identifying information will not be published or be otherwise made available unless you let us know that it is acceptable/desirable to acknowledge you. We are only soliciting opinions from a select group of professionals with relevant expertise; therefore, we ask that the attached worksheet remain confidential and not to be shared with others.

Instructions:

1. Please open and save the worksheet with your initials in the title (i.e. RiskRankingParticipantWorksheet_ZG.xlsx)
2. Complete the 'Demographic Information' at the top of the spreadsheet
3. Answer all categories for 'CONTRIBUTION TO THE RISK OF A NEW HUMAN VIRAL SPILLOVER OR EPIDEMIC EVENT OF ANIMAL-ORIGIN' and 'LEVEL OF EXPERTISE' using provided dropdown options
4. Please return your completed worksheet ASAP to [REDACTED] original deadline **April 28th 2017** extended for your participation to May 12 or by arrangement if this date is impossible and you would still like to contribute.

We sincerely hope that we can count on your important involvement in the process and that you will accept our gratitude for your time and contribution to scientific collaboration.

Sincerely,

Prof. Jonna Mazet

Global Director, PREDICT USAID
Professor of Disease Ecology and
Epidemiology
One Health Institute
School of Veterinary Medicine
University of California Davis
1089 Veterinary Medicine Drive
Davis, CA 95616, USA
jkmazet@ucdavis.edu

REDACTED

Project Scientist, PREDICT USAID
Postdoctoral Researcher in Disease Ecology
One Health Institute
School of Veterinary Medicine
University of California Davis
1089 Veterinary Medicine Drive
Davis, CA 95616, USA

REDACTED

From: "William B. Karesh" <karesh@ecohealthalliance.org>
Sent: 05/23/2017 10:11:21 AM (-07:00)
To: "Jonna Mazet" <jkmazet@ucdavis.edu>
Subject: Fwd: Partner update report for Y3Q2

I wonder if Andrew meant to reply to all?

Sent from my iPhone

Begin forwarded message:

From: Andrew Clements <aclements@usaid.gov>
Date: May 23, 2017 at 6:54:44 PM GMT+2
To: Ehab Abu-Basha <[REDACTED]>
Cc: Alisa Pereira <apereira@usaid.gov>, Maysa Al-Khateeb <malkhateeb@usaid.gov>, Nicolas Kaufman <nkaufman@usaid.gov>, "csawalha@usaid.gov" <csawalha@usaid.gov>, Mohmmad Abdallat <[REDACTED]>, Sultan Mabdalla <[REDACTED]>, BELAL SHAQARIN <[REDACTED]>, "Dr.rachel Dodeen " <[REDACTED]>, "Hijazeen, Zaidoun (FAOJO)" <[REDACTED]>, "predict@ucdavis.edu" <predict@ucdavis.edu>, Ava Sullivan <sullivan@ecohealthalliance.org>, Patrick Dawson <dawson@ecohealthalliance.org>, "William B. Karesh" <karesh@ecohealthalliance.org>, Hani Talafha <[REDACTED]>, "Bilal Al Omari" <[REDACTED]>, Mustafa Ababneh <[REDACTED]>, "Moh"D Borhan Al-Zghoul" <[REDACTED]>, Zuhair Bani Ismail <[REDACTED]>
Subject: Re: Partner update report for Y3Q2

Thanks. I assume that the results from the testing of the bat samples have not been made public. (You mentioned testing but no results.)

*Andrew P. Clements, Ph.D.
Senior Scientific Adviser
Emerging Threats Division/Office of Infectious Diseases/Bureau for Global Health
U.S. Agency for International Development
Mobile phone: 1-571-345-4253
Email: aclements@usaid.gov*

On May 23, 2017, at 6:15 PM, Ehab Abu-Basha <[REDACTED]> wrote:

Dear Respected Partners,

Please find enclosed the PREDICT-Jordan's mission/partner update for Y3Q2.

Best regards to all.

Yours,
Ehab

Ehab Abu-Basha, DVM, MSc., Ph.D
Professor of Pharmacology and Toxicology
Faculty of Veterinary Medicine
Jordan University of Science and Technology

REDACTED

<PREDICT-2 Jordan Partner Update Y3Q2 (1).pdf>

From: "Peter Daszak" <daszak@ecohealthalliance.org>
Sent: 05/23/2017 2:30:28 PM (-07:00)
To: "Jonna Mazet" <jkmazet@ucdavis.edu>
Cc: "Brooke Genovese (bgenovese@ucdavis.edu)" <bgenovese@ucdavis.edu>; "Alison Andre" <andre@ecohealthalliance.org>
Subject: Re: Quick call later this afternoon if possible?

Great - train delayed but will call in about 10 mins

Cheers,

Peter

Peter Daszak
(Sent from my iPhone)

President
EcoHealth Alliance

460 West 34th Street, New York, NY10001, USA

www.EcoHealthAlliance.org

On May 23, 2017, at 4:53 PM, Jonna Mazet <jkmazet@ucdavis.edu> wrote:

Yep -- have to catch me before 3, as I have another meeting then,
J

On Tue, May 23, 2017 at 1:17 PM, Peter Daszak <daszak@ecohealthalliance.org> wrote:

Hi Jonna,

I'm on the train up from DC and want to check a couple of things re. transition from MB countries. Could I give you a call sometime after the train gets in (2.30pm CA time)? Should be just 10-15 mins, and nothing controversial...!

Cheers,

Peter

Peter Daszak

President

EcoHealth Alliance

460 West 34th Street – 17th Floor

New York, NY 10001

[+1.212.380.4473](tel:+12123804473) (direct)

[+1.212.380.4465](tel:+12123804465) (fax)

www.ecohealthalliance.org

EcoHealth Alliance leads cutting-edge research into the critical connections between human and wildlife health and delicate ecosystems. With this science we develop solutions that promote conservation and prevent pandemics.

From: "Lipkin, Ian W." <wil2001@cumc.columbia.edu>
Sent: 06/22/2017 12:46:20 AM (-07:00)
To: "Jonna Mazet" <jkmazet@ucdavis.edu>
Cc: "Peter Daszak" <daszak@ecohealthalliance.org>; "Briese, Thomas" <tb2047@cumc.columbia.edu>; "Anthony, Simon J." <sja2127@cumc.columbia.edu>
Subject: Re: NSTDA project

Thanks Jonna.

Ian

On Jun 21, 2017, at 7:46 PM, Jonna Mazet <jkmazet@ucdavis.edu> wrote:

Thanks very much, Ian (Hi to Thomas, as well) -- I know Dennis is excited to have a couple of pilot sites, and Thailand is at the top of the list. We will talk to Dennis tomorrow. Let us know what kind of resources would be required for a pilot site of two for VirCapSeq.

Hope all is great here,
Jonna

On Sat, Jun 17, 2017 at 10:34 AM, Lipkin, Ian W. <wil2001@cumc.columbia.edu> wrote:

Jonna and Peter-

In the event USAID wants to push VirCapSeq to Thailand we will be happy to help, contingent upon resources. The point person for VirCapSeq is Thomas.

Ian

W. Ian Lipkin, MD
John Snow Professor of Epidemiology and Director
Center for Infection and Immunity
Mailman School of Public Health

Professor of Pathology and Neurology
College of Physicians & Surgeons
Columbia University
722 West 168th Street, 17th Floor
New York, NY 10032
Voice: [\(212\) 342-9033](tel:(212)342-9033)
Fax: [\(212\) 342-9044](tel:(212)342-9044)
Email: wil2001@cumc.columbia.edu

Ellie Kahn
Administrative Coordinator
Voice: [\(212\) 342-9032](tel:(212)342-9032)
Email: ejk2162@columbia.edu

www.cii.columbia.edu

Follow CII on Twitter: CII_Columbia | Facebook: CII.Columbia

Begin forwarded message:

From: Prasert Auewarakul [REDACTED]
Subject: NSTDA project
Date: June 17, 2017 at 4:42:23 AM EDT
To: 'Jonna Mazet' <jkmazet@ucdavis.edu>
Cc: "'Ian W. Lipkin'" <wil2001@cumc.columbia.edu>, Arunee Thitithanyanont <arunee.thi@mahidol.ac.th>, 'Thanat Chookajorn' [REDACTED] 'Monta NSTDA' [REDACTED]

Dear Jonna,

We will initiate a project in Thailand funded by the National Science and Technology Development Agency (NSTDA) to do high-throughput sequencing for pathogen discovery. The scope is not exactly GVP as there will be samples from both wildlife and livestock/humans. Nevertheless, I think this can be a good starting point for capacity building to serve future GVP. The project will be led Arunee and Thanat, whose emails are cc.. Ian has kindly agreed to help with technology transfer. I think it'll be best that they do sample collection and field work according to GVP/PREDICT guideline and SOP. Would you mind helping them? Thanat will communicate with you. I thank you in advance for your kind help.

Best regards,
Prasert

From: "Aleksei Chmura" <chmura@ecohealthalliance.org>
Sent: 07/29/2017 10:12:17 PM (-07:00)
To: "Dr. Jonna Mazet" <jkmazet@ucdavis.edu>
Cc: "Dr. Peter Daszak" <daszak@ecohealthalliance.org>; "Evelyn Luciano" <luciano@ecohealthalliance.org>; "Watson Brooke" <watson@ecohealthalliance.org>; "李泓莹" <li@ecohealthalliance.org>; "Molly Turner" <turner@ecohealthalliance.org>
Subject: GVP China Budget
Attachments: GVP China Budget.xlsx,

Dear Jonna,

Please see the attached excel file with the GVP China budget estimate. The total comes to \$589,793

We would only want to proceed with this, if it is clearly new money and not part of the currently budgeted GVP funding.

Many thanks!

-Aleksei

Aleksei Chmura
Senior Coordinator of Operations

EcoHealth Alliance
460 West 34th Street – 17th floor
New York, NY 10001

+1.212.380.4473 (direct)
REDACTED (mobile)
Aleksei MacDurian (Skype)

www.ecohealthalliance.org

Visit our blog: www.ecohealthalliance.org/blog

EcoHealth Alliance leads cutting-edge research into the critical connections between human and wildlife health and delicate ecosystems. With this science we develop solutions that promote conservation and prevent pandemics.

From: [REDACTED] on behalf of "Jonna Mazet" <jkmazet@ucdavis.edu>
Sent: 09/08/2017 2:43:12 PM (-07:00)
To: "William B. Karesh" <karesh@ecohealthalliance.org>
Cc: "Brian Bird" <bhbird@ucdavis.edu>; "David Wolking" <djwolking@ucdavis.edu>; "Tracey Goldstein" <tgoldstein@ucdavis.edu>; "Corina Grigorescu Monagin" <cgmonagin@ucdavis.edu>; "PREDICT-outbreak" <predict-outbreak@ucdavis.edu>
Subject: Re: [predict-outbreak] US DoS to possibly limit VISAs from Cambodia, Guinea, Sierra Leone

That's for sure - yikes!
J

On Fri, Sep 8, 2017 at 10:19 AM, William B. Karesh <karesh@ecohealthalliance.org> wrote:
A good reason for the annual meeting to be held in Brussels.

BK

William B. Karesh, D.V.M
Executive Vice President for Health and Policy

EcoHealth Alliance
[460 West 34th Street - 17th Floor](#)
[New York, NY 10001 USA](#)

[+1.212.380.4463](tel:+12123804463) (direct)
[+1.212.380.4465](tel:+12123804465) (fax)
www.ecohealthalliance.org

President, OIE Working Group on Wildlife

Co-chair, IUCN Species Survival Commission - Wildlife Health Specialist Group

EPT Partners Liaison, USAID Emerging Pandemic Threats - PREDICT-2 Program

EcoHealth Alliance leads cutting-edge research into the critical connections between human and wildlife health and delicate ecosystems. With this science we develop solutions that promote conservation and prevent pandemics.

On Sep 8, 2017, at 12:52 PM, Brian Bird <bhbird@ucdavis.edu> wrote:

Not sure if/how this might impact things, but nonetheless the SL team informed me of these issues this morning.

<https://www.dailysabah.com/americas/2017/08/24/us-to-limit-visas-from-cambodia-eritrea-guinea-and-sierra-leone-for-refusing-to-take-deportees>

-b

From: "William B. Karesh" <karesh@ecohealthalliance.org>
Sent: 11/10/2017 7:20:35 AM (-08:00)
To: "Jonna Mazet" <jkmazet@ucdavis.edu>
Cc: "Chris Johnson" <ckjohnson@ucdavis.edu>; "Tracey Goldstein" <tgoldstein@ucdavis.edu>; "Woutrina Smith" <wasmith@ucdavis.edu>
Subject: Re: PREDICT 2 samples to be shared

Jonna,

I think Andrew needs to be looped in on that last paragraph about FAO not funding the 5 family level testing.

Though, if the samples are not usable anyway, I guess their change of funding plans is moot.

BK

On Nov 10, 2017, at 9:36 AM, Woutrina Smith <wasmith@ucdavis.edu> wrote:

Just FYI on Ethiopia FAO correspondence about camel samples, for the files. Wout

—

Begin forwarded message:

From: "Newman, Scott (FAOET)" [REDACTED]
Date: November 9, 2017 at 10:40:32 PM PST
To: Woutrina A Smith <wasmith@ucdavis.edu>
Cc: "Nigatu (PREDICT)" [REDACTED], "Yung-Ting Bonnenfant" (<ybonnenfant@usaid.gov>), "Jack Mortenson" (<jmortenson@usaid.gov>), "Walelign, Elias (FAOET)" [REDACTED], "Awoke, Wondwosen (FAOET)" [REDACTED], "Tewolde, Nega (FAOET)" [REDACTED], "Makonnen, Yilma (FAOKE)" [REDACTED], "VonDobschuetz, Sophie (AGAH)" [REDACTED], "Morzaria, Subhash (TCE)" [REDACTED]
Subject: RE: PREDICT 2 samples to be shared

Hi Woutrina-

I hope you are doing well. I realize that we have been working towards sharing samples collected from camels in a similar geographic sampling site as where PREDICT was conducting wildlife surveillance and that is what we agreed to do at national level here in Ethiopia.

Further to this, we have found out the exact details of the sample handling which is outlined below-

1. Field sample collection;
 - Dacron swab sampling materials in cryovials (one in Trizole and one in VTM from same animal);
 - Nasal swab samples collected in 300µl Trizole;

- 165 camel nasal swabs collected from Awash area in Afar;
 - Stored in liquid nitrogen for transport;
 - Transported to NAHDIC sample reception unit => sample registration => transferred to the Molecular diagnostic lab;
2. At the NAHDIC Laboratory;
- Stored at -80 dc freezer at the NAHDIC molecular diagnostic lab;
 - Thawed for MERS CoV testing; **NB: all the 300µl was used up;**
 - Aliquoted with additional 500µl of Trizole on the remaining material;
 - Stored at -80dc for further analysis;

We are still willing to share these samples if they are ok, or explore sharing of additional samples. However, based on the outcomes of the recent MERS CoV tripartite meeting held in Geneva, we are advised by FAO Headquarters that we can no longer financially support the analyses of any samples for the 5 viral families. While I realize we had agreed to doing this over the past 3-4 months, I have been instructed that we cannot use any of our remaining resources to support this and therefore, I hope you can accept my sincerest apology and recognize that our collaborative intentions were sincere but the management has made a decision we have to abide by.

If PREDICT is willing to pay for analyses of the samples, then we should proceed with the MTA and sample transfer.

Once again, I am really sorry.

Best wishes,
Scott

Scott Newman DVM, PHD
ECTAD Team Leader - Ethiopia
 Emergency Center for Transboundary Animal Diseases (ECTAD)
 Food and Agriculture Organization of the United Nations (FAO)

REDACTED

Email: **REDACTED**
 Skype : **REDACTED**
 Office: **REDACTED**
 <image001.png>

From: Woutrina A Smith [<mailto:wasmith@ucdavis.edu>]
Sent: Wednesday, October 25, 2017 2:51 AM
To: Newman, Scott (FAOET) **REDACTED**
Cc: Nigatu (PREDICT) **REDACTED**; Mesfin Sahle (NAHDIC) **REDACTED**; Solomon (NADHIC) **REDACTED**; Abera (NAHDIC) **REDACTED**; Yung-Ting Bonnenfant (ybonnenfant@usaid.gov) <ybonnenfant@usaid.gov>; Jack Mortenson (jmortenson@usaid.gov) <jmortenson@usaid.gov>; Walelign, Elias (FAOET) <**REDACTED**>; Awoke, Wondwosen (FAOET) **REDACTED**

Tewelde, Nega (FAOET) <[REDACTED]>

Subject: Re: PREDICT 2 samples to be shared

Hi Scott and FAO team,

Thanks for your email. In order to evaluate whether it is worth testing this set of camel nasal swabs using the PREDICT viral family protocols, we need to know how they have been handled already. Perhaps this is already being discussed between ALIPB and NAHDIC. My previous understanding is that the swabs were collected according to the PREDICT sampling protocols and that the trizol and vtm swab samples were frozen immediately to maintain cold chain that is especially important for RNA viruses that can easily degrade. So I think a key question is what happened to the swabs once they came to the labs, as I think you are saying that these swabs were already processed for MERS COV testing. If the swabs were already processed for nucleic acid extraction then there is likely not enough new material still available on the original swab for our separate PREDICT extraction and testing. If cDNA was prepared we could explore testing that with our viral family protocols though. Or the best bet might be to provide Dr. Nigatu's ALIPB group the duplicate set of VTM swabs that have not been processed at all. Let us know any further updates so we can decide whether this sample set or another would be top priority for testing, and also let us know if you are moving forward with the paperwork to cover the lab testing costs for AAU as we discussed in person. It would be great to align livestock testing with what we are doing for wildlife and people at these animal value chain interfaces.

Best wishes, Woutrina

On Oct 24, 2017, at 5:29 AM, Newman, Scott (FAOET)

<[REDACTED]> wrote:

Dear Nigatu-

I hope you are doing well.

As we have previously discussed, the MTA for the MERS CoV samples has been completed and the camel samples are available to be picked up at NAHDIC by PREDICT.

This is to advise you that the samples are from the joint sample collection area of Awash with further details below.

Study area - Awash area, Afar regional state

Type of samples – Camel nasal swab

Media used – Trizole

Number of samples = 165

Please note that these are the same samples that NAHDIC used to analyze for MERS CoV. If you recall, we did not have access to the full volume of Trizole when this sample collection was conducted. Therefore, the swabs were placed in 300ul of Trizole and when the samples were

tested for MERS COV, and additional 500u/ of Trizole was added to the tube in order to maintain the swab sample in Trizole at all times.

Please confirm if these samples are appropriate for analyses, in light of the process described above and if so, when you will be able to collect the samples from NAHDIC.

Best wishes,
Scott

Scott Newman DVM, PHD
ECTAD Team Leader - Ethiopia

Emergency Center for Transboundary Animal Diseases (ECTAD)
Food and Agriculture Organization of the United Nations (FAO)

REDACTED

Email: **REDACTED**
Skype : **REDACTED**
Office: **REDACTED**
<image001.png>

From: REDACTED on behalf of "Jonna Mazet" <jkmazet@ucdavis.edu>
Sent: 12/06/2017 11:13:09 AM (-08:00)
To: "Kevin Olival, PhD" <olival@ecohealthalliance.org>
Cc: "Peter Daszak" <daszak@ecohealthalliance.org>; "Christine Kreuder Johnson" <ckjohnson@ucdavis.edu>; "Damien Joly" <djoly@metabiota.com>; "Alison Andre" <andre@ecohealthalliance.org>; "Brooke Genovese (bgenovese@ucdavis.edu)" <bgenovese@ucdavis.edu>; "Anna Willoughby" <willoughby@ecohealthalliance.org>
Subject: Re: PREDICT partner-wide M&A call; Dec 6th (Weds) 1pm PST/4pm EST
Attachments: Bat & other intervention project list 2 NOV 2017 DRAFT.xlsx

Comments on the workbook from us for discussion today,
J

On Mon, Dec 4, 2017 at 2:26 PM, Kevin Olival, PhD <olival@ecohealthalliance.org> wrote:
Dear all,

A reminder that we will have a partner-wide M&A conference call on Wednesday at 1 pm PST/4 pm EST. Below is a draft agenda and the latest intervention modeling project list is attached (for Agenda item 1). Please feel free to email me with additional items or any updates.

Cheers,
Kevin

PREDICT-2 M&A Call

Wednesday, December 6th

1:00 pm PST/4:00pm EST

REDACTED, Access code REDACTED

1. Intervention Modeling Collaborative Projects
 - updates to personnel and projects (input post PREDICT EB call)
 - discuss timelines
2. Capacity Building Goals for Y4
 - EHA preparing country-level reports
 - Will there be a Metabiota Fellow? Extend invitation to Smithsonian/WCS?
 - Regional modeling workshops? e.g PREDICT-FAO risk mapping workshop in Indonesia in early 2018?
3. M&A plans for Brussels meeting – discuss details/ideas, including joint breakout session with Surveillance (risk mapping).

4. Other topics?

	A	B
1	Topic	Project Name
2	Shared food resources	Fruit bat-livestock-orchard overlap
3	Medium and large market value chains	Converting live markets to non-live
4	Medium and large market value chains	Upstream vs. local viral diversity
5	Bat-community Interactions (including livestock)	Regional risk of a bat-pig outbreak
6	Bat Hunting and hunted meat value chain	Hunter Behavioral Risk Hotspots
7	Bat Hunting and hunted meat value chain	Bat Hunting Seasonality
8	Shared food resources	Bat-palm sap overlap
9	Bat-community Interactions (including livestock)	SADS outbreak modeling - China
10	Bat-community Interactions (including livestock)	Bat-pig contact risk of new EIDs
11	Medium and large market value chains	Reducing market biodiversity
12	Medium and large market value chains	Assessing viral sharing within market species
13	Medium and large market value chains	Will policies for market-based interventions be accepted?
14	Ecotourism/recreational/religious exposure to bat caves	Bat cave biodiversity risk
15	Ecotourism/recreational/religious exposure to bat caves	Bat-tourist interaction
16	Bat guano farming/harvesting	Bat-harvester interaction
17	Bat guano farming/harvesting	Bat guano farming

C

1	Description
2	Identify areas most likely to have human-fruit-bat interactions using species ranges and agricultural data
3	Estimating reductions in viral density/diversity as a result of change from live to non-live markets. Compare estimated viral diversity and density in a live market to an equivalent non-live market or live market with fraction of time, volume, or species converted to non-live.
4	Compare viral detection rates of species in markets to the same species at their sources
5	Identify areas with swine-bat overlaps similar to SADS conditions
6	Identify areas with highest risk of viral spillover to hunters based on risky behavior, propensity of local bat species to carry viruses, and likelihood for bats to be sold into value chain
7	Identify areas of bat hunting associated with high risk seasonality in bat viral detection
8	Identify areas where bat populations and viral propensities overlap with palm sap harvesting practices
9	Developing and fitting model of SADS disease dynamics on chinese pig farms based on previous outbreak data
10	Identifying the likely mechanism for contact between SADS host bats and pigs to assess if this could be generalizable to other countries and other viruses.
11	Estimating potential for viral recombination in markets based on species diversity and count using previously created recombination model.
12	Within common or nearby markets, determining which species share viruses in order to recommend separation. Determine viral sharing both within specific markets, and for all PREDICT-1 (and other) data for species found in the same market
13	The intervention policy ideas that we are generating above, and others, may not be acceptable to governments or people within countries. This project will assess their likelihood of
14	Estimating potential for recombination of viruses in bat-dwelling caves
15	Survey bat caves associated with predict to estimate tourist flow and demographics, current safety measures, contact risk. Estimate reduction of risk with limitation on visitors / safety measures.
16	Survey caves to estimate harvester populations and practices. Estimate reduction in risk with reduced or modified practices.
17	Determine viral survival associated with guano preparation practices

	D
1	Potential Countries
2	Bangladesh, Cambodia, Cameroon, Cote d'Ivoire, DRC, Ghana, Guinea, Malaysia, Myanmar, RoC, Rwanda, Sierra Leone, Tanzania, Uganda
3	Cameroon, China, DRC, Indonesia, Lao PDR, ROC, Vietnam
4	Cameroon, China, DRC, Indonesia, Lao PDR, ROC, Vietnam
5	Bangladesh, Cambodia, Cameroon, Cote d'Ivoire, DRC, Ghana, Guinea, Malaysia, Myanmar, RoC, Rwanda, Sierra Leone, Tanzania, Uganda
6	Bangladesh, China, DRC, Ghana, Indonesia, Nepal, RoC, Sierra Leone
7	Bangladesh, China, DRC, Ghana, Indonesia, Nepal, RoC, Sierra Leone
8	Bangladesh, Cambodia, Cameroon, Cote d'Ivoire, DRC, Ghana, Guinea, Malaysia, Myanmar, RoC, Rwanda, Sierra Leone, Tanzania, Uganda
9	China
10	China
11	Cameroon, China, DRC, Indonesia, Lao PDR, ROC, Vietnam
12	Cameroon, China, DRC, Indonesia, Lao PDR, ROC, Vietnam
13	Cameroon, China, DRC, Indonesia, Lao PDR, ROC, Vietnam
14	China, Malaysia, Myanmar, Rwanda, Uganda
15	China, Malaysia, Myanmar, Rwanda, Uganda
16	Cambodia, DRC, Myanmar, Thailand, Vietnam
17	Cambodia, DRC, Myanmar, Thailand, Vietnam

	E	F
1	Analysis Type	Expected Policy Products or Recommendations
2	Similarity Analysis	Areas for increased surveillance and bat-livestock separation based on previous Nipah work
3	Mixed Data Modeling/Scenario Creation	Expected degree of risk change from full conversion of markets, Expected efficacy of partial conversions and closures Identification of markets with potential for conversion
4	Data Modeling	Recommendations whether to focus on upstream or in-market interventions to reduce spillover
5	Similarity Analysis; ecological niche modeling?	Areas for increased surveillance and bat-livestock separation based on previous Nipah work
6	Data Modeling	Target locations and behaviors for educational interventions
7	Data modeling	Target locations and seasons to reduce bat hunting/drive education
8	Similarity Analysis	Areas for palm sap safety interventions
9	Scenario Creation	Recommendations for intervention in new SADS outbreaks
10		
11	Mixed Data Modeling/Scenario Creation	Identification and ranking of markets with high recombination risk, recommendations for species segregation for those markets
12	Data Modeling	Recommendations for species segregation to reduce spread,
13	Mixed Data Modeling	Recommendations that are more likely to be adopted
14	Mixed Data Modeling/Scenario Creation	Risk characterization by cave site/size/type
15	Scenario Creation	Target caves and safety measures by cave
16	Scenario Creation	Target caves and safety measures by cave
17	Scenario Creation	Time frames and practices for guano preparation

G	
1	Existing PREDICT Data
2	
3	PREDICT-1 viral detection data from live and non-live samples in markets
4	PREDICT-1 viral detection data
5	
6	PREDICT-2 questionnaire data on hunter behavior
7	PREDICT-2 questionnaire data on hunter behavior
8	PREDICT-1 viral detections
9	PREDICT-2 virus identification
10	
11	PREDICT-2 Species and number of animals (live) in markets (Site and Event characterization - Main Q15)
12	PREDICT-1 viral detection data from markets
13	PREDICT-1 and PREDICT-2 species presence in markets
14	PREDICT-1 and PREDICT-2 behavioral risk data
15	
16	
17	PREDICT-1 and PREDICT-2 site data about guano harvesting, PREDICT-1 viral detections at that interface

H

1	Other Existing Data Assets
2	IUCN species ranges, FAO livestock layers, FAO and associated crop/orchard layers, population density maps; ; Na's work; Richard Suu-ire's project in Ghana
3	
4	
5	IUCN species ranges, FAO livestock layers
6	IUCN species ranges, HP3 viral risk propensities
7	IUCN species ranges
8	IUCN species ranges, HP3 and known viruses hosted by bat species
9	High-resolution data of SADS disease mortality
10	
11	
12	HP3 viral associations
13	Surveys of current policies within country, literature review
14	HP3 and Cave bat viral sharing analysis
15	
16	
17	Viral survival lit review

1	Non-field Data Collection
2	Literature or country-level descriptions to determine specific types of fruit tree resources: map layers are general for tropical fruit
3	Literature review of viral survival at EHA (collected but not analyzed)
4	
5	Bat-swine separation policy procedures based on Nipah work
6	
7	
8	Literature or country-level descriptions to determine specific types of fruit tree resources: map layers are general for tropical fruit
9	Vaccination and other intervention efficacy based of PEDV
10	
11	
12	
13	
14	Find literature-based bat-specific viral sharing/recombination rates
15	Estimates of efficacy of safety measures from published literature
16	Estimates of efficacy of safety measures from published literature
17	

	J	K
1	Additional Field Data Collection	Time Frame (3 mo, 6 mo, 1 yr)
2		Short-med
3		Short
4	Market-upstream site associations from field teams	Short
5		Short
6	Country team estimation of exact bat species being hunted	Med
7	Country team estimation of exact bat species being hunted	Med
8		Med
9		Med
10	Infrared and echolocation detection of bats on farms.	Med
11	More accurate species characterization and counts in identified markets of interest	Long
12	More accurate species characterization and counts in identified markets of interest	Long
13	Targeted qualitative data and focus groups. Interviews with Govt. agencies.	Long
14	Cave bat species diversity and composition and multiple cave sites	Long
15	Data on visitor flow, demographics and origin. Data on current safety measures implemented Observation on tourist-bat interaction measures	Long
16	Data on harvester numbers, frequency and duration of visits, harvets and safety practices, current safety measurements in place.	Long
17	Experimental viral survival in bat feces (UCD lab)	Long

	L
1	Probability of Success (Low, Med High)
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	

M	
1	Action items
2	Determine characteristics of spillover locations to drive similarity analysis, data availability review
3	Determine which countries are we sampling from dead animals in non-live markets. Can we identify comparable live and non-live markets?
4	Determine what P1 cases have same species in both markets and linked upstream sources
5	Determine characteristics of SADS-CoV spillover locations
6	Pull survey data to determine locations with hunters, what species hunted and hunting behaviors engaged in
7	Pull survey data to determine locations with hunters, what species hunted and hunting behaviors engaged in, determine whether these hunters hunt with Pteropus or Eidolon (seasonal bat species)
8	Determine whether palm sap harvesting practices data are likely to be adequate
9	Currently underway
10	Experimental design meeting follow-up
11	Estimate data on species diversity and numbers from P2 site characterizations in market modules
12	Estimate data on species diversity and numbers from P2 site characterizations in market modules
13	
14	Identify cave sites with potential for measurement and develop sampling plan
15	ID target caves and generate a sampling plan
16	ID target caves and generate a sampling plan
17	

	N	O
1	Point person	Collaborators
2	Brooke Watson	Carlos, Erica, Nistara (DTRA-funded work identifying orchards from Satellite), JAKM (Cashews).
3	CKJ	
4	Kevin	Evan, CKJ
5	Brooke Watson	Carlos, Erica
6	CKJ	KJO, Anna Willoughby
7	CKJ	KJO, Evan, Nistara, Diego,PD, JAKM
8	JHE	
9	Noam Ross, Cale Basaraba	
10	Hongying, Guangjian, other analytical people	
11	CKJ	KJO, Sarah Olson, Brian Bird, Tracey
12	CKJ	KJO, Alice Latinne
13	LVF, Saba Qasmieh	Karen Saylor, Hongying Li
14	KJO	Anna Willoughby
15	LVF	Karen Saylor, Stephanie Martinez
16	LVF	Karen Saylor, Suzan Murray
17	Tracey, Jonna	Simon, Peter, Kevin,

	P
1	
2	DJW,Terra and Brian B, Discuss in-country people
3	Lucy K for SE Asia markets; Behavior Leads; Existing data not likely super useful
4	Tracey; Behavior leads; Existing data not likely super useful
5	DJW and Ian if behavior/social related?;Terra & Richard data from Ghana; Consider in-country people
6	Terra, Brian, Guinea
7	What about dog/bat hunting in Lake Zone?; Add lab people if viral finding-dependednt
8	Consider which countries are really harvesting sap & then build team
9	
10	
11	
12	
13	Add DJW
14	We havE MURONGO cave as well in TZ; Brian Bird; Kirste & Julius; Simon/Tracey
15	We have Murongo cave as well in TZ; Rwanda won't approve the IRB; Kirsten for Uganda & DJW Tanzania
16	Add guano farms to "caves"; Tracey & Lucy
17	

From: David J Wolking <djwolking@ucdavis.edu>
To: William B. Karesh <karesh@ecohealthalliance.org>
CC: Jonna Mazet <jkmazet@ucdavis.edu>; David Wolking <djwolking@ucdavis.edu>; Evelyn Luciano <luciano@ecohealthalliance.org>; Ava Sullivan <sullivan@ecohealthalliance.org>
Sent: 2/7/2018 12:17:42 PM
Subject: Re: edits to EPT- review.

Received, thanks Billy!

On Wed, Feb 7, 2018 at 12:15 PM, William B. Karesh <karesh@ecohealthalliance.org> wrote:
My suggestion for page 20:

Conclusion 1: Strategic planning at the country, regional, and global levels

EPT2 is a centralized program that several respondents said lacked in-country stakeholders in strategy development. Some EPT-2 project components required standardized methodology across countries in order to produce required deliverables while other components were designed for local customization. The evaluation team agrees with respondents who noted that progress and timelines do and will continue to vary by region and between countries, and that single “cookie-cutter” approaches will not be useful or acceptable to country stakeholders in the long run. We are also concerned that many respondents believe EPT2 is set up independently from USAID Mission strategies, and that the strategic process does not include coordination with other USAID projects or sectors (e.g., economic growth). Without these investments in participation and strategic clarity at the country level, USAID’s ability to continue a leadership role in this field may suffer.

William B. Karesh, D.V.M

Executive Vice President for Health and Policy

EcoHealth Alliance
460 West 34th Street - 17th Floor
New York, NY 10001 USA

+1.212.380.4463 (direct)
+1.212.380.4465 (fax)
www.ecohealthalliance.org

President, OIE Working Group on Wildlife

Co-chair, IUCN Species Survival Commission - Wildlife Health Specialist Group

EPT Partners Liaison, USAID Emerging Pandemic Threats - PREDICT-2 Program

EcoHealth Alliance leads cutting-edge research into the critical connections between human and wildlife health and delicate ecosystems. With this science we develop solutions that promote conservation and prevent pandemics.

From: "David De Pooter" <d.depooter@onehealthplatform.com>
Sent: 02/22/2018 4:22:52 AM (-08:00)
To: "Jonna Mazet" <jkmazet@ucdavis.edu>; "Martyn Jeggo" <[REDACTED]>; "Amadou Sall" <asall@pasteur.sn>; "MARK RWEYEMAMU" <[REDACTED]>; "Wang Linfa" <[REDACTED]>; "William B. Karesh" <karesh@ecohealthalliance.org>; "Dr. Ottorino Cosivi" <[REDACTED]>; "Casey Barton Behraves" <dlx9@cdc.gov>; "malik" <[REDACTED]>; "Baljit Singh" <[REDACTED]>; "Gerdts, Volker" <[REDACTED]>; "Marietjie Venter" <[REDACTED]>; "Penina Munyua" <ikg2@cdc.gov>; "Lorne Babiuk" <[REDACTED]>; "Patrick Leighton" <[REDACTED]>; "Craig Stephen" <[REDACTED]>
Cc: "Ab Osterhaus" <[REDACTED]>; "John MacKenzie" <[REDACTED]>; "Chris Vanlangendonck" <c.vanlangendonck@onehealthplatform.com>
Subject: 5th International One Health Congress: Scientific Programme Committee telephone conference on March 9th

Dear Scientific Programme Committee members,

The abstract submission deadline for the Fifth International One Health Congress expired on 15 February 2018 and by that time more than 700 research abstracts had been submitted. The session chairs and co-chairs are now reviewing the abstracts in view of selecting papers for oral and poster presentation during the congress. Their work will allow us to develop a final scientific program and to that end I'd like to invite you to participate in the next Programme Committee conference call on 9 March 2018 at 15:00h CET (8am CST - 10pm AWST/SGT) I'll provide a more detailed meeting agenda closer to the date, but may I ask to confirm your availabilities as soon as possible?

Kindest regards,

David De Pooter
management

[REDACTED]
d.depooter@onehealthplatform.com
www.onehealthplatform.com

ONE HEALTH PLATFORM
NEW ADDRESS!

[REDACTED]



From: "Kirsten Gilardi" <kvgilardi@ucdavis.edu>
Sent: 03/15/2018 12:50:07 PM (-07:00)
To: "Jonna Mazet" <jkmazet@ucdavis.edu>; "William B. Karesh" <karesh@ecohealthalliance.org>; "Predict inbox" <predict@ucdavis.edu>
Cc: "jnziza" [REDACTED]
Subject: Fwd: Meeting with at USAID Mission Brief

Jonna, Billie, David:

Just looping you in on this message from Julius Nziza, Rwanda CC.

-Kirsten

Begin forwarded message:

From: Nziza Julius [REDACTED]
Subject: RE: Meeting with at USAID Mission Brief
Date: March 15, 2018 at 11:31:31 AM PDT
To: Kirsten Gilardi <kvgilardi@ucdavis.edu>, Mike Cranfield <[REDACTED]>

Hello Kirsten and Mike-

today at 2 .00 p.m I had a meeting at the USAID mission with the following

1. Lisa Kramer
2. Richard (Mission)
3. John (Mission)
4. Etienne (OHW)
5. Yilma Makonnen ECTDA Regional manager E.A/FAO
6. Charles BEBAY Regional OH Coordinator

Lisa briefed us that the FAO team had come to Rwanda at the request of USAID to help on filling some of the gaps left by P&R activities. FAO has limited plan focussing on some activities like providing support to OH platform, updating the ROHSC strategic plan. FAO guys talked about they will hire someone to focus on such actions in the country. That's this is an opening for future FAO/ECTAD collaboration with GOR. FAO more flexible on diseases outbreak response; Veterinary capacity building.

Lisa assured as no MOU renew talk with tomorrow meeting with GOR.

OHW briefed us about their last year actions. I did the same for PREDICT 2.

Also I told them about the gap of domestic animal surveillance which is supposed to be covered by FAO; Response that Rwanda is GSHA 2 so no such action.

Julius

From: REDACTED on behalf of "Jonna Mazet" <jkmazet@ucdavis.edu>
Sent: 03/16/2018 10:51:23 AM (-07:00)
To: "Anna Willoughby" <willoughby@ecohealthalliance.org>
Cc: "Kevin J. Olival" <olival@ecohealthalliance.org>; "Peter Daszak" <daszak@ecohealthalliance.org>
Subject: Re: PREDICT partner-wide M&A call; March 6th (Tues) 11 am PST/2 pm EST

Hi Anna,

I'm going to need a few more days for the EDI reviews. Alternatively, if you are receiving reviews and will be making changes, I could review the edited, near-final versions after you incorporate changes that you have received.

Sorry for the inability to meet today's deadline,
Jonna

On Mon, Mar 12, 2018 at 3:24 PM, Anna Willoughby <willoughby@ecohealthalliance.org> wrote:

Dear all,

Please find the notes from our call last week. I apologize for the delay. I have also attached the latest version of the Intervention Modeling projects and the Brussels flipchart notes as circulated to EB last week. Action Items include:

- **Everyone** to review the Intervention Modeling sheet and send any revisions
- **Everyone** to send EDI edits by March 16th
- **EHA** to revise EDI branding for PREDICT
- **Kevin** to circulate Intervention Modeling sheet to EB, March 7th (circulated, tabled til March 21st)
- M&A regional workshop to be discussed on EB, March 7th (circulated, tabled til March 21st)
- **Peter** to send revised EDIs to next EB, March 21st

Please let me know if you have any questions or are missing any relevant documents. The next partner-wide M&A call is scheduled for **April 25th 1 pm PST/ 4 pm EST**. I will reach out a week before with agenda items and call details. Feel free to send any agenda items you may have.

Best,
Anna

On Tue, Mar 6, 2018 at 1:35 PM, Kevin Olival, PhD <olival@ecohealthalliance.org> wrote:

Dear all,

Look forward to speaking with you all in 30 min. Call in information is below.

In addition, to the Emerging Disease Insights documents we sent around earlier, attached is the latest version of the intervention modeling policy projects for our discussion.

Cheers,
Kevin

--

Anna Willoughby

Research Assistant

EcoHealth Alliance
460 West 34th Street – 17th floor
New York, NY 10001

1.646.868.4713 (direct)

1.212.380.4465 (fax)

REDACTED (cell)

www.ecohealthalliance.org

Visit our blog: <http://blog.ecohealthalliance.org/updates>

EcoHealth Alliance leads cutting-edge scientific research into the critical connections between human and wildlife health and delicate ecosystems. With this science, we develop solutions that prevent pandemics and promote conservation.

From: [REDACTED] on behalf of "Jonna Mazet" <jkmazet@ucdavis.edu>
Sent: 05/17/2018 11:22:24 AM (-07:00)
To: "William B. Karesh" <karesh@ecohealthalliance.org>
Subject: Re: [predict-outbreak] Re: DRC other response activities?

Thanks!
J

On Thu, May 17, 2018 at 10:12 AM, William B. Karesh <karesh@ecohealthalliance.org> wrote:
Just FYI. In another area, there is one suspect VHF case in Faradje, samples sent to INRB for testing also. It's in the northeast - historically a Marburg zone.

BK

William B. Karesh, D.V.M
Executive Vice President for Health and Policy

EcoHealth Alliance
[460 West 34th Street - 17th Floor](#)
[New York, NY 10001 USA](#)

+1.212.380.4463 (direct)
+1.212.380.4465 (fax)
www.ecohealthalliance.org

President, OIE Working Group on Wildlife

Co-chair, IUCN Species Survival Commission - Wildlife Health Specialist Group

EPT Partners Liaison, USAID Emerging Pandemic Threats - PREDICT-2 Program

EcoHealth Alliance leads cutting-edge research into the critical connections between human and wildlife health and delicate ecosystems. With this science we develop solutions that promote conservation and prevent pandemics.

On May 17, 2018, at 12:07 PM, Jonna Mazet <jkmazet@ucdavis.edu> wrote:

Thanks -- super helpful!
J

On Wed, May 16, 2018 at 12:49 AM, Karen Saylor <ksaylor@metabiota.com> wrote:
hi Jonna.
No, we are doing no other response activities in DRC separate from PREDICT.

I just checked with Charles and it's INRB who has just sent a team to Mbadaka to run GeneXpert Ebola assays. I imagine the confusion stems from the fact that Placide has returned

from Montpellier to accompany an INRB team to the field to do this work. Remember he is doing his PhD at University of Montpellier but he retains an affiliation with INRB, so I believe they sent him back due to the outbreak. Apparently he will be running the mobile lab in Mbandaka. He was supposed to be at the OIE meeting in Paris on Friday, but I suppose his plans have changed due to the outbreak.

Charles is attempting to get some final budgetary details from the INRB adjoint director regarding the last request that INRB made and then he will send me today's updated Outbreak Report, so please stay tuned.

thanks,
Karen

On Wed, May 16, 2018 at 12:15 AM, Jonna Mazet <jkmazet@ucdavis.edu> wrote:

Hi Karen,

Is Metabiota doing other response activities in DRC separate from Predict? We received a note to that effect, along the lines of..

"Metabiota folks heading to Mbandaka to run GeneXpert Ebola assay"?

Please advise, as I'm working with Richard to raise the DRC ceiling and support the response effort for USAID. We need to have great communications and/or to clear this up.

Thanks,

J

From: "William B. Karesh" <karesh@ecohealthalliance.org>
Sent: 05/31/2018 1:39:58 PM (-07:00)
To: "Suzan Murray" <MurrayS@si.edu>
Cc: "Jonna Mazet" <jkmazet@ucdavis.edu>
Subject: Re: BIO Convention - One Health Day - Keynote Panel Discussion Guide

I'm not sure you want to put them on the spot by asking them for examples or experiences and let them go off in some weird direction, but you could guide them along by beginning a question with an example from PREDICT that you found this or that and ask if they have had similar experiences.

William B. Karesh, D.V.M

Executive Vice President for Health and Policy

EcoHealth Alliance
460 West 34th Street - 17th Floor
New York, NY 10001 USA

+1.212.380.4463 (direct)

+1.212.380.4465 (fax)

www.ecohealthalliance.org

President, OIE Working Group on Wildlife

Co-chair, IUCN Species Survival Commission - Wildlife Health Specialist Group

EPT Partners Liaison, USAID Emerging Pandemic Threats - PREDICT-2 Program

EcoHealth Alliance leads cutting-edge research into the critical connections between human and wildlife health and delicate ecosystems. With this science we develop solutions that promote conservation and prevent pandemics.

On May 31, 2018, at 4:16 PM, Murray, Suzan <MurrayS@si.edu> wrote:

fabulous!

We have some leeway, and I was thinking it would be helpful to ask for examples of either helpful governmental agencies (USAID) or programs that have been very successful (hint, predict), ask about university leadership (ucdavis), NGOs (EHA), successful MD/DVM One health leadership teams (myanmar) - not trying to commandeer this necessarily, but be helpful and advocate/advertise a bit?

From: William B. Karesh [karesh@ecohealthalliance.org]

Sent: Thursday, May 31, 2018 4:12 PM

To: Murray, Suzan

Cc: Jonna Mazet

Subject: Re: BIO Convention - One Health Day - Keynote Panel Discussion Guide

Looks like more than enough to fill up a panel session.

I gave the opening OH Plenary at BIO last year in San Diego, it a huge meeting ~18,000 people. Good audience because they are very business-minded.

BK

William B. Karesh, D.V.M

Executive Vice President for Health and Policy

EcoHealth Alliance
460 West 34th Street - 17th Floor
New York, NY 10001 USA

+1.212.380.4463 (direct)

+1.212.380.4465 (fax)

www.ecohealthalliance.org

President, OIE Working Group on Wildlife

Co-chair, IUCN Species Survival Commission - Wildlife Health Specialist Group

EPT Partners Liaison, USAID Emerging Pandemic Threats - PREDICT-2 Program

EcoHealth Alliance leads cutting-edge research into the critical connections between human and wildlife health and delicate ecosystems. With this science we develop solutions that promote conservation and prevent pandemics.

On May 31, 2018, at 4:07 PM, Murray, Suzan <MurrayS@si.edu> wrote:

HI J and B,

Heres some info on a panel I will be moderating next week in Boston. We'll be working on fleshing out the goals and questions a bit more over the weekend. It might be a good opportunity to work in some of our broader Predict/USAID messages. Feel free to review and send me ideas if you would like

Suzan

From: Amy Walker [awalker@bio.org]

Sent: Wednesday, May 30, 2018 2:35 PM

To: Murray, Suzan; [REDACTED]; [REDACTED] AGUADO Jorge; SAEZ Maria Alejandra; Timothy Bouley

Cc: Justin Duarte Pine; Don Atkins; Amanda Pratter; Sarah Maki

Subject: BIO Convention - One Health Day - Keynote Panel Discussion Guide

All,

As discussed on this afternoon's "Global Perspectives" panel prep call, attached is the discussion guide that we have prepared for the keynote panel that will precede the global panel on Monday. The keynote panel will focus primarily on the business case for One Health and conveying why industry should adopt a One Health perspective. This document includes a few key messages that the panel would like to convey, as well as a few questions prepared for their discussion.

Please feel free to use this as a template for the global panel. We look forward to seeing you in Boston!

Best,
Amy

Amy Walker
Manager, Infectious Diseases Policy
Biotechnology Innovation Organization (BIO)
1201 Maryland Ave. SW, Ste. 900
Washington, DC 20024
direct: (202) 962-9226
mobile: **REDACTED**
awalker@bio.org
www.bio.org

*Join me in celebrating BIO's 25th Anniversary.
Visit <https://www.bio.org/history> for details.*

[<image001.gif>](#)

<2018 BIO Convention - One Health Day keynote - discussion guide.docx>

From: [REDACTED] on behalf of "Jonna Mazet" <jkmazet@ucdavis.edu>
Sent: 06/21/2018 1:45:52 PM (-07:00)
To: "William B. Karesh" <karesh@ecohealthalliance.org>
Subject: Re: edited advisors report
Attachments: Advisors Report P-2 May 2018 v2 JM.docx

Looks great -- just what I was thinking.
I just did some bullet formatting clean-up.
Thanks & sorry for the delay,
J

On Mon, Jun 4, 2018 at 10:11 AM, William B. Karesh <karesh@ecohealthalliance.org> wrote:
| See attached - have at it. ;)

Advisor's Comments for the PREDICT – 2 (P-2) Semi-Annual Consortium Meeting

Napa. CA

April 10 – 11, 2018

Drs. Lonnie King and Jim Hughes

It has been a pleasure staying engaged with the P-2 project and interacting with its many talented and committed participants. As advisors, the first task is always to evaluate if the project is meeting its original goals and outcomes. This project is not only meeting its goals, it continues to outperform expectations and is making exceptional progress in important areas such as risk reduction, innovation, improving lives and science, many beyond its initial scope.

As advisors, we would like to share some of our key findings and impressions based on attending the Semi-Annual Consortium Meeting in April 2018. The following items stood out to us and deserve special attention and acknowledgement:

Accomplishments to date:

- The project has enjoyed and has benefitted from exceptional leadership which has been a key success factor for the project
- Training and involvement of approximately 4,200 individuals is a special achievement that helped produce high quality results but will also have a long-term benefit of real significance
- The project has been aware of the need for effective evaluation and assessment and is adopting and implementing effective tools to complete this critical task
- Capacity building across the many P-2 countries has been very impressive and will be an important legacy of the project
- One Health has been a continuous focus and driver; it has been effectively embedded into the efforts, has been fundamental to the P-2 mission, and has continued to change mindsets and direct activities along the entire project map
- The emphasis on One Health has also resulted in the project's commitment to integrate human, animal and environmental data; this has helped distinguish the project from earlier work
- Organizational systems, platforms and implementation strategies have been continuously improved and have been focused on answering key questions and have effectively linked back to and supported project goals
- Behavior data and its synthesis is progressing nicely and has broad utility; it will be important to prioritize the completion of this work including some metrics of impactful interventions
- There has been opportunistic engagement and further learning and discovery working on Ebola and SADS.
- Linking the project with the JEE has added value
- Exploration of prevention intervention strategies and their proof of concept will help to convert data into meaningful and well defined actions
- Incorporation of FAO into key parts of the project has been a turn around and quite helpful – L/S 2050 has been a good example of cross-sectional collaboration and could have lasting benefits

- P-2 has made excellent progress in working with multiple government officials; this has had a positive short-term impact, but perhaps more importantly will greatly benefit them in the long-term
- The Spillover Ranking using a “credit report” analogy was innovative and could simplify results for the public, help increase their awareness, and stimulate behavioral changes.
- The continuation of the deep forest work had been very fruitful and revealing; the continued effort with this sector of the project has given the group a longitudinal frame to view data and events with an emphasis on understanding the dynamics and diversity of hosts and viral families within changing landscapes. This has been well done and valuable.

Considerations for final 18 months of project:

In addition, and after further reflection on discussions and presentations, we would like to offer a few insights and views for consideration. These are offered, not as critiques, but rather as opportunities to strengthen pieces of this truly outstanding and unique global project.

- As the project enters its final stage (18 months), it would be useful to make realistic decisions about what must be completed beyond the core deliverables, i.e., which additional activities would be nice to finish, and what just can’t be completed because it can’t be done well within the existing time frame. This suggests creating an additional priority list and developing an explicit map from the present to the end of the project; such a map should have very specific goals and targets, activities to be completed, responsibilities and timelines. The 18-month plan should be openly shared with the entire team.
- There is some concern that perhaps there is an unrealistic push to continue to add new activities even though the project is moving quickly to its conclusion. While this is a good sign and quite admirable that the team still has a strong commitment and passion about its work, it might lead to a frantic project ending rather than a “smooth landing”. It is also telling that participants have adopted a culture of going beyond expectations and want to ensure ROI; however, there is a point of diminishing returns.
- A final report was discussed, and it is not too early to begin drafting parts of the report now, even though many analyses need to be completed.
- It is common knowledge that the project’s endpoint is in view; thus, communications, especially within the team, will have special importance. Frequent and honest communications are essential as personnel plan for post-project activities.
- The project could do more to emphasize an economic-case or benefit. It has been noted that Finance Ministers and other funders/investors need to understand P-2 and the implications of the studies and results. The recent World Bank Report on One Health is timely and offers a good structure to build upon. As the GHSA has become more of a concentration, there is obviously new interest in improved health, security and economics that will lead to healthier and more stable countries; thus, a better framing of the economic benefits of the project and One Health would be useful. A missing piece in the acceptance of One Health has been minimal proof of its value proposition; i.e. why the One Health platform and interventions are more advantageous with a greater ROI than maintaining the status quo. With reports of over a billion cases and 1 million deaths/year due to zoonoses and expected global losses on an average of \$60 billion/year per

pandemic, making the case for more prevention, preparation and response funding would make the project more relevant and align with the GHSA.

- The group discussion about consideration of final disposition of data and biologic samples upon the completion of the project was timely and obviously important; there could be very public decisions that might also be potentially controversial. This is a complex topic with ethical, legal, safety, scientific and value components. We applaud the groups thinking about this, and it will require a careful and thoughtful process based on the importance of this discussion. We suggest that you (with USAID support) might consider a blue-ribbon panel of experts or a National Academy of Sciences workshop to ensure that options are explored and evaluated. Ref. “Meeting Critical Laboratory Needs for Animal Agriculture: Examination of Three Options” published by NAS Press in 2012.
- Behavioral risk surveillance and analysis is an important feature of the study. However, populations seem to vary considerably across countries based on differing beliefs, cultures, biases, experiences, and histories; thus, populations are not monolithic and may prevent the usefulness of a generic conclusion. However, there is still much value to be gained within individual countries and comparing interventions across countries.
- The concept of risk characterization is of special interest and has some possibly fertile applications. There is an immediate need to decide on the added value of this work. It appears that much more might be gleaned from mining existing data and, perhaps from some limited additional data collection. In addition to defining risk factors, defining protective factors could have even more public value. The data might have some limitations due confounding factors such as contaminated food and water; yet, we encourage the team to consider using the next 3-4 months to enhance the data collection and perhaps focus on a small subset with an in depth analysis that could make this work more valuable and useful.
- There were good discussions about telling the PREDICT story and communication strategies. Most P-2 participants can explain what they do and often how they do it; it is also important to emphasize why they do it. (“Start With Why” – Simon Sinek). When telling the story and issuing the final report, it will be essential to emphasize why P-2 was undertaken and the real value of the effort – to improve the lives of people and animals and prevent costly and deadly pandemics. We like the idea of using vignettes and highlighting the human faces of PREDICT.
- PREDICT-2 is an extraordinary project and needs an extraordinary finish – special communications, celebrations, appreciations and a launch pad for the next extraordinary and globally impactful endeavor will demand special attention and planning.

Additional efforts for consideration (within time and budget constraints):

- Follow up activities and further sampling in post-Ebola West Africa countries is a very attractive goal and could be very helpful to advance our understanding of that pandemic. Exploring the roles of various ecological zones and perhaps finding key maintenance and host mechanisms would be especially useful. We encourage the continuation and completion of this phase of the project.
- It might be appreciated if the project commits to helping P-2 participants by creating 1-page personalized (SKA’s – skills, knowledge, abilities) summaries for key workers, especially those from participating countries. These could serve as “mini-resumes” and list competencies accrued,

experiences gained, accomplishments completed, etc.; this could be useful for folks as they search for future positions and prepare for other work and plans for succession planning.

- More work and data collection in serology and surveillance is adding real value; technological advances like the creation of new chip peptide technology could accelerate more rapid discovery and knowledge acquisition. Such work would add to spillover identification, earlier detection, and the exploration of new viral families and potential threats. The same can be said for modeling; however, care needs to be taken with results and presentation of data and interpretation.
- The advisors were very pleased to see that the group has included some interesting antimicrobial resistance (AMR) data with potential systematic reviews of AMR events and emergent data. While the project didn't include this goal, the new momentum and interest in AMR along with the ability of P-2 to include this data adds further value to the project and its future. It also points out that there are likely significant and scientifically relevant spin-offs that could originate from the project including future AMR work. Giving some thought to future R & D activities based on the rich data and results generated from P-2 could be included in the final report and would be a beneficial endeavor.
- It may not be feasible at this stage of the project but including a leadership training module would be helpful for participants and add another dimension and competency to make them more effective and marketable. There are numerous leadership modules already available, so it would not be an expensive investment or strain on the team. After P-2 is completed, the leaders in communities, laboratories, etc. will be key to maintaining activities in the future so leadership development is certainly a pertinent need. In addition, implementing One Health strategies necessitates working and leading across disciplines, sectors, and agencies and leadership is an essential skill to enable this cooperation to be successful.
- The findings from P-2 are impressive, but the impact must be even more so. Another consideration may be to use the Land Grant mission or "Global Grant" evaluation frame – the focus is on understanding key problems in communities through engagement, conducting relevant R & D to find answers to the problems, and then returning information to communities and constituents to improve their lives and well-being (outreach). Education and training are also needed to add to the capacity and ensure future assets.

We wish to thank the PREDICT-2 team for the opportunity to attend and participate in the Semi-Annual Consortium Meeting and hope that our comments prove useful and that they are received in the spirit in which they are intended – with our admiration of the of the project and its team and our sincere commitment to strengthen the project and add value to the work.

From: "William B. Karesh" <karesh@ecohealthalliance.org>
Sent: 06/21/2018 4:37:02 PM (-07:00)
To: "Jonna Mazet" <jkmazet@ucdavis.edu>
Subject: Re: edited advisors report

See you in the northern prairie!!

B

Sent from my iPhone

William B. Karesh, D.V.M
Executive Vice President for Health and Policy

EcoHealth Alliance
[460 West 34th Street - 17th Floor](#)
[New York, NY 10001 USA](#)

[+1.212.380.4463](tel:+12123804463) (direct)
[+1.212.380.4465](tel:+12123804465) (fax)
www.ecohealthalliance.org

President, OIE Working Group on Wildlife

Co-chair, IUCN Species Survival Commission - Wildlife Health Specialist Group

EPT Partners Liaison, USAID Emerging Pandemic Threats - PREDICT-2 Program

EcoHealth Alliance leads cutting-edge research into the critical connections between human and wildlife health and delicate ecosystems. With this science we develop solutions that promote conservation and prevent pandemics.

On Jun 21, 2018, at 3:46 PM, Jonna Mazet <jkmazet@ucdavis.edu> wrote:

Looks great -- just what I was thinking.
I just did some bullet formatting clean-up.
Thanks & sorry for the delay,
J

On Mon, Jun 4, 2018 at 10:11 AM, William B. Karesh <karesh@ecohealthalliance.org> wrote:
| See attached - have at it. ;)

<Advisors Report P-2 May 2018 v2 JM.docx>

From: "Jonna Mazet" <jkmazet@ucdavis.edu>
Sent: 09/06/2018 4:01:25 PM (-07:00)
To: "Tran, Thu Anh" <TTran@nas.edu>
Cc: "Shah, Cecilia" <cshah@nas.edu>; "FUKUDA, Keiji" [REDACTED]; "Peter Daszak" <daszak@ecohealthalliance.org>; "Ogawa, V. Ayano" <VOgawa@nas.edu>
Subject: Re: LAST PLANNING CALL - PLEASE REVIEW ATTACHED WORKSHOP AGENDA

Hi,
So sorry for the drop. My phone died & when I plugged in and tried to rejoin, I kept getting an invalid passcode message, even though it was repeating the passcode back to me that was correct (what I had used when I joined the call successfully earlier). I sent a text to Peter to fill me in. I'll do whatever is needed.
Sorry about the technical issues,
Jonna

On Thu, Sep 6, 2018 at 1:32 PM Tran, Thu Anh <TTran@nas.edu> wrote:

Dear all,

Please refer to this attached version of the agenda for our call in a few hours.

Best,

Anh

From: Shah, Cecilia
Sent: Thursday, September 06, 2018 4:20 PM
To: 'Suerie Moon' [REDACTED]; Hermsen, Elizabeth D <elizabeth.hermsen@merck.com>
Cc: Jennifer Gardy <[REDACTED]>; David Nabarro <david.nabarro@undp.org>; David Nabarro [REDACTED]; Dennis Carroll <dcarroll@usaid.gov>; Erbelding, Emily (NIH/NIAID) [E] <emily.erbelding@nih.gov>; FUKUDA, Keiji [REDACTED]; Jay Siegel [REDACTED]; Jernigan, Daniel B. (CDC/OID/NCIRD) <dbj0@cdc.gov>; jkmazet@ucdavis.edu; Karen Grosser [REDACTED]; [REDACTED]; Kumanan Rasanathan [REDACTED]; [REDACTED]; Peter Daszak <daszak@ecohealthalliance.org>; Peter Sands <[REDACTED]>; Ogawa, V. Ayano <VOgawa@nas.edu>; Tran, Thu Anh <TTran@nas.edu>; Joanna Ong <[REDACTED]>
Subject: RE: LAST PLANNING CALL - PLEASE REVIEW ATTACHED WORKSHOP AGENDA

Thank you, Suerie. We will be sure to provide a new version of the agenda after today's call and reach out to you individually for specific suggestions if needed.

Best,

Ceci

From: Suerie Moon <[REDACTED]>
Sent: Thursday, September 6, 2018 4:17 PM
To: Hermsen, Elizabeth D <elizabeth.hermsen@merck.com>
Cc: Shah, Cecilia <cshah@nas.edu>; Jennifer Gardy <[REDACTED]>; David Nabarro <david.nabarro@undp.org>; David Nabarro <[REDACTED]>; Dennis Carroll <dcarroll@usaid.gov>; Erbelding, Emily (NIH/NIAID) [E] <emily.erbelding@nih.gov>; FUKUDA, Keiji <[REDACTED]>; Jay Siegel <[REDACTED]>; Jernigan, Daniel B. (CDC/OID/NCIRD) <dbj0@cdc.gov>; jkmazet@ucdavis.edu; Karen Grosser <[REDACTED]>; Kumanan Rasanathan <[REDACTED]>; Peter Daszak <daszak@ecohealthalliance.org>; Peter Sands <[REDACTED]>; Ogawa, V. Ayano <VOgawa@nas.edu>; Tran, Thu Anh <TTran@nas.edu>; Joanna Ong <[REDACTED]>
Subject: Re: LAST PLANNING CALL - PLEASE REVIEW ATTACHED WORKSHOP AGENDA

Dear Ceci and colleagues,

My apologies, I will be unable to join the call in a few hours due to poor internet access during a thunderstorm in the mountains. I think the agenda is shaping up very nicely, congratulations to everyone.

Two comments:

1. As this workshop is taking the long view, which distinguishes it from other discussions of preparedness, it may be relevant to incorporate more historical perspectives and speakers. For example, Kendall Hoyt of Dartmouth has done fascinating research on the role of the US military and government in driving vaccine development for outbreaks during and after WWII. Some very interesting lessons for contemporary efforts are definitely available there. My colleague at the Graduate Institute, Davide Rodogno, is a historian who has studied the League of Nations Health Organization (HOLN), and how its legacy shaped WHO in ways still relevant today. I'm not sure he's available, but I mention him just to illustrate what a historical approach could add.

2. during Session 2 on Day 1 (afternoon), it would be great to narrow down and specify more concretely the types of challenges to be discussed by the tables. There are so many facets of preparedness, so many challenges, so many actors involved in them, and so many initiatives. (We have recently published a working paper (<https://t.co/EOcHrKz2pA?amp=1>) and short version in the BMJ trying to make sense of the multiplicity of initiatives: <https://www.bmj.com/content/362/bmj.k3254>). Perhaps we can narrow down the discussions to a theme per group (eg technology devt, public communication, financing preparedness, etc). This may have implications for the Day 2 discussion themes, which are already more specific than Day 1. But I don't think this would necessarily be a problem.

Again, I regret that I am unable to make the call, but wish you productive discussions and look forward to hearing the outcomes,

Best wishes,

Suerie

Please excuse brevity or errors, sent from phone

On Thu, Sep 6, 2018, 9:37 PM Hermsen, Elizabeth D <elizabeth.hermsen@merck.com> wrote:

Hi Ceci,

Once again, I apologize that I am unable to attend the planning committee phone calls. I think the agenda is shaping up nicely, and I've provided a few additional comments/suggestions in the attached version. I look forward to seeing the revisions following the discussion later today.

Kind regards,

Elizabeth

Elizabeth D. Hermsen, PharmD, MBA, BCPS-AQ(ID), FIDP

Head, Global Antimicrobial Stewardship

Global Population Health

Office: 402-496-3350

Mobile: REDACTED

Fax: 402-496-3357

-
-
-
-
-

From: Shah, Cecilia [<mailto:cshah@nas.edu>]

Sent: Tuesday, September 04, 2018 2:41 PM

To: Jennifer Gardy; David Nabarro; David Nabarro; Dennis Carroll; Hermsen, Elizabeth D; Erbelding, Emily (NIH/NIAID) [E]; FUKUDA, Keiji; 'Jay Siegel'; Jernigan, Daniel B. (CDC/OID/NCIRD); ikmazet@ucdavis.edu; Karen Grosser (REDACTED); Kent Kester; Kumanan Rasanathan (REDACTED); Peter Daszak; 'Peter Sands'; Suerie Moon

Cc: Ogawa, V. Ayano; Tran, Thu Anh; Joanna Ong

Subject: LAST PLANNING CALL - PLEASE REVIEW ATTACHED WORKSHOP AGENDA

Importance: High

-

EXTERNAL EMAIL – Use caution with any links or file attachments.

Dear Planning Committee Members,

-

We appreciate all the feedback we received during our second planning call and via email. Based on the input you provided, we have made a number of changes to the structure of the sessions and have started the invitation process for speakers. Please note that we still need suggestions for alternative speakers as some of those we have invited might not be available to attend. Also, we have not finalized the speakers for the breakout sessions on the second day so please let us know if you have any suggestions. We plan to send out invitations for that session after our call on **Thursday, September 6 at 6:00 pm (EDT)**. If you are not able to join the call, we welcome your comments via email.

-

Thanks again for all your work on this. We are very excited about the refined version of the agenda and hope to be able to secure most of the speakers soon.

-

Best,

Ceci

-

Cecilia Mundaca Shah, MD, DrPH

Director, Forum on Microbial Threats

Board on Global Health

Health and Medicine Division | Find us at nationalacademies.org/HMD

The National Academies of Sciences, Engineering, and Medicine

500 Fifth Street, NW

Washington, DC 20001

Phone: 202 334 2622

E-mail: cshah@nas.edu

-

-

Notice: This e-mail message, together with any attachments, contains information of Merck & Co., Inc. (2000 Galloping Hill Road, Kenilworth,

New Jersey, USA 07033), and/or its affiliates Direct contact information for affiliates is available at <http://www.merck.com/contact/contacts.html>) that may be confidential, proprietary copyrighted and/or legally privileged. It is intended solely for the use of the individual or entity named on this message. If you are not the intended recipient, and have received this message in error, please notify us immediately by reply e-mail and then delete it from your system.

From: "Alison Andre" <andre@ecohealthalliance.org>
Sent: 11/08/2018 6:45:04 AM (-08:00)
To: "Jonna Mazet" <jkmazet@ucdavis.edu>
Cc: "Peter Daszak" <daszak@ecohealthalliance.org>; [REDACTED] "Brooke Genovese" <bgenovese@ucdavis.edu>
Subject: Re: ABSTRACTS: 2019 GHS Conference, Sydney, Australia, June 18-20, 2019

Dear Jonna,

Peter is in Boston at the moment but thinks the abstract looks great and is happy to be a coauthor.

Best,
Alison

Alison Andre
Executive Assistant to the President

EcoHealth Alliance
460 West 34th Street – 17th floor
New York, NY 10001

1.212.380.4462 (direct)

1.212.380.4465 (fax)

www.ecohealthalliance.org

EcoHealth Alliance leads cutting-edge research into the critical connections between human and wildlife health and delicate ecosystems. With this science we develop solutions that prevent pandemics and promote conservation.

From: Jonna Mazet
Sent: Saturday, November 3, 2018 6:10:35 PM (UTC-05:00) Eastern Time (US & Canada)
To: AOTR/Grant Manager Andrew Clements; Christine Kreuder Johnson; Tracey Goldstein; Woutrina Smith; sja2127@cumc.columbia.edu; Peter Daszak; Leilani Francisco; David J Wolking; Brian Bird; Elizabeth Leasure; William B. Karesh; Karen Saylor; Suzan Murray; Amanda Fine
Cc: Predict inbox; Brooke Genovese; [REDACTED]
Subject: Re: ABSTRACTS: 2019 GHS Conference, Sydney, Australia, June 18-20, 2019

Dear Leads & Andrew,

We've discussed on our calls, so you should already be aware, but Andrew has encouraged a Predict submission to the GHSA conference. I have drafted and attached an abstract for your consideration. Please let me know if you would like to: be a co-author, suggest a co-author (I will add the Predict consortium as a co-author; not sure if they will limit the number), or suggest edits. Unfortunately the abstracts are limited strictly to 200 words and must include the specific headings I've used (I did cheat & shorten them a bit from the abstract guidelines to adhere to the 200 word limit).

If you want to be a co-author, I need to hear from you by Nov 7 to be able to make the submission deadline -- sorry for the short turn-around!

Also, if you are volunteering as a co-author, please suggest a cool title.

Thanks in advance,
Jonna

----- Forwarded message -----

From: **Ekechi, Chinyere (CDC/CGH/DGHP)** <eo6@cdc.gov>

Date: Wed, Oct 31, 2018 at 10:39 AM

Subject: ABSTRACTS: 2019 GHS Conference, Sydney, Australia, June 18-20, 2019

To: Nairobi Global Health Security Agenda Interagency WG <NairobiGHSAWG@state.gov>

Colleagues,

Information sharing.

There is a Call for Abstracts for the **2019 Global Health Security Conference** scheduled to be held **June 18-19, 2019** at the International Convention Centre in Sydney, Australia.

Additional information on the conference themes and format of the abstracts is available on the conference website - <https://www.ghs2019.com/abstracts.php>. The conference deadline for abstract submission is **November 9th, 2018**.

The conference organizers are promoting this meeting as a first of its kind meeting on the topic of GHS that is targeted at partners both in and outside of government. They are requesting abstracts (≤ 200 words) on topics that fit within the following five themes and sub-themes. Abstracts can be submitted for three types of presentations: posters, oral panel presentations, workshops.

1. Health Emergencies: Preparedness & Management

1. Surveillance and outbreak response
2. Health crises & disasters
3. International Health Regulations

2. Emerging Threats & Challenges

1. Antimicrobial resistance
2. Zoonotic pathogens
3. Gain-of-function/deliberate events

3. Partnerships for Global Health Security

1. Global health & the private sector
2. Security sector engagement
3. Civil society participation

4. Governance & Financing for Global Health Security

1. Sustainable financing for global health security
2. Institutional innovation
3. Health system strengthening & resilience

5. New Technologies & Approaches for Global Health Security

1. Biotechnology
2. Medical countermeasures
3. Non-clinical interventions

If you or your partners have ideas that you think would add value to this meeting, please consider submitting an abstract or sharing your ideas.

Best,
Chinyere

Chinyere O. Ekechi

Deputy Director for Programs

Division of Global Health Protection (DGHP)

U.S. Centers for Disease Control and Prevention, Kenya

Mobile: **REDACTED** | Email: cekechi@cdc.gov

www.cdc.gov/globalhealth/countries/kenya

Find us online at [Facebook](#) and [Twitter](#)

From: "Ogawa, V. Ayano" <VOgawa@nas.edu>
Sent: 01/17/2019 9:18:22 AM (-08:00)
To: "Jonna Mazet" <jkmazet@ucdavis.edu>; "daszak@ecohealthalliance.org" <daszak@ecohealthalliance.org>; "dmrizzo@ucdavis.edu" <dmrizzo@ucdavis.edu>; "george.poste@asu.edu" <george.poste@asu.edu>; "mary_wilson@harvard.edu" <mary_wilson@harvard.edu>; "Jennifer.gardy@bccdc.ca" <Jennifer.gardy@bccdc.ca>; "Hughes, James M" <jmhughe@emory.edu>; "Gail Hansen" [REDACTED] "Barton Behravesh, Casey (CDC/OID/NCEZID)" <dlx9@cdc.gov>; "King, Lonnie" <king.1518@osu.edu>; "Anderson, Kevin" <Kevin.Anderson@HQ.DHS.GOV>; "Hermsen, Elizabeth D" <elizabeth.hermsen@merck.com>; "Miller, Sally" <millers.769@osu.edu>
Cc: "Shah, Cecilia" <cshah@nas.edu>; "Tran, Thu Anh" <TTran@nas.edu>; [REDACTED] [REDACTED] "Stephanie Calderone" <Stephanie.Calderone@asu.edu>; "Brooke Genovese" <bgenovese@ucdavis.edu>; "Alison Andre" <andre@ecohealthalliance.org>; "MUMFORD, Elizabeth" <[REDACTED]>
Subject: Next OHAC meeting - Tues Jan 22 @ 12pmET
Attachments: 1.OHAC Mtg 14 Agenda.pdf, 2.OHAC Deliv 2 Workforce timeline .pdf, 3.OHAC Deliv 3 Plants_Food Sec_Climate Change_1.17.docx, 4.Bio of Maureen Lichtveld.pdf, 5.World One Health Congress sidemeetings.pdf

Dear OHAC members,

As a reminder, the next OHAC call will take place on **Tuesday, Jan 22 at 12:00-1:00pm (Eastern Time)**. Please review the attached call materials:

1. *Meeting agenda*
2. *One Health workers deliverable #2 timeline* – This document presents a snapshot of the data analysis and manuscript writing timeline.
3. *Concept outline for deliverable #3 on food security and plant health* – Sally and Dave have put together an initial outline for deliverable #3, and the subcommittee members have provided initial feedback, but we look forward to diving into a deeper discussion with the rest of the OHAC members. Please review this outline and be ready to provide feedback.
4. *Bio of Maureen Lichtveld* – We will discuss if she would be a good addition to the group.
5. *World One Health Congress 2020* – We will discuss if OHAC would like to host a side event in Edinburgh in 2020.

Call-in information:

Toll-free number: [REDACTED]
International: [REDACTED]
Passcode: [REDACTED]

Please let me know if you have any questions. Looking forward to the discussion next week. I hope you have a lovely holiday weekend!

Best regards,
Ayano

V. Ayano Ogawa, S.M.
Program Officer
Board on Global Health | Health and Medicine Division
The National Academies of Sciences, Engineering, and Medicine
500 Fifth Street NW, Office 852
Washington, DC 20001
Phone: 202.334.1349

The National Academies of
SCIENCES • ENGINEERING • MEDICINE

ONE HEALTH ACTION COLLABORATIVE

Deliverable #3

Plant Health, Food Security, Climate Change, and One Health

2020 International Year of Plant Health

Editorial style white paper

Introduction

The UN Declaration on 2020: International Year of Plant Health: why plant health is essential to food security and human and animal health. One Health in 2020: a tripartite concept encompassing human, animal, and plant health in the context of rapidly changing environments. The importance of plant health is being increasingly recognized, and plant health was recently added to the US multi-agency One Health definition.

Definition and general aspects of food security and how plant health fits into the big picture of food security. Two important aspects of food security that relate to microorganisms, plant health, and One Health:

1. food availability- reduction in yield due to infectious plant diseases (also insect pests, weeds, and environment [temperature, water availability, soil nutrients, etc.]). And what reduced yield means in terms of availability to human and animal health.
2. food safety - Contamination of plant products by infectious (e.g., *E. coli*, *Salmonella*, noroviruses, etc.) and non-infectious (e.g., mycotoxin producing fungi) microorganisms. Contamination of food products with pesticides.

General concepts of plant health and the role of the environment in plant disease: disease pyramid. How the environment is changing in ways that directly affect food availability, food safety, and public health.

Well-documented outcomes of climate change – droughts, floods, increasing temps, etc., then a general perspective on how changing climate influences plant pathogen emergence, re-emergence, invasiveness, shifting management practices, crop adaptability /non-adaptability (many staple crops are bred for specific environments and the ability to grow and consume them has important cultural ramifications).

Case studies:

Food safety

Example #1

Mycotoxins- products of certain fungal infections of plants that are toxic to humans and animals. Both acute and chronic (e.g., liver cancer) risks to health of people and livestock. Focus

on aflatoxin but also other mycotoxins. Climate change will affect water availability, humidity, and temperature each of which can increase the likelihood of mycotoxin accumulation. One Health approach is critical through management of many aspects of agriculture. Geographic shifts of impacts.

Example #2

Contamination of produce by infectious human pathogens. Climate change links to changes in water usage and contamination as well as temperature.

Example #3

How use of pesticides changes/increases due to increased disease and pest pressure (resulting from climate change) and role of pesticides in AMR in human and animal pathogens (the azole fungicide-Aspergillosis story would be good; also increased copper use with increasing bacterial diseases). Could mention issues of changing soil microbiome in context of wide contamination with antimicrobial substances.

Food availability

Example #1

Changes in geographic distribution and/or emergence of plant pathogens (focus on bacteria and/or fungi).

Example #2

Changes in distribution and/or density of insect pests and vectors. There are lots of possible examples of emerging vectors and/or vectored pathogens but focus on one or two that cause real hardship, with the food insecurity angle, e.g. maize lethal necrosis in Kenya but there are plenty more. Could include how loss of staple crops due to climate change affects human health.

Conclusions

Identify the most significant gaps in this area and wrap-up including suggestions for mitigation including crop breeding, genome editing, new crop protection products, including biologicals, integrated pest management, extension and outreach, etc.

Response to emerging pathogens, pests – same for human, animal and plant health– slow at first with lots of damage/losses until solutions are found and broadly communicated. Include the importance of funding for rapid response; brief examples could include (soybean rust – economic impact data available), wheat head blight, or possibly coffee rust). Also mention the need for a research agenda.

Special Side Meetings Offer

The 6th World One Health Congress will be the world's premier One Health Congress in 2020 and has a special offer for side meetings for non-commercial organizations and their registered congress delegates.

The actual 6th World One Health Congress is taking place from 15-18 June 2020 in Edinburgh, Scotland, UK. Side meetings can be planned on 14 June 2020 in the run-up to the Congress for an audience ranging from a minimum of 50 to up to 220 registered congress delegates. We have 8 conference halls available in various sizes.

This Special Side Meetings Offer includes:

- Reduced registration fee depending on number of participants
- 1 Conference room rental on June 14 for full or half day
- Complimentary basic AV in the room – multimedia projector, screen and flipchart & pens
- 1 chef's choice coffee break and lunch for participating registered congress delegates
- Early Congress registration for registered participants on spot (badges and Congress materials), avoiding queues on official registration days
- Advice on accommodation, logistics and visa support from Congress organisers

TERMS & CONDITIONS

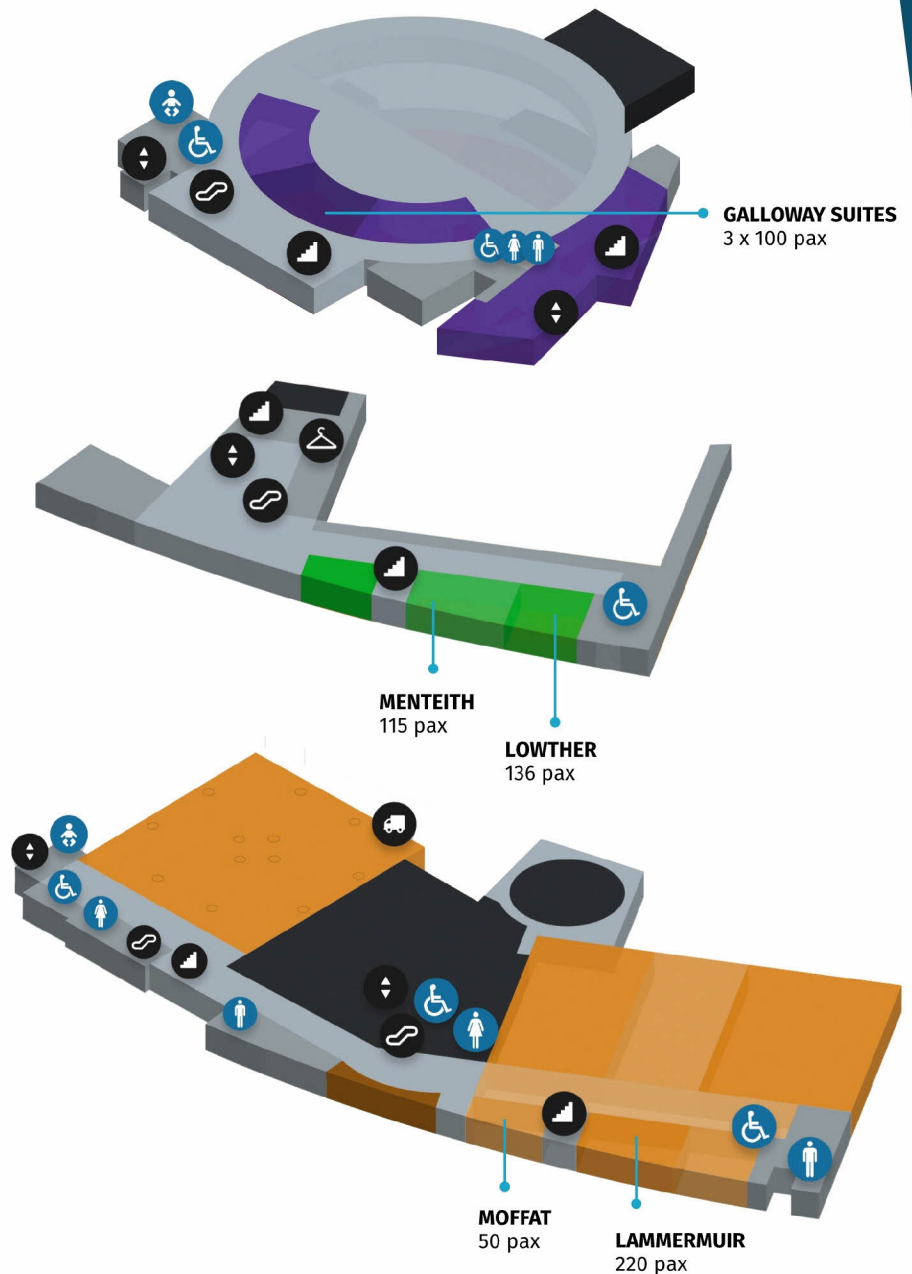
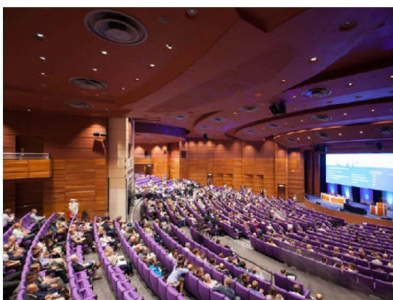
- Side meetings can only be organized by non-commercial organizations for their delegates registered for the congress.
- An invoice for bulk registration for the congress will be sent after confirmation of the side meeting and needs to be paid within one month after confirmation.
- Side meetings need to be booked before April 1st 2020.
- This offer is available on "first come, first served" principle.
- Names of actual congress delegates must be given to the WOHC no later than 25 May 2020.
- All additional catering, equipment and other services need to be ordered and paid separately.
- It is not possible to decrease the number of participants after the agreement is signed. However, names of participants can be replaced up to 7 days before the start date of the 6th World One Health Congress.

THE 6TH WORLD ONE HEALTH CONGRESS ORGANIZERS:



WOHC 2020 The venue

Located in the heart of Scotland's beautiful and vibrant capital city, the Edinburgh International Conference Centre (EICC) is a magnificent multi-purpose venue. It is situated at the west end of the city from where the majority of attractions, hotels and venues can be reached on foot in under 15 minutes. The impressive purpose-built facilities include a series of adaptable auditoria, spacious reception areas and flexible suites, all including very high standard technology.





Maureen Lichtveld, MD, MPH

- Professor and Chair, Freeport McMoran Chair of Environmental Policy
- Director, GROWH Research Consortium; Director, Center for Gulf Coast Environmental Health Research, Leadership and Strategic Initiatives; Associate Director, Population Sciences, Louisiana Cancer Research Consortium
- Population Sciences, Louisiana Cancer Research Consortium

Maureen Lichtveld, a member of the National Academy of Medicine, has more than 35 years environmental public health experience and is chair of department of global environmental health sciences at Tulane University School of Public Health and Tropical Medicine. She is the Freeport McMoran Endowed Chair in environmental policy and director of the Center for Gulf Coast Environmental Health Research, Leadership, and Strategic Initiatives. Her national and global environmental health research examines the cumulative impact of chemical and non-chemical stressors on communities facing environmental health threats, disasters and health disparities. Lichtveld is a member, National Advisory Environmental Health Sciences Council, NIH/ NIEHS; EPA Scientific Advisory Board; NAS Roundtable on Environmental Health Sciences, Research, and Medicine; Health Disparities Subcommittee, CDC; Chair, Editorial Board, American Journal of Public Health; President, Hispanic Serving Health Professions Schools. Other recognitions: Johns Hopkins University Society of Scholars, CDC's Environmental Health Scientist of the Year, Woman of the Year, New Orleans.

ONE HEALTH ACTION COLLABORATIVE (OHAC)

OHAC Deliverable #2 on One Health Workers: *Tentative Timeline*

Phase	Dates	Task	Person Responsible
Phase 1: Submit survey and get clearance from IRB	<i>Completed! (Nov 5, 2018)</i>		
Phase 2: Disseminate survey	<i>Almost Complete! (Nov 12, 2018 – Jan 31, 2019)</i> <ul style="list-style-type: none"> • Disseminated survey to over 550 contacts • Received responses across 58 countries (stats as of Jan 14): <ul style="list-style-type: none"> ○ Students: 141 ○ Graduates: 285 ○ Workers: 517 ○ Employers: 193 		OHAC staff, subcommittee members, and OHAC members
Phase 3: Analyze findings <i>(In Progress)</i>	Jan 22, 2019	<u>OHAC Call #14</u> : Discussion on analysis methods and possible challenges that may arise	OHAC members
	End of Jan – Mid-March 2019	Analyze findings, and put together preliminary outline of manuscript	Eri/Jonna/Subcommittee
	March 22, 2019	<u>OHAC Call #15</u> : Provide feedback on preliminary outline and decide on target publication	OHAC members
Phase 4: Develop manuscript	March – May, 2019	Write extended outline/first draft of manuscript	Eri/Jonna/Subcommittee
	May 14, 2019	<u>OHAC Call #16</u> : Provide feedback on extended outline/first draft of manuscript	OHAC members
	Mid-May – June	Incorporate feedback and complete first/second draft	Eri/Jonna/Subcommittee
	June 11, 2019	<u>OHAC Meeting #17</u> (date/time TBD): Discussion on manuscript draft	OHAC and FMT members

The National Academies of
SCIENCES • ENGINEERING • MEDICINE

FORUM ON MICROBIAL THREATS

ONE HEALTH ACTION COLLABORATIVE (OHAC) MEETING #14

Tuesday, January 22, 2019

12:00-1:00pm (ET)

PARTICIPANTS

MEMBERS:

Jonna Mazet, Casey Barton Behravesh, Peter Daszak, Jennifer Gardy, Gail Hansen, Elizabeth Hermsen, Lonnie King, Sally Miller, Dave Rizzo, and Mary Wilson (*Tentative/Absent*: Kevin Anderson, Jim Hughes, Liz Mumford, George Poste)

STAFF:

Ayano Ogawa, Ceci Mundaca Shah, and Anh Tran (National Academies); [REDACTED] (UC Davis)

ATTACHMENTS

- Timeline for One Health workers deliverable #2
- Concept outline for deliverable #3 on food security and plant health
- Bio of Maureen Lichtveld
- World One Health Congress 2020 side event brochure

AGENDA ITEMS

1. Welcome (Ayano)
 - Quick recap of 2018
2. One Health workers deliverable #2 (Jonna and [REDACTED])
 - Survey update and closing date – end of the month? (*see attached timeline*)
 - Discussion on analysis plan and potential challenges
3. U.S. and One Health (Casey)
 - Brief update on Vet Student Day and other activities to advance One Health within the U.S. gov't
4. Food security and One Health deliverable #3 (Sally and Dave)
 - Overview and discussion of initial concept (*see attached*)
 - Subcommittee – invite any external stakeholders? (current members include Sally, Dave, Jonna, Gail, Jim, Mary, and [REDACTED])
 - Next steps: research and extended outline
5. OHAC vision for 2019 and beyond (Jonna)
 - New members to fill missing expertise: Maureen Lichtveld, Chair of Environmental Health, Tulane University (*see bio*)
 - Discussion on organizing a potential side event at World One Health Congress 2020, Edinburgh (*see attached*)
 - Discussion on overall direction of OHAC
6. Other brief updates (Ceci)
 - Next Forum workshop – “Breaking down the silos: The Convergence of Infectious Diseases and Noncommunicable Diseases,” June 11-12, 2019, location TBD
7. Next steps and action items (Ayano)
 - Next call #15: Thursday, March 21 at 2-3pm

From: Peter Daszak <daszak@ecohealthalliance.org>
To: Jonna Mazet <jkmazet@ucdavis.edu>
CC: William B. Karesh <karesh@ecohealthalliance.org>; Evelyn Luciano
<luciano@ecohealthalliance.org>
Sent: 1/25/2019 3:17:22 PM
Subject: Overall draft budget for extension - including One Health Policy

Here's a draft budget, with the One Health Policy work included, so we can see how they want to proceed.

Cheers,

Peter

Peter Daszak
President

EcoHealth Alliance
460 West 34th Street – 17th Floor
New York, NY 10001

Tel. +1 212-380-4474
Website: www.ecohealthalliance.org
Twitter: [@PeterDaszak](https://twitter.com/PeterDaszak)

EcoHealth Alliance leads cutting-edge research into the critical connections between human and wildlife health and delicate ecosystems. With this science we develop solutions that prevent pandemics and promote conservation.

From: Peter Daszak <daszak@ecohealthalliance.org>
To: Jonna Mazet <jkmazet@ucdavis.edu>
CC: William B. Karesh <karesh@ecohealthalliance.org>; Evelyn Luciano <luciano@ecohealthalliance.org>; Elizabeth Leasure <ealeasure@ucdavis.edu>
Sent: 1/29/2019 8:41:55 AM
Subject: RE: Overall draft budget for extension - including One Health Policy

Thanks Jonna – really good to hear, we’re going to need every \$ we can find...

Cheers,

Peter

Peter Daszak
President

EcoHealth Alliance
460 West 34th Street – 17th Floor
New York, NY 10001

Tel. +1 212-380-4474
Website: www.ecohealthalliance.org
Twitter: [@PeterDaszak](https://twitter.com/PeterDaszak)

EcoHealth Alliance leads cutting-edge research into the critical connections between human and wildlife health and delicate ecosystems. With this science we develop solutions that prevent pandemics and promote conservation.

From: Jonna Mazet [mailto:jkmazet@ucdavis.edu]
Sent: Monday, January 28, 2019 6:26 PM
To: Peter Daszak
Cc: William B. Karesh; Evelyn Luciano; Elizabeth Leasure
Subject: Re: Overall draft budget for extension - including One Health Policy

Great -- I have a working budget.

Thanks very much, especially for the updates on salaries. Important thing at the moment is to get the funding up to the ceiling encumbered to avoid a gap in Yr 5 money, as they're trying to do one more obligation up to the ceiling that gets us the Yr 5 & Yr 6 money now.

Your numbers at 12 months, sans the policy workshops, make us close to the right numbers. I kept placeholders for some salary for Billy, Catherine & Carlos, but no Ellen. I'm just going to bury them in the overall plan & cross our fingers. Hopefully they'll also build us in to whatever extra funding they have for policy workshops in other budgets.

I still have to cut about \$175K overall (not from EHA) to get us to the ceiling budget, but I'll try to protect the salaries across the board as much as I can.

Fingers crossed,
J

On Mon, Jan 28, 2019 at 1:16 PM Peter Daszak <daszak@ecohealthalliance.org> wrote:
Yes – that’s right – we just aren’t sure what the current thinking is, so leave it to you Jonna,

Cheers,

Peter

Peter Daszak

President

EcoHealth Alliance
460 West 34th Street – 17th Floor
New York, NY 10001

Tel. +1 212-380-4474
Website: www.ecohealthalliance.org
Twitter: [@PeterDaszak](https://twitter.com/PeterDaszak)

EcoHealth Alliance leads cutting-edge research into the critical connections between human and wildlife health and delicate ecosystems. With this science we develop solutions that prevent pandemics and promote conservation.

From: Jonna Mazet [mailto:jkmazet@ucdavis.edu]
Sent: Monday, January 28, 2019 3:43 PM
To: Peter Daszak
Cc: William B. Karesh; Evelyn Luciano
Subject: Re: Overall draft budget for extension - including One Health Policy

Ah, maybe that was when Andrew said we could have a 12-18month extension, but there was only ever enough money for 12.

If that's it, no need to respond.

Thanks,

J

On Fri, Jan 25, 2019 at 6:51 PM Jonna Mazet <jkmazet@ucdavis.edu> wrote:
Quick question -- why 18 months?
They haven't mentioned going past September 2020.
I can adjust, just wondering on the reason,
J

On Fri, Jan 25, 2019 at 6:46 PM Jonna Mazet <jkmazet@ucdavis.edu> wrote:
Thanks -- I'll take a look.
Have a nice weekend,
J

On Fri, Jan 25, 2019 at 3:17 PM Peter Daszak <daszak@ecohealthalliance.org> wrote:
Here's a draft budget, with the One Health Policy work included, so we can see how they want to proceed.

Cheers,

Peter

Peter Daszak
President

EcoHealth Alliance
460 West 34th Street – 17th Floor
New York, NY 10001

Tel. +1 212-380-4474
Website: www.ecohealthalliance.org
Twitter: [@PeterDaszak](https://twitter.com/PeterDaszak)

EcoHealth Alliance leads cutting-edge research into the critical connections between human and wildlife health and delicate ecosystems. With this science we develop solutions that prevent pandemics and promote conservation.

From: onehealthnextgen-request@ucdavis.edu on behalf of "alexandra zuber" <alexandrazuber@atahealthstrategies.com>
Sent: 04/24/2020 4:04:39 PM (-07:00)
To: "margaritamartins@berkeley.edu" <margaritamartins@berkeley.edu>; "Amy J Armistad" <AArmistad@salud.unm.edu>; "oromero@haas.berkeley.edu" <oromero@haas.berkeley.edu>; "Elizabeth Leasure" <ealeasure@ucdavis.edu>; "f.castillo@berkeley.edu" <f.castillo@berkeley.edu>; "Corina Grigorescu Monagin" <cgmonagin@ucdavis.edu>; "Sam Halabi" <sfh9@georgetown.edu>; "Matthew Blake" <mblake@ucdavis.edu>; "daszak@ecohealthalliance.org" <daszak@ecohealthalliance.org>; "Rabkin, Miriam" <mr84@cumc.columbia.edu>; "oladele.ogunseitani@uci.edu" <oladele.ogunseitani@uci.edu>; "Jennifer K Lane" <jklane@ucdavis.edu>; "wasmith@ucdavis.edu" <wasmith@ucdavis.edu>; "Bridgette Phebean Smith" <brpsmith@ucdavis.edu>; "David John Wolking" <djwolking@ucdavis.edu>; "Terra Kelly" <trkelly@ucdavis.edu>; "Tracey Goldstein" <tgoldstein@ucdavis.edu>; "William B. Karesh" <karesh@ecohealthalliance.org>
Cc: "onehealthnextgen Sympa List" <onehealthnextgen@ucdavis.edu>
Subject: [onehealthnextgen] Agenda for Objective 3 Work Group Meeting
Attachments: Draft Semi Annual Report (April).pdf

Hi all,

On Monday we have our monthly working group meeting for Objective 3.

Here is the proposed agenda (please add or comment as needed):

Updates (15 min):

- AFROHUN - Virtual Workshops & Key Priorities Identified to Date
 - See the annotated PPTs for 4 virtual workshops accomplished in April here in the [Objective 3 Box](#)
- SEAOHUN- Benchmarking & Workshop Timeline
- MEL draft submitted for Objective 3 (see first full cross-objective draft attached)

Discussion (45 min): Where do we go from here?

- How do we want to provide technical support for new AFROHUN organizational capacity priorities? What are specific activities we can suggest in the action planning session next week with AFROHUN for Y1 and Y2?
 - Review existing global team work plan items for Q3 and Q4
 - E.g. ECHO OLS, partnership development strategies, sustainability case studies, stakeholder mapping
 - Discuss new ideas for technical support
 - Partnership development/ resource mobilization
 - Stakeholder mapping, grant-writing
 - Sub-award management
 - Board development
 - Branding
 - Indirect cost documentation
- How do we conduct the business plan workshop if we do not have an in-person workshop in Y1?

Looking very forward,
Alexandra

Alexandra Zuber, MPP, DrPH
Founder and CEO, Ata Health Strategies, LLC
Email: alexandrazuber@atahealthstrategies.com
Phone: +1 (617) 680-3950
LinkedIn: [alexandrazuber/](https://www.linkedin.com/in/alexandrazuber/)
Website: www.atahealthstrategies.com
Twitter: [@alexandrazuber](https://twitter.com/alexandrazuber)

OBJECTIVE ONE

TRAINING & EMPOWERMENT

Develop, deliver, and institutionalize training and educational offerings in alignment with prioritized One Health core competencies and technical skills

STRATEGIES

- 1.1 One Health Training Content Curation and Development
- 1.2 One Health Academy
- 1.3 One Health Empowerment and Career Development
- 1.4 One Health Experiential Learning
- 1.5 One Health Policy Engagement

MAJOR ACTIVITIES (October 2019–March 2020)

- **GL Activity 1.1.1** Curate and update existing One Health competencies, learning objectives, evaluation tools, and training materials
- **GL Activity 1.2.1** Establish an open One Health Academy online structure to house existing and new One Health curricula
- **GL Activity 1.2.2** Launch first regional ECHO Virtual Community of Practice (VcoP) for One Health Faculty and In-service Professionals

LONG-TERM OUTCOMES/IMPACT

- Increased proficiency in OH competencies for pre-service and in-service professionals
- Well trained and technically proficient workforce pipeline
- Active and engaged One Health networks that can be activated during health emergencies

MEL INDICATORS

- **1.1:** Total # of existing and new OH training content and delivery modes, curated, updated and implemented
- **1.2:** Total # of individuals trained
- **1.3:** Total # of SOHICs established and continuing
- **1.4:** Total # of products resulting from small grants awarded

JEE 2.0 TECHNICAL AREA: HUMAN RESOURCES

- **D.4.2** Human resources are available to effectively implement IHR
- **D.4.3** In-service trainings are available

OBJECTIVE ONE

TRAINING & EMPOWERMENT

IMPACT

Objective 1 focuses on increasing proficiency in One Health competencies for pre-service and in-service professionals, establishing a well-trained and technically proficient workforce pipeline, and engaging One Health Networks that can be activated during health emergencies.

ACTIVITY UPDATE

GL Activity 1.1.1 Curate and update existing One Health competencies, learning objectives, evaluation tools, and training modules.

The goal of this activity is for the Networks to have refined One Health curricula and training programs based on core competencies and in-demand skills. By targeting inclusion of One Health core competencies, OHW-NG can ensure that the Networks and therefore the countries and regions, have a competently trained and technically proficient One Health workforce pipeline. This also leads to One Health graduates/trainees being placed in targeted sectors that address gaps in the workforce as identified by the JEE. In this respect, the OHW-NG Objective 1 working group made significant progress in activity GL 1.1.1.

The OHW-NG appreciates the 10 years of prior Network activities with the previous Consortium. In order to build on these experiences, identify and understand gaps, many of the first activities that the OHW-NG undertook were to explore existing data. The Objective 1 working group worked primarily with the Secretariats on this exercise but also reached out to country-partners and USAID to ensure that all activities and products developed in the previous Consortium project are accounted for in full.

Survey instruments were developed and distributed to the Secretariat and Network country partners to begin the content curation exercise, the first step in the process of curating and updating materials. A glossary of training-related terms and phrases was produced and a short instructional video was developed to frame the curation project and to motivate data collection. Global Consortium partners initiated virtual working sessions with the Network partners to aid in the curation exercise. For AFROHUN, a virtual 2-hour orientation was held for 20 country managers, faculty point persons, and activity leads across 8 countries. With SEAOHUN, four national coordinating officers are leading the curation exercise in member countries. As of this report, the project has identified One Health-based regular courses, field activities, and degrees offered at universities in Rwanda, Tanzania, and Uganda and data continues to be collated at the Global level for review.

NEXT STEPS

The Objective 1 working group will review data collected from the curation exercise survey instruments in order to assess materials developed and to identify and address the gaps in current training programs. By addressing the identified gaps, OHW-NG will be able to assist the Networks in developing a comprehensible accessible curriculum for an accreditable certificate in One Health. Network University partners will then be able to offer trainings and accredited One Health programs tailored to address workforce and health security gaps in the country and region.

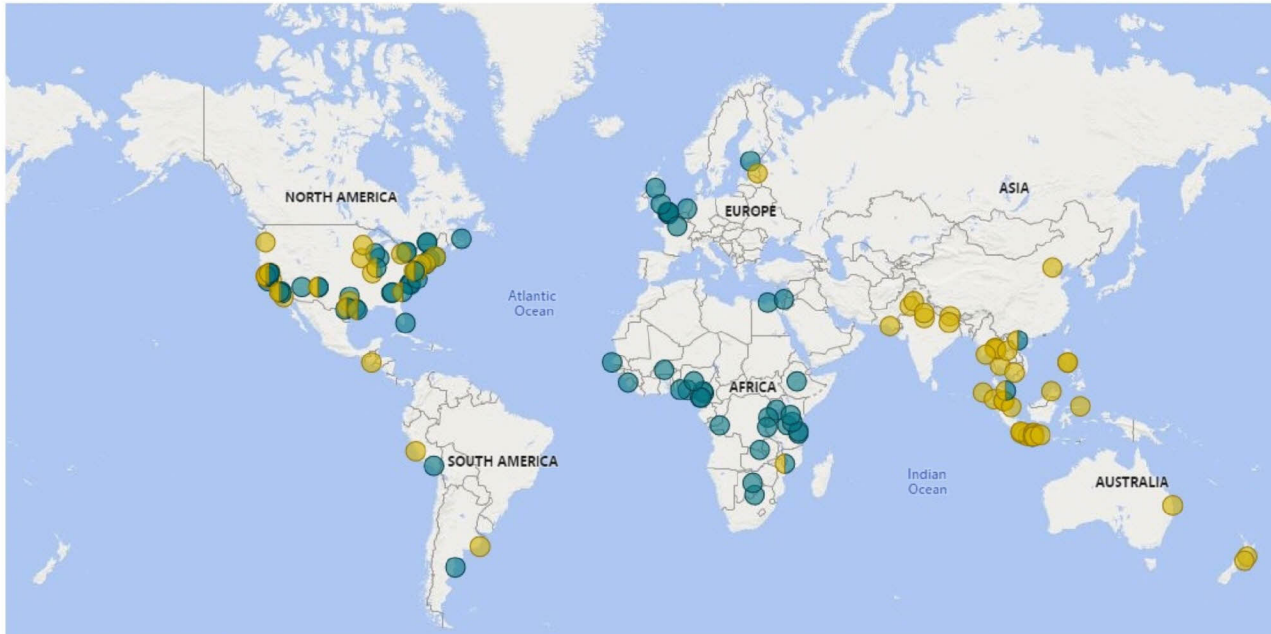
GL Activity 1.2.2 As a component of the One Health Academy, launch first regional ECHO Virtual Community of Practice (VCoP) for One Health faculty and in-service professionals.

One of the prioritized thematic areas for this project year is to address hot topic One Health issues. OHW-NG planned to address this through activities targeting curation and revision of training materials (GL 1.1.1), as well as through implementation of the ECHO virtual community of practice sessions that can bring learners together from around the globe in a synchronous or asynchronous manner. The ECHO learning platform is an excellent format for quick dissemination of information across a multi-country community of practice. With the majority of the world working remotely due to COVID-19, these types of virtual platforms become increasingly important. Initial discussions with both AFROHUN and SEAOHUN identified the hot topic areas of antimicrobial resistance, disease transmission and emergence, and organizational sustainability, but in response to the SARS CoV 2 pandemic, the OHW-NG Consortium organized and launched the first regional ECHO COVID-19 events for both AFROHUN and SEAOHUN on March 23rd, 2020. The two events featured international and regional experts on pandemic emergencies in the context of the One Health framework, engaging more than 900 participants from 54 countries and included French translation.

The COVID-19 pandemic was an exemplary opportunity to launch the OHW-NG Virtual Communities of Practice. The sessions were interactive with opportunities for participants to ask questions, and to engage in side conversations through the chat feature of Zoom. 84 participants took advantage of the opportunity to receive instant Continuing Education Credits (e.g. Continuing Medical Education; CME) offered to all who fully attended the ECHO-COVID-19 events.



Session ● AFROHUN ● SEAOHUN



This launch was the beginning of a series of ECHO sessions targeting COVID-19 topics that will build on the Virtual Community of Practice (VCoP) that was initiated on March 23rd. This COVID-19 special series will continue for several months on a bi-weekly basis and feature topics such as community surveillance, gender and psychosocial aspects of COVID-19, diagnostic testing, immunity issues and interventions, and One Health approaches addressing COVID-19 origins and spillover. These sessions target hot topics as identified by the OHW-NG Consortium and University Network partners as well as align with competency-based One Health curriculum. The sessions are recorded, and the videos and powerpoint presentations will be part of the content available for dissemination through the One Health Academy.

NEXT STEPS

In coordination with the Network University partners, the Objective 1 working group is developing sessions for the Virtual Communities of Practice moving beyond the COVID-19 pandemic, including antimicrobial resistance and antibiotics stewardship. In addition, the Network Secretariats will participate in ECHO virtual immersion training informing them on how to design and implement ECHO platform events. This will allow both SEAOHUN and AFROHUN to develop and implement VCoPs themselves, a critical activity in developing organizational capacity and serving as regional leaders for the University Network partners.

A Special Focus on Faculty & Students

as the backbone and lifeblood of the project, motivated faculty and students are a key to success in building momentum for One Health University Networks around the world. As we move together into the OHW-NG phase of supporting AFROHUN and SEAOHUN to be leaders in building a One Health workforce, catalyzing positive change and paying special attention to the needs of faculty and students is a priority. Within this theme range, the OHW-NG Consortium has begun to engage with Student One Health Clubs. As part of the One Health Academy initiatives (GL 1.2.1), the Objective 1 workgroup is supporting the finalization of a publication guide for faculty, and a guide for Student One Health Innovation (SOHIC) clubs.

OBJECTIVE TWO

ONE HEALTH WORKFORCE PLANNING & MANAGEMENT

Establish systems, policies, and procedures to assess and track multisectoral workforce placement, performance, and impact

STRATEGIES

2.1 Establish a regional Knowledge Management System

2.2 Develop a standardized One Health competency assessment toolkit

2.3 Engage One Health coordinating bodies to support workforce assessment and tracking, including inclusion of OH competencies in Continuing Professional Development certification requirements using a capability maturity model

MAJOR ACTIVITIES (October 2019–March 2020)

- **GL Activity 2.1.1** Conduct a Knowledge Management System (KMS) needs assessment, evaluate existing OHUN websites, review existing KMS, and develop recommendations for design and development of a regional KMS for each network inclusive of its member countries
- **GL Activity 2.2.1** Conduct an in-depth review of existing competencies, learning objectives and assessment tools; identify gaps and/or inconsistencies; add/develop learning objectives where they are missing; and match existing evaluation strategies to each learning objective
- **GL Activity 2.2.2** Review existing data and fill gaps to map national and regional One Health coordinating bodies, with a special focus on: mapping coordination of OH workforce activities; identifying countries/regions with the strongest multisectoral partnerships for OHW planning and management and distilling best practices; and identifying countries/regions with opportunities to enhance OHW coordination

LONG-TERM OUTCOMES/IMPACT

- Improved quality and increased use of workforce and assessment data for decision making
- Increased placement of One Health graduates in targeted sectors
- Improved multi-sectoral workforce strategies within participating countries

MEL INDICATORS

- **2.1:** % of universities using toolkit to strategically integrate One Health competency assessments into activities
- **2.2:** # of countries in which OHUN universities participate in national-level OHW processes

JEE 2.0 TECHNICAL AREA: HUMAN RESOURCES

- **D.4.1** An up-to-date multisectoral workforce strategy is in place

OBJECTIVE TWO

ONE HEALTH WORKFORCE PLANNING & MANAGEMENT

ACTIVITY UPDATE

Objective 2 targets strengthening systems and procedures within the AFROHUN and SEAOHUN Secretariat to assess and track their multi-sectoral workforce placement, performance, and impact. Activities are focusing on three areas at this time:

- Establishing a Knowledge Management System (KMS) for each Network Secretariat that will improve their internal operations and that will allow them to pull in external datasets on workforce monitoring and assessment to provide insights and programmatic shifts that, over time, can better equip key sectors with intelligence on human resources available for health emergencies and routine decision making;
- Developing a standardized OH competency assessment toolkit using a capability maturity model that empowers the Network Secretariats to evaluate knowledge and competencies of individuals, to better inform decision making and strategies for human resource and health workforce strengthening;
- Evaluating the regional landscape of One Health coordinating bodies by working across the OHW-NG Global Team, Secretariats, and Country Chapters/OHUNs, with the goal of improving multi-sectoral workforce strategies and engagement over time.

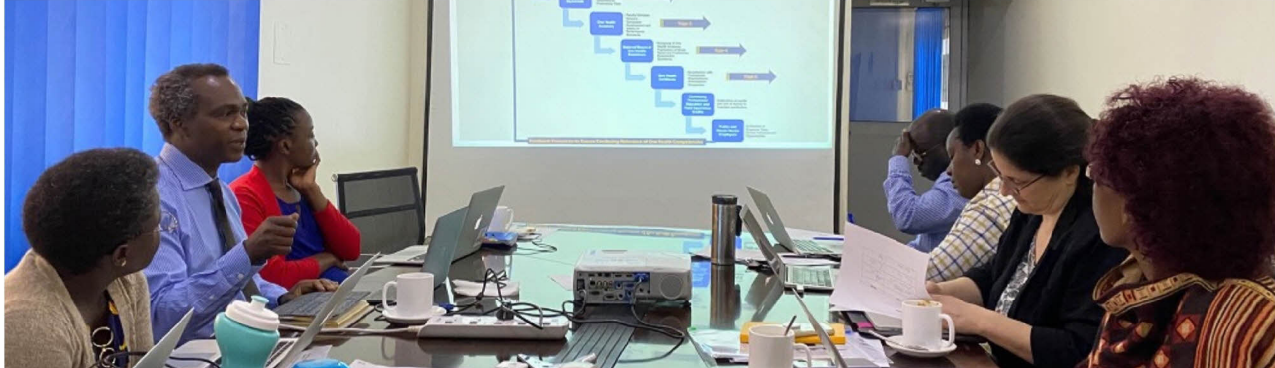
GL Activity 2.1.1 Conduct a Knowledge Management System (KMS) needs assessment, evaluate existing OHUN websites, review existing KMS, and develop recommendations for design and development of a regional KMS for each Network inclusive of its member countries.

Following initial orientation and brainstorming via face to face meetings (Fig. 1) and zoom calls with the Secretariats, the Objective 2 working group developed a three-stage KMS needs assessment strategy including a rapid Secretariat self-assessment, key informant interviews (KII) and focus group discussions (FGD) with Secretariat staff, and KII with country-level stakeholders. AFROHUN completed the self-assessment in late March 2020. The KII and FGD with AFROHUN Secretariat members are planned for mid-April 2020 and the KII with AFROHUN country-level stakeholders are planned for May 2020. At the request of the SEAOHUN Secretariat, the SEAOHUN KMS needs assessment has been delayed due to startup phase of the project.

NEXT STEPS

The Objective 2 team will continue the AFROHUN KMS needs assessment, with the goal of completing data collection, synthesizing results and making recommendations by early Q4. Coordination with SEAOHUN Secretariat will dictate the timeline for their KMS needs assessment and follow on tasks.

FIGURE 1. AFROHUN meeting in February 2020



GL Activity 2.2.1 Conduct an in-depth review of existing competencies, learning objectives, and assessment tools; identify gaps and/or inconsistencies; add/develop learning objectives where they are missing; and match existing evaluation strategies to each learning objective.

The Objective 2 working group has launched this activity and is prioritizing two domains for Year 1: gender and outbreak response. The in-depth review and framework for the first two domains will be completed in April 2020 for further review by the Secretariats. Questions on competency frameworks and assessment tools were included in the Objective 1 curation survey distributed in March 2020 and preliminary data are expected in late April or early May 2020. A more detailed survey instrument to scan for assessment tools has been developed, and will be shared with respondents for completion.

NEXT STEPS

The Objective 2 working group will analyze relevant data from the Objective 1 curation project and circulate the more detailed needs assessment survey. The working group will also continue to develop the framework and competency assessment tool review. The figure below shows an example competency assessment tool concept using capability staging.

FIGURE 2: Illustrative Capability Staging

	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6
	Incomplete understanding of essential concepts to complete function	Understanding of essential concepts to complete function	Successfully completes function in simulation setting	Successfully completes function in professional setting*	Successfully completes function in complex simulation	Successfully completes function in complex professional setting
Infection prevention & control	Limited understanding of the fundamental concepts of IPC	Basic understanding of the fundamental concepts of IPC	Ability to apply standard precautions in simulated practice	Ability to apply standard precautions in clinical practice	Ability to apply transmission-based isolation techniques in simulated practice	Ability to apply transmission-based isolation techniques in clinical practice

* Professional settings include but are not limited to clinical, research, public health, and environmental health

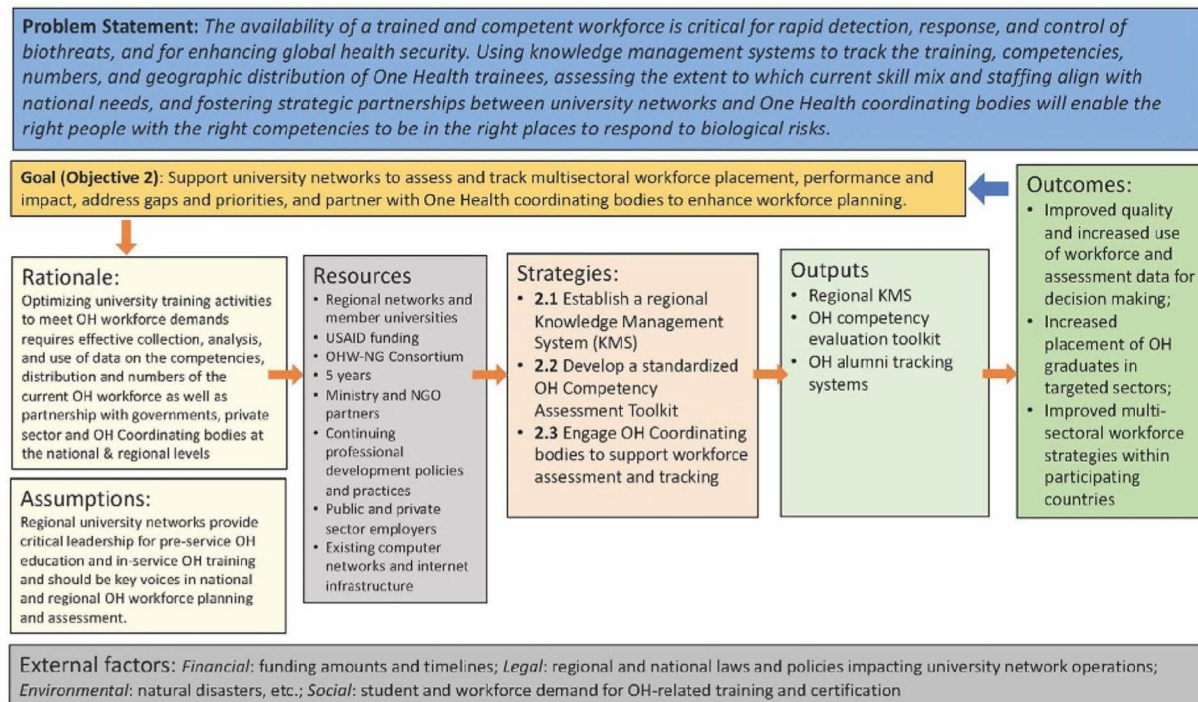
GL Activity 2.3.1 Review existing data and fill gaps to map national and regional One Health coordinating bodies, with a special focus on: mapping coordination of OH workforce activities; identifying countries/regions with the strongest multisectoral partnerships for OHW planning and management and distilling best practices; and identifying countries/regions with opportunities to enhance OHW coordination.

Activities have focused on developing an optimal approach for information-gathering to assess needs and opportunities for OHUN Secretariats and participating universities to liaise with national and regional OH coordination bodies as part of the Objective 2 logic model implementation (Fig. 3). A document review was conducted, including strategic frameworks and plans (e.g., OH platform governance manuals), health security assessments (e.g., Joint External Evaluations) and country-specific planning and implementation reports. To validate and expand this scan, a data collection tool was developed to obtain information from universities, government, and professional and licensing associations. This will be implemented as an online survey.

Next Steps

Distribution of the online survey to regional and national stakeholders.

FIGURE 3: Logic Model



GL Activity 2.3.2 Engage with One Health coordinating bodies to identify regions/countries in which university Network needs and priorities align with the need to enhance OHW coordination; support interested Networks/universities to conduct a situational analysis and determine how best to support their local OHW coordinating bodies; share relevant best practices and tools.

These activities will be guided by the results of the document review and stakeholder survey. We are also actively liaising with intergovernmental partners (e.g. World Bank, West African Health Organization) on an ongoing basis to promote programmatic synergies.

OBJECTIVE THREE

ORGANIZATIONAL SUSTAINABILITY

Strengthen the functional and organizational capacities of the regional One Health university networks to ensure they are capable of acquiring and managing direct donor funding

STRATEGIES

- 3.1 Assessment, benchmarking, and strategic planning
- 3.2 Build network organizational capacities
- 3.3 Develop new and diversified partnerships with a five year vision

MAJOR ACTIVITIES (October 2019–March 2020)

- **GL Activity 3.1.1** Evaluate existing assessments, audit performance, and strategic plans to benchmark the previous status and the process for meeting NUPAS criteria
- **GL Activity 3.1.2** Conduct workshops and activities to establish new benchmarks and update existing business plans with a five-year vision

LONG-TERM OUTCOMES/IMPACT

- Direct recipient of external donor funding
- New and diverse funding partners and enhanced ability to identify and develop partnerships
- Model identified for creating ongoing network revenue for self-reliance

MEL INDICATORS

- **3.1:** Evidence of measurable improvement of key capacities for organizational sustainability
- **3.2:** # of direct funding awards received by the Networks
- **3.3:** # of new and diverse partnerships established for the networks

JEE 2.0 TECHNICAL AREA: HUMAN RESOURCES

- **D.4.1** An up-to-date multisectoral workforce strategy is in place

OBJECTIVE THREE

IMPACT

Objective 3 builds organizational sustainability for the regional One Health University Networks by strengthening their capacity to demonstrate that they can acquire and manage direct donor funding. Activities within Objective 3 lead to the Networks being empowered to generate revenue for sustained operation, as well as opening up opportunities for new and diverse funding partners for long-term viability.

ACTIVITY UPDATE

GL Activity 3.1.1 Evaluate existing assessments, audit performance, and strategic plans to benchmark the previous status and proceed toward meeting NUPAS criteria.

A key priority for OHW-NG in Year 1 is to assess AFROHUN's and SEAOHUN's present organizational capabilities and to help them to design business and strategic plans for addressing any deficiencies in these required standards. There are four key benchmarking assessments associated with this activity: the NUPAS, an international audit, stakeholder mapping, and the OCA tool. In addition, a SWOT (strengths, weaknesses, opportunities, and threats) analysis will be utilized to help determine partner engagement strategies and assess organizational sustainability.

NUPAS

The OHW-NG global team successfully conducted a NUPAS assessment of AFROHUN, which included an extensive desk review of organizational documents and virtual site visits with key Secretariat staff in the form of 1-2 hour videoconferences. The findings of these assessments were presented, and priorities for capacity building in Year 1 were identified in a 2.5 hour virtual workshop between the full technical team of each Secretariat, select Objective 3 staff from the OHW-NG global team, OHW-NG Consortium leadership, and USAID headquarters. This process is presently underway in SEAOHUN and will be completed in May 2020.

Priority areas for capacity building identified through the NUPAS:

- Diversified sources of funding
- Sub-award management policy
- Legal corporate/entity registrations in countries where AFROHUN undertakes activities
- Indirect cost understanding and utilization

International Audit

The global team also reviewed the independent audits conducted for each Secretariat and determined that a repeat international audit would not be necessary, given the existing audits covered the same objectives and found no deficiencies.

Stakeholder Mapping

The global team completed the USAID stakeholder mapping tool with AFROHUN and will expand upon this exercise later this year. The SEAOHUN Secretariat staff will complete this exercise in Q3.

OCA

The global team successfully facilitated AFROHUN's self-assessment on the USAID OCA tool, including hosting a 2.5 hour virtual workshop led by AFROHUN to present findings and jointly determine priority capacity-building areas. This process also established a baseline set of scores against which progress will be measured over the five-year initiative.

Priority capacity-building areas identified by the OCA:

- Diversified funding and finance strategy – financial sustainability
- Resource mobilization
- Sub-grant management policies and procedures
- Succession planning
- Communication strategy
- Cost-sharing plan and procedures
- Standards for service delivery

SWOT

The Objective 3 working group engaged in a SWOT (Strengths, Weaknesses, Opportunities, and Threats) analysis with AFROHUN and SEAOHUN to assess organizational sustainability. These assessments included Zoom-based interviews with Secretariat staff and Board members and Zoom-based focus group discussions with country representatives. The SWOT for AFROHUN has been completed, and the SWOT analysis for SEAOHUN is underway and will be completed in May 2020.

Approximately 27 staff attended each of three virtual workshops held related to the SWOT, NUPAS, and OCA. The workshops each lasted 2.5 hours and utilized many interactive features to facilitate dialogue and priority-setting on each tool. The next workshops, planned for April 29, 2020 (AFROHUN) and May 25, 2020 (SEAOHUN), will outline concrete action steps for Year 1 and beyond to build critical organizational capabilities in each network.

GL Activity 3.1.2 Conduct workshops and activities to establish new benchmarks and update existing business plans with a five-year vision.

OHW-NG successfully planned two workshops entitled “Business Planning Workshops for Organizational Sustainability” to take place at each Secretariat office in March and April 2020. The objective for each was to formulate the vision, strategy, and tactics required to draft the business plan for each network. However, due to COVID-19, these workshops were postponed. OHW-NG quickly pivoted and facilitated 5 “virtual workshops” with AFROHUN to enable discussion on the benchmarking assessments and to establish common priorities for capacity-building. The workshops were well attended by all partners including Secretariat, global OHW-NG team, and USAID representatives.

NEXT STEPS

The working group in collaboration with the Secretariats will launch the *Organizational and Leadership activities* (June 2020) to build capabilities identified in the virtual workshops as priorities and facilitate cross-Secretariat peer learning. The Objective 3 working group will continue with the planning workshops focusing on the development of business plans for each Secretariat by the end of Year 1.

From: "Jonna Mazet" <jkmazet@ucdavis.edu>
Sent: 05/22/2020 3:22:52 PM (-07:00)
To: "alexandra zuber" <alexandrazuber@atahealthstrategies.com>
Cc: "Sam Halabi" <sfh9@georgetown.edu>; "Peter Daszak" <daszak@ecohealthalliance.org>; "karesh@ecohealthalliance.org" <karesh@ecohealthalliance.org>; "f.castillo@berkeley.edu" <f.castillo@berkeley.edu>; "oromero@haas.berkeley.edu" <oromero@haas.berkeley.edu>
Subject: Re: 'board governance review'

I think that all sounds great. I agree on the slide tone & content, but I also would like to have a good, candid discussion among us about Sam's distillation and finding to make a strong plan for recommendations moving forward.

Have a great weekend everybody,
Jonna

On Fri, May 22, 2020 at 12:28 PM alexandra zuber <alexandrazuber@atahealthstrategies.com> wrote:
Thanks again Sam! Here are all the transcripts.

Your timeline sounds great. My recommendation is to keep the content pithy and action-oriented (the objective is to inform and guide our technical support, not to produce a formal report). Your NUPAS findings did this very well, so I am confident this will be a useful product.

And let's make sure (as you've rightly done below) that we message this as a summarization of the Board issues for the global team to better provide technical support (I want to be sure no one mis-perceives this as an additional assessment of any kind).

In fact, we may wish to rename this activity now as "board governance summary" to avoid any issues.

Alexandra Zuber, MPP, DrPH
Founder and CEO, Ata Health Strategies, LLC
Email: alexandrazuber@atahealthstrategies.com
Phone: +1 (617) 680-3950
LinkedIn: [alexandrazuber/](https://www.linkedin.com/in/alexandrazuber/)
Website: www.atahealthstrategies.com
Twitter: [@alexandrazuber](https://twitter.com/alexandrazuber)

From: Sam Halabi <sfh9@georgetown.edu>
Sent: Friday, May 22, 2020 12:28 PM
To: alexandra zuber <alexandrazuber@atahealthstrategies.com>
Cc: Peter Daszak <daszak@ecohealthalliance.org>; karesh@ecohealthalliance.org <karesh@ecohealthalliance.org>; Jonna Mazet <jkmazet@ucdavis.edu>; f.castillo@berkeley.edu <f.castillo@berkeley.edu>; oromero@haas.berkeley.edu <oromero@haas.berkeley.edu>
Subject: Re: 'board governance review'

Hi, Alexandra,

That sounds like a terrific idea and way forward. In general, it seems that our AFROHUN planning moves about a month behind our SEAOHUN planning (at least for the Objective 3 work in which I've involved), so I

envisioned June 30 as the delivery date for the review draft for the AFROHUN board/Deans' Summit and July 31 for the SEAOHUN board/Foundation Board review/overview documents.

I'm happy to adjust those timelines with input from everyone on the board taskforce team.

I think there may be a few board transcripts taken pursuant to the SWOT reviews that I don't have, but I can certainly get under way with what I have in my possession now.

Best,
Sam

On Fri, May 22, 2020 at 9:25 AM alexandra zuber <alexandrazuber@atahealthstrategies.com> wrote:

Dear board development TA task team,

I wanted to follow-up on a Y1 Obj 3 work plan item we've discussed before- the 'board governance review'. When we last spoke about this, we agreed we did not have pre-determined methodology, and we'd brainstorm this after the workshops. I have a simple suggestion on how to move this forward.

I think it would be good for us as a quick exercise to pull together everything we've learned on the board issues to date facing SEAOHUN and AFROHUN from the SWOT interviews and the NUPAS review. I've asked if Sam could do this for us, by analyzing the board -specific questions in the SWOT interviews with board members and by compiling that together with his analysis of board issues as part of the NUPAS assessment of both Secretariats.

I've suggested Sam assemble this information in a single PPT, which we can report to USAID as accomplishing the 'board governance review' in our work plan. The audience for this PPT would be internal to us for the moment, and we can then decide how we want to package the information for broader consumption (or not). (For example, we may wish to title the PPT something softer than "review", such as "an overview of network boards for the global team" to avoid any sensitivities from either secretariat).

I would envision objectives of this board governance review to be:

- 1) characterize the boards of both secretariats - composition, retention, selection criteria, by laws, etc
- 2) identify strengths and challenges/ areas of improvement
- 3) make recommendations for our board government TA task team on key improvements and how to approach in Year 1-2.

Sam can give us a timeline for this work and send you all drafts for review/ input. How does this sound to the team?

Thanks,
Alexandra

Alexandra Zuber, MPP, DrPH
Founder and CEO, Ata Health Strategies, LLC
Email: alexandrazuber@atahealthstrategies.com
Phone: +1 (617) 680-3950
LinkedIn: [alexandrazuber/](https://www.linkedin.com/in/alexandrazuber/)
Website: www.atahealthstrategies.com
Twitter: [@alexandrazuber](https://twitter.com/alexandrazuber)

From: "alexandra zuber" <alexandrazuber@atahealthstrategies.com>
Sent: 05/30/2020 11:15:32 AM (-07:00)
To: [REDACTED] "karesh@ecohealthalliance.org" <karesh@ecohealthalliance.org>; "Peter Daszak" <daszak@ecohealthalliance.org>; "f.castillo@berkeley.edu" <f.castillo@berkeley.edu>; "oromero@berkeley.edu" <oromero@berkeley.edu>; "Terra Kelly" <trkelly@ucdavis.edu>; "sfh9@georgetown.edu" <sfh9@georgetown.edu>; "Elizabeth Leasure" <ealeasure@ucdavis.edu>; [REDACTED] "Corina Grigorescu Monagin" <cgmonagin@ucdavis.edu>; [REDACTED] "Jennifer K Lane" <jklane@ucdavis.edu>; "Bridgette Phebean Smith" <brpsmith@ucdavis.edu>; "Matthew Blake" <mblake@ucdavis.edu>; "margaritamartins@berkeley.edu" <margaritamartins@berkeley.edu>; "Rabkin, Miriam" <mr84@cumc.columbia.edu>; "Amy J Armistad" <aarmistad@salud.unm.edu>
Cc: "djwolking@ucdavis.edu" <djwolking@ucdavis.edu>
Subject: Agenda & Slides for upcoming Monthly Obj 3 Work Group
Attachments: SEAOHUN Action Plan PPT slides.pptx, Action Plan AFROHUN v4.xlsx, Obj 3 Monthly Work Group Meeting 06.01.2020.pptx

Hello Objective 3 Work Group,

For Monday's upcoming monthly meeting, after a round of updates, I'd like to dedicate the our time to brainstorm our implementation plan to achieve the capacity-building action plans we've initiated with AFROHUN and SEAOHUN. There may be a few of you for which this portion of the agenda is not as relevant, so please feel free to log-off when you need to.

Our proposed agenda is:

Updates (15 min)

- Personnel updates
- MEL Update- Corina
- Message on Y2 Work Planning-- start generating ideas!
- Progress to date and remaining activities in Year 1

Small Group Action Planning (45)

- Break in to three small groups:
 - Business Planning Workshops & Development the Business Plan: Omar, Federico, Margarita, Matthew, Dele
 - Facilitator: OR
 - Resource Mobilization & Funding Diversification: Peter, Billy, Jonna, Alex, Terra, Jinnie, Amy
 - Facilitator: AZ
 - Subaward Management & Legal and Corporate Governance: Sam, Elizabeth, Miriam, Tracey
 - Facilitator: SH
- Review the attached Excel and PPT documents that capture action plan priorities and major activities for AFROHUN and SEAOHUN
- Come up with proposed implementation plan for how to carry out the action plans for the remainder of the year
- Feedback to the large group for discussion

Attached you'll find:

- Slides for our meeting
- AFROHUN Draft Action Plan (Excel)
- SEAOHUN Action Plan Workshop PPT Slides (to be converted to an Excel plan)

Alexandra Zuber, MPP, DrPH
 Founder and CEO, Ata Health Strategies, LLC
 Email: alexandrazuber@atahealthstrategies.com
 Phone: +1 (617) 680-3950
 LinkedIn: [alexandrazuber/](https://www.linkedin.com/in/alexandrazuber/)
 Website: www.atahealthstrategies.com
 Twitter: [@alexandrazuber](https://twitter.com/alexandrazuber)

From: REDACTED
Sent: Tuesday, January 21, 2020 11:09 AM
To: REDACTED karesh@ecohealthalliance.org
 <karesh@ecohealthalliance.org>; Peter Daszak <daszak@ecohealthalliance.org>; f.castillo@berkeley.edu
 <f.castillo@berkeley.edu>; oromero@berkeley.edu <oromero@berkeley.edu>; djwolking@ucdavis.edu
 <djwolking@ucdavis.edu>; Terra Kelly <trkelly@ucdavis.edu>; kaleasure@ucdavis.edu <kaleasure@ucdavis.edu>;
 sfh9@georgetown.edu <sfh9@georgetown.edu>; Elizabeth Leasure <ealeasure@ucdavis.edu>; REDACTED
 REDACTED Corina Grigorescu Monagin <cgmonagin@ucdavis.edu>; REDACTED
 REDACTED; Jennifer K Lane <jklane@ucdavis.edu>; Bridgette Phebean Smith
 <brpsmith@ucdavis.edu>; Matthew Blake <mblake@ucdavis.edu>; margaritamartins@berkeley.edu
 <margaritamartins@berkeley.edu>; alexandra zuber <alexandrazuber@atahealthstrategies.com>; Rabkin, Miriam
 <mr84@cumc.columbia.edu>; Amy J Armistad <aarmistad@salud.unm.edu>
Subject: Updated invitation with note: Monthly Obj 3 Work Group @ Mon Jun 1, 2020 4pm - 5pm (EDT)
 (alexandrazuber@atahealthstrategies.com)
When: Monday, June 1, 2020 4:00 PM-5:00 PM.
Where: REDACTED

This event has been changed with this note:

"Hi all, due to Memorial Day holiday, I'm moving this monthly call back by one week, just for this month. We can maintain our routine schedule thereafter. "

Monthly Obj 3 Work Group

When **Changed:** Mon Jun 1, 2020 4pm – 5pm Eastern Time - New York

Where REDACTED ([map](#))

Calendar alexandrazuber@atahealthstrategies.com

- Who
- REDACTED organizer
 - karesh@ecohealthalliance.org
 - Peter Daszak
 - f.castillo@berkeley.edu
 - oromero@berkeley.edu
 - djwolking@ucdavis.edu
 - Terra Kelly
 - kaleasure@ucdavis.edu

- sfh9@georgetown.edu
- Elizabeth Leasure
- **REDACTED**
- Corina Grigorescu Monagin
- **REDACTED**
- Jennifer K Lane
- Bridgette Phebean Smith
- Matthew Blake
- margaritamartins@berkeley.edu
- alexandrazuber@atahealthstrategies.com
- Rabkin, Miriam
- Amy J Armistad

[more details »](#)

Alexandra Zuber is inviting you to a scheduled Zoom meeting.

Join Zoom Meeting

REDACTED

Meeting ID: **REDACTED**

One tap mobile

REDACTED US (New York)
REDACTED US (San Jose)

Dial by your location

REDACTED US (New York)
REDACTED US (San Jose)

Meeting ID: **REDACTED**

Find your local number:

<https://zoom.us/j/ah08Ei8U0>

Going (alexandrazuber@atahealthstrategies.com)? [Yes](#) - [Maybe](#) - [No](#) [more options »](#)

Invitation from [Google Calendar](#)

You are receiving this courtesy email at the account alexandrazuber@atahealthstrategies.com because you are an attendee of this event.

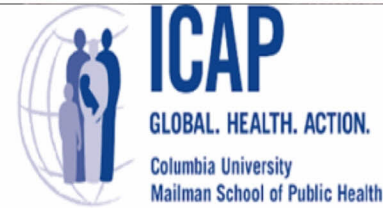
To stop receiving future updates for this event, decline this event. Alternatively you can sign up for a Google account at <https://www.google.com/calendar/> and control your notification settings for your entire calendar.

Forwarding this invitation could allow any recipient to send a response to the organizer and be added to the guest list, or invite others regardless of their own invitation status, or to modify your RSVP. [Learn More](#).



USAID
FROM THE AMERICAN PEOPLE

**Objective 3 Monthly Working Group Meeting
June 1, 2020**



Agenda

- Updates (15 min) – Alex
 - Personnel update
 - Progress to Date and Way Forward
 - MEL- Corina
- Y1 Action Planning (45 min)- Small Group Break-outs & Large Group Discussion
- Message on Y2 Work Planning– Begin considering what new activities we want to support in Year 2



Updates



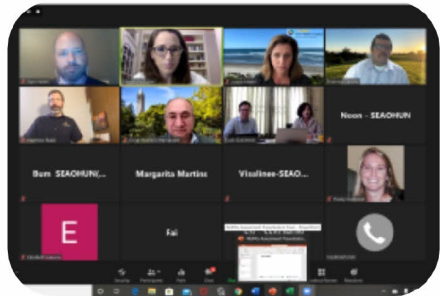
- Alexandra will be on **REDACTED**
REDACTED

Personnel Update

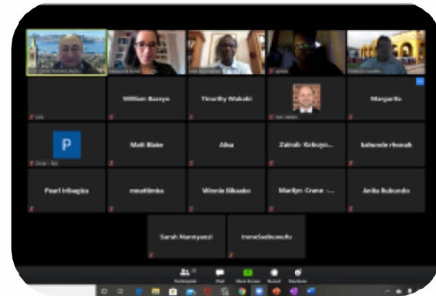
- Omar Romero-Hernandez will be acting Objective 3 lead, and will work closely with Federico Castillo and Margarita Martins to manage the portfolio
- We have a transition & communication plan in place
- Thank you in advance Omar, Federico, and Margarita!



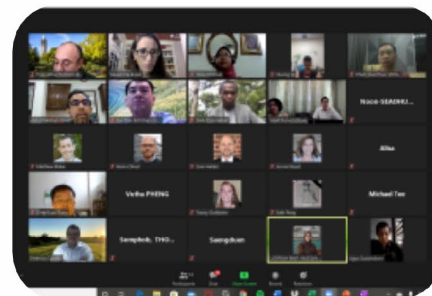
Major milestone accomplished: All Benchmarking Workshops Completed! (n=9)



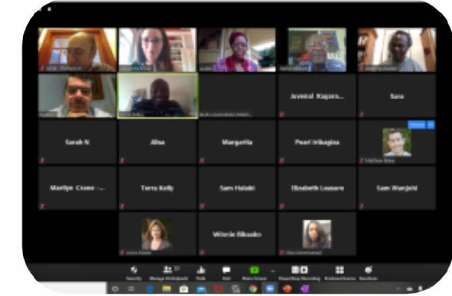
NUPAS



OCA



SWOT












Action Planning

A special thanks to OR, FC, and MC for co-design & execution of these workshops! And to EL, MB, and SH for extensive assessment & facilitation for these workshops!



All Virtual Workshop Files Stored on Objective 3 Box.com

All Files > ... > Benchmarking & Planning > Virtual Workshops (2020) > ☆ AFROHUN Virtual Workshops April.2020

Name	Updated	Size
 Meeting notes	May 8, 2020 by alexandra zuber	5 Files
 AFROHUN SWOT Virtual Workshop.pdf	May 8, 2020 by alexandra zuber	2 MB
 AFROHUN NUPAS Virtual Workshop.pdf	May 8, 2020 by alexandra zuber	1.7 MB
 AFROHUN Action Planning Virtual Workshop.pdf	May 8, 2020 by alexandra zuber	1.7 MB
 OCA AFROHUN Virtual Workshop.pdf	May 8, 2020 by alexandra zuber	1.1 MB
 Zoom Recordings AFROHUN Virtual Workshops April 2020.docx	May 8, 2020 by alexandra zuber	13.4 KB
 AFROHUN - Country Managers Benchmarking Discussion.pptx	May 8, 2020 by alexandra zuber	591.8 KB
 AFROHUN Country Manager Virtual Workshop.pdf	May 8, 2020 by alexandra zuber	1.2 MB
 AFROHUN - Action Plan_Final Version.pptx	May 8, 2020 by alexandra zuber	606 KB



Feedback from USAID



- MEL Update- Corina
- Message on Y2 Work Planning

More Updates

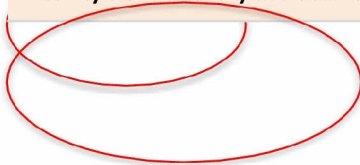


So where are we?



Completed from Y1 Workplan

TASK	PROGRESS	Q1	Q2	Q3
Activity 3.1.1: Evaluate and Benchmark				
NUPAS Assessment	Complete		X	X
Audit or Review of Audit	Complete		X	
SWOT analysis with key informants	Complete		X	X
Facilitate OCA self-assessment for each Secretariat	Complete			
Assemble assessments in one Pre-Retreat Report	Complete			X
Conduct Benchmarking & Planning Workshops (n=9)	Complete		X	X
Activity 3.1.2: Business Planning Retreats				
Activity 3.2.1: Launch ECHO OLS Community of Practice				
ECHO Immersion Training	Complete			X
Activity 3.2.2: Provide technical assistance				
Conduct Interim Action Planning for Capacity-building in Year 1	Complete			X
Activity 3.3.1: Identify and Secure New Secretariat Partnerships				



In Progress from Y1 Workplan

TASK	PROGRESS	Q1	Q2	Q3	Q4
Activity 3.1.1: Evaluate and Benchmark					
Board governance review	In progress			X	X
Case studies of organizational sustainability	In progress			X	X
Monitor Transition Plan	In progress		X	X	X
Activity 3.1.2: Business Planning Retreats					
Activity 3.2.2: Provide technical assistance					
Identify & Manage technical assistance	In progress			X	X
Provide TA (e.g. grant-writing workshop)	In progress			X	X
Activity 3.3.1: Identify and Secure New Secretariat Partnerships					
Stakeholder Mapping	In progress			X	X



Not yet started activities for Y1

TASK	PROGRESS	Q1	Q2	Q3	Q4
Activity 3.1.1: Evaluate and Benchmark					
Expanded SWOT	Not started			X	X
Routine review of project M&E indicators	Not started			X	X
Activity 3.1.2: Business Planning Retreats					
Plan and Facilitate Business Planning Workshops for each Secretariat	Not Started				X
Finalize Business Plans for each Secretariat	Not Started				X
Activity 3.3.1: Identify and Secure New Secretariat Partnerships					
Formulate partnership development strategy	Not started				X



Formulation of Joint Global Team-Secretariat

Obj 3 Action Plans for Remainder of Year 1

AFROHUN and Global Team Action Plan for Joint Objective 3 Activities		Global Team Sub-groups to support						
Draft 3: Revised Draft with Input from AFROHUN and Comments by Global Team (30-May-20)		Business Planning Task Team: Omar Romero-Hernandez, Alexandra Zuber, Federico Castillo, Margarita Martina, Matthew Blake						
Activities if Top Year 1 priorities determined through action planning workshop		Partnership Development Group (PDG): Peter Dasak, Billy Karsch, Alexandra Zuber, Josina Mayer, Federico Castillo						
Activities if Other activities that are ongoing in Year 1 that support priorities identified		Technical Assistance Teams: Ad-hoc task teams, based on needs, organized by Alexandra Zuber and Federico Castillo						
Global Work Plan Activity ID								
Priority: Formulate AFROHUN Business Plan								
Gap / Challenge	Activities	Milestones / Deliverables	Start Date	Periodic Review / End Date	Comments	AFROHUN Team	Global Team	
3.1.1	Expanded SWOT Analysis ("phase 2")	1. Slide deck with findings from phase 2	6/15/2020	7/15/2020		Agnes/Sarah	Lead: FC, MM. Team: Business Planning Group (BPG)	
3.1.1	Identify regional organizations that can be models for organizational sustainability that can guide AFROHUN vision-setting	1. Case studies of 3 regional prototypes	6/15/2020	7/30/2020	The global team will produce this, but we welcome your input on regional organizations that we can include in this.	Agnes/ Dr. Irene	Lead: AZ, FC. Team: BPG	
3.1.2	AFROHUN is required by the OHW-NG cooperative agreement to produce a business plan by end of Y1; this business plan will assist AFROHUN to establish a new vision, business model, and strategy for achieving organizational sustainability, and in particular OHW-NG Objective 3 goals	1. Apply the Mission Model Canvas to AFROHUN 2. Writing team that writes up sections subsequent to each workshop	1. Conduct 4 Virtual workshops to flesh out the issues 7/1/2020 2. 7/20/2020	8/15/2020 8/30/2020	We think this alternative is not an	Agnes/ Sarah	Lead: OR, FC, MM. Team: BPG	
3.1.2	Identify strategy, goals and objectives for capacity building for Years 2 onward	1. Virtual workshop to identify strategy, goals, and objectives for organizational capacity-building	9/1/2020	9/15/2020	Yes, we can add a section identifying capacity development needs to the business plan	Nina/ Sarah	Lead: OR, FC, MM. Team: BPG	
3.1.2	Strategy for resource mobilization and fund diversification	2. Establish appenda to the business plan	9/15/2020	9/30/2020	This refers to the structure of the plan we proposed in our Year 1 work plan. But we are flexible on the approach.	Nina/ Sarah	Lead: OR, MB. Team: BPG	
3.1.2		1. Establish appenda to the business plan	9/15/2020	9/30/2020	This refers to the structure of the plan we proposed in our Year 1 work plan. But we are flexible on the approach.	Agnes/ Dr. Irene	Lead: OR, MB. Team: BPG	



Technical Assistance Priorities identified in Joint Action Plans

AFROHUN

- Business Plan
- Resource Mobilization & Funding Diversification
- Subaward Management
- Branding & Communications
- Legal & Corporate Governance- Registration

SEAOHUN

- Business Plan
- Resource Mobilization & Funding Diversification
- Subaward Management
- Program Management & Absorptive Capacity
- Legal & Corporate Governance - Boards

Small Group Break-out: Implementation planning for Action Plans

- (30 min) Break in to 3 groups:
 - Business Planning Workshops
 - Resource mobilization & Funding diversification
 - Sub-award Management & Legal and Corporate Governance
- Review proposed action plan activities for SEAOHUN (slides) and AFROHUN (excel)
- Come up with implementation plan to launch & carry out these activities jointly with Secretariats, based on their input to date
 - What will we do first? How can we synergize and encourage peer learning between the Secretariats? What are milestone events & dates? What are the deliverables?
- (15 min) Present back on a PPT slide (s) to the large group

Action Plan: Short Term Priorities

1. Business plan

ACTIVITIES	Y 1	Y 2	Y 3	HOW
Integrate findings in a document and design a 5-year business plan.	■			
BUSINESS PLAN includes:				
Mission Model Canvas	■			
Strategy for resource mobilization.	■			
Strategy for funding diversification.	■			
Other:				

Action Plan: Short Term Priorities

2. Resource mobilization and funding diversification

ACTIVITIES	Y 1	Y 2	Y 3	HOW
Identify donors and stakeholders (stakeholder mapping).	■			
Partnership strategy development.	■	■	■	
Implementation of funding diversification strategy.	■	■	■	
Implementation of potential value-generating activities.	■	■	■	
Building capacity of existing staff / Recruitment of a program officer.	■	■	■	
Other:	■	■	■	

Action Plan: Short Term Priorities

3. Procurement and subawards

ACTIVITIES	Y 1	Y 2	Y 3	HOW
Development of a sub-award policy	■			
Capacity building of subrecipient organizations	■			
Completion of TBD sub-recipient monitoring procedures for Y1 funding	■			
COI, ethics and other refresher trainings	■			
Other:	□			

Action Plan: Short Term Priorities

4. Program management capacity

ACTIVITIES	Y 1	Y 2	Y 3	HOW
Devise and implement a project management scheme with OHUN's related projects and activities	■	■	■	
Developing and adopting a project management manual	■			
For Secretariat-led projects develop a protocol to manage projects from inception to final reporting stages	■			
Training in project management for new and existing personnel	■			
Other: _____	□	□	□	

Action Plan: Short Term Priorities

5. Absorptive capacity

ACTIVITIES	Y 1	Y 2	Y 3	HOW
1. Formalize delegation of project management duties from leadership to new program staff	█			
2. Dedicate an explicit portion of a staff person(s) to resource mobilization & partnership development (or hire new 'surge' staff)		█	█	
3. Work with OHW-NG to utilize M&E data for improved program quality and planning		█	█	
4. Prepare exit interviews for staff		█	█	
Other:				

Action Plan: Short Term Priorities

6. Legal structure

ACTIVITIES		Y 1	Y 2	Y 3	HOW
Organizational Structure	Compose and make			+	
Management Committee					
Internal Controls	Formalize the process by which the Board is selected and approved				
	Foundation have the approve it				

From: "Amponsah, Edith" <EAmponsah@nas.edu>
Sent: 06/10/2020 2:32:52 PM (-07:00)
To: "Jonna Mazet" <jkmazet@ucdavis.edu>; "Peter Daszak" <daszak@ecohealthalliance.org>; "David Rizzo" <dmrizzo@ucdavis.edu>; "Sally A. Miller" <miller.769@osu.edu>; "Mary E. Wilson" <mewilson@hsph.harvard.edu>; "Gail Hansen" [REDACTED] "Elizabeth Hermsen" <elizabeth.hermsen@merck.com>; "apruden@vt.edu" <apruden@vt.edu>; "Rushton, Jonathan" [REDACTED] "Casey Barton Behravesh" <dlx9@cdc.gov>; "Lichtveld, Maureen Y" <mlichtve@tulane.edu>; "MUMFORD, Elizabeth" [REDACTED] "jmhughe@emory.edu" <jmhughe@emory.edu>; "Anderson, Kevin" <Kevin.Anderson@hq.dhs.gov>
Cc: "Pavlin, Julie" <JPavlin@nas.edu>; "Goodtree, Hannah" <HGoodtree@nas.edu>; "Buckley, Gillian" <GBuckley@nas.edu>; "Mary Radford" <maradford@ucdavis.edu>; "andre@ecohealthalliance.org" <andre@ecohealthalliance.org>
Subject: Call #22 meeting notes
Attachments: OHAC Call 22 Notes_FINAL.pdf

Dear OHAC members,

I hope you're all doing well. Please find attached the meeting notes for our most recent call. I will follow up with information on the calls for the remainder of the year in the coming weeks.

Many thanks,
Edith

From: Amponsah, Edith
Sent: Tuesday, June 2, 2020 6:37 PM
To: 'Jonna Mazet' <jkmazet@ucdavis.edu>
Cc: Peter Daszak <daszak@ecohealthalliance.org>; David Rizzo <dmrizzo@ucdavis.edu>; Sally A. Miller <miller.769@osu.edu>; Mary E. Wilson <mewilson@hsph.harvard.edu>; Gail Hansen [REDACTED] Elizabeth Hermsen <elizabeth.hermsen@merck.com>; apruden@vt.edu; Rushton, Jonathan [REDACTED] Casey Barton Behravesh <dlx9@cdc.gov>; Lichtveld, Maureen Y <mlichtve@tulane.edu>; MUMFORD, Elizabeth [REDACTED] jmhughe@emory.edu; Anderson, Kevin <Kevin.Anderson@hq.dhs.gov>; Mary Radford <maradford@ucdavis.edu>; andre@ecohealthalliance.org; Pavlin, Julie <JPavlin@nas.edu>; Goodtree, Hannah <HGoodtree@nas.edu>; Buckley, Gillian <GBuckley@nas.edu>
Subject: Call for vote to invite Dr. Parrish-Sprowl
Importance: High

Dear OHAC members,

Please let us know your preference in inviting Dr. John Parrish-Sprowl to join the One Health Action Collaborative by completing this brief [poll](#). I have attached his presentation here for those who were not able to join the call last week.

Link to voting poll: <https://www.surveymoz.com/s3/5633420/OHAC-Member-Vote>

Best,
Edith

From: Jonna Mazet <jkmazet@ucdavis.edu>
Sent: Tuesday, May 26, 2020 3:20 PM
To: Amponsah, Edith <EAmponsah@nas.edu>
Cc: Peter Daszak <daszak@ecohealthalliance.org>; David Rizzo <dmrizzo@ucdavis.edu>; Sally A. Miller

<miller.769@osu.edu>; Mary E. Wilson <mewilson@hsph.harvard.edu>; Gail Hansen <[REDACTED]>; Elizabeth Hermsen <elizabeth.hermsen@merck.com>; apruden@vt.edu; Rushton, Jonathan <[REDACTED]>; Casey Barton Behravesh <dlx9@cdc.gov>; Lichtveld, Maureen Y <mlichtve@tulane.edu>; MUMFORD, Elizabeth <[REDACTED]>; jmhughe@emory.edu; Anderson, Kevin <Kevin.Anderson@hq.dhs.gov>; Mary Radford <maradford@ucdavis.edu>; andre@ecohealthalliance.org; Pavlin, Julie <JPavlin@nas.edu>; Goodtree, Hannah <HGoodtree@nas.edu>; Buckley, Gillian <GBuckley@nas.edu>
Subject: Re: OHAC Call # 22 Meeting Materials

Thanks to all of you who were able to join today. Please respond to this chain with your reactions and thoughts on whether we should ask Professor Parrish-Sprowl to join the OHAC. If you would like a call to discuss, we will get that scheduled. Alternatively, if we receive a majority of positive feedback, Edith can help me to send out a call for a vote. I do think a focus in our next call should be on developing new deliverables, so deciding on this invitation could shape some of that discussion.

Please advise and have a good day,
Jonna

On Fri, May 22, 2020 at 2:06 PM Amponsah, Edith <EAmponsah@nas.edu> wrote:

Dear OHAC members,

Please find the agenda for our call next Tuesday attached here. I have also attached here Dr. Parrish-Sprowl's presentation.

Have a good weekend,
Edith

From: Amponsah, Edith

Sent: Monday, May 4, 2020 1:37 PM

To: 'Jonna Mazet' <jkmazet@ucdavis.edu>; 'Peter Daszak' <daszak@ecohealthalliance.org>; 'David Rizzo' <dmrizzo@ucdavis.edu>; 'Sally A. Miller' <miller.769@osu.edu>; 'Mary E. Wilson' <mewilson@hsph.harvard.edu>; 'Gail Hansen' <[REDACTED]>; 'Elizabeth Hermsen' <elizabeth.hermsen@merck.com>; apruden@vt.edu <apruden@vt.edu>; 'Rushton, Jonathan' <[REDACTED]>; 'Casey Barton Behravesh' <dlx9@cdc.gov>; 'Lichtveld, Maureen Y' <mlichtve@tulane.edu>; 'MUMFORD, Elizabeth' <[REDACTED]>; jmhughe@emory.edu <jmhughe@emory.edu>; 'Anderson, Kevin' <Kevin.Anderson@HQ.DHS.GOV>

Cc: 'Mary Radford' <maradford@ucdavis.edu>; andre@ecohealthalliance.org <andre@ecohealthalliance.org>; Pavlin, Julie <JPavlin@nas.edu>; Goodtree, Hannah <HGoodtree@nas.edu>; Buckley, Gillian <GBuckley@nas.edu>

Subject: RE: OHAC Call # 22 Doodle

Hi all,

Our next call will be on **Tuesday May 26th from 2-3pm EST**. Hannah sent a calendar invitation with zoom details.

I'm making another call for nominations/recommendations for the next OHAC chair. Please send suggestions before our next call.

Best wishes,
Edith

From: Amponsah, Edith

Sent: Monday, April 27, 2020 10:21 AM

To: Jonna Mazet <jkmazet@ucdavis.edu>; Peter Daszak <daszak@ecohealthalliance.org>; 'David Rizzo' <dmrizzo@ucdavis.edu>; Sally A. Miller <miller.769@osu.edu>; Mary E. Wilson <mewilson@hsph.harvard.edu>; 'Gail Hansen' <**REDACTED**>; Elizabeth Hermsen <elizabeth.hermsen@merck.com>; 'Apruden@vt.edu' <apruden@vt.edu>; 'Rushton, Jonathan' <**REDACTED**>; Casey Barton Behravesh <dlx9@cdc.gov>; 'Lichtveld, Maureen Y' <mlichtve@tulane.edu>; MUMFORD, Elizabeth <mumforde@who.int>; 'jmhughe@emory.edu' <jmhughe@emory.edu>; 'Anderson, Kevin' <Kevin.Anderson@HQ.DHS.GOV>

Cc: 'Mary Radford' <maradford@ucdavis.edu>; 'andre@ecohealthalliance.org' <andre@ecohealthalliance.org>; Pavlin, Julie <JPavlin@nas.edu>; Goodtree, Hannah <HGoodtree@nas.edu>; Buckley, Gillian <GBuckley@nas.edu>

Subject: OHAC Call # 22 Doodle

Dear OHAC members,

Please fill out this doodle poll to let us know your availability for the next OHAC call next month. As discussed on the last call, we will plan to have Dr. John Parrish-Sprowl give a 30 minute presentation before moving forward with a final decision to invite him to join the group.

Link to Doodle: <https://doodle.com/poll/9vw84uzkm7z57dec>

Please let me know if you have any questions or concerns.

Best,

Edith Amponsah, MPH, IBCLC

Associate Program Officer

Forum on Microbial Threats

Health and Medicine Division

The National Academies of Sciences, Engineering, and Medicine

500 Fifth Street, NW

Phone: 202-334-3222

www.nationalacademies.org/HMD

The National Academies of

SCIENCES • ENGINEERING • MEDICINE

ONE HEALTH ACTION COLLABORATIVE (OHAC) MEETING #22

DATE: Tuesday, May 26, 2020

PARTICIPANTS:

OHAC members - Jonna Mazet (*chair*), Kevin Anderson, Peter Daszak, Gail Hansen, Jim Hughes, Maureen Lichtveld, Liz Mumford, Amy Pruden, Dave Rizzo, Jonathan Rushton and Mary Wilson

(Absent: Casey Barton Behravesh, Elizabeth Hermsen and Sally Miller)

Staff: Gillian Buckley, Edith Amponsah, and Hannah Goodtree (National Academies)

AGENDA:

1) Welcome and general check-in; 2) Food safety deliverable; 3) One Health at the state and local levels deliverable; 4) Presentation by Dr. Parrish-Sprowl; 5) Discussion of chair; 6) Other brief updates; 7) Next steps and action items

KEY DISCUSSION POINTS

1. Welcome

Jonna welcomed the group to the 22nd OHAC meeting. She opened the meeting with a brief introduction by [John Parrish-Sprowl](#), guest presenter during the meeting.

- Dr. Parrish-Sprowl is the director of the global health communication center of the Indiana University School of Liberal Arts, professor of communication studies, and a member of the WHO Roster of Experts for social and behavioral change.¹
- Members of OHAC and Forum on Microbial Threats staff briefly introduced themselves as well.

2. Food Safety deliverable

As co-lead on the food safety deliverable, Dave provided an update on the status of the manuscript. Since the last call, the group submitted the manuscript and an op-ed to the *American Journal of Public Health (AJPH)*, neither of which was accepted by the journal.

- The group held a zoom call on May 21st where they decided to submit the full manuscript to a special edition of [One Health Outlook](#). This special edition, [One Health in policy, practice, and response to emerging diseases](#), will be edited by Jonna Mazet and REDACTED
 - Jonna commented that the One Health Outlook is a newer journal and the special issue aims to fill the gap in previously under-represented One Health themes in the literature.
 - Jonna and REDACTED will not review the manuscript submitted by this group to avoid any conflict of interest. The submission will be referred to other editors.
 - The group will reformat the manuscript to fit the guidelines for *One Health Outlook*

¹ Dr. Parrish-Sprowl was recommended by Jonna Mazet and Liz Mumford as a potential OHAC member who would bring social and behavioral change perspectives to the group and its activities.

3. One Health at the state and local levels

Gail updated the group on the progress of this deliverable. Since the last call, the subcommittee completed an op-ed initially aimed for submission at *Stat News*. The op-ed was not accepted by *Stat News* and the group is deciding on the next avenue for submission.²

Gail commented that work on the main deliverable has stalled due to COVID-19 but hopes to pick things back up in the coming weeks.

Jonna added that this deliverable is even more important in the time of COVID-19, especially as the impact of COVID-19 on food systems and animal health have received attention in the last few months.

- Since this call, the subcommittee met virtually on June 2nd to discuss the deliverable. Subcommittee members agreed on a general timeline and plan of action for next steps.

4. Presentation by Dr. Parrish-Sprowl

Jonna discussed briefly OHAC members' previous conversations about involving the social and behavioral change perspective in the group's activities and membership. During the last call in March, OHAC members agreed to invite Dr. Parrish-Sprowl to present on the complexity approach to social and behavioral science.

Dr. Parrish-Sprowl's presentation on "Communication for Whole Health: A Complexity Approach to Social and Behavioral Science" was attached to the call material

5. Discussion of chair

Jonna reminded the group that her term as OHAC chair is coming to an end in the summer and encouraged anyone interested in the position to communicate with her and inform Edith of their interest.

6. Other brief updates

Next Forum on Microbial Threats (FMT) workshop on The Critical Public Health Value of Vaccines – Tackling Issues of Access and Hesitancy

- Gillian provided an update on the planning of the Forum's next workshop on "The Critical Public Health Value of Vaccines – Tackling Issues of Access and Hesitancy." She noted that the workshop series will be virtual with the first of the two-part series happening on May 28th, 2020. This meeting featured three presentations followed by a Q&A session.³

7. Next steps and action items

Next OHAC meeting

- Edith will send a doodle poll to gather availabilities for the remaining calls of the year.

² Since this call, the op-ed was submitted to *Issues in Science & Technology* and the editors think it is a good fit. It is currently undergoing review by their team.

³ Meeting materials from the first of the workshop series can be found here:

<https://www.nationalacademies.org/event/05-28-2020/the-critical-public-health-value-of-vaccines-tackling-issues-of-access-and-hesitancy-a-zoom-meeting>

From: [REDACTED] on behalf of "Jonna Mazet" <jkmazet@ucdavis.edu>
Sent: 03/02/2017 8:07:32 PM (-08:00)
To: "Amanda Fine" <[REDACTED]>
Cc: "David J Wolking" <djwolking@ucdavis.edu>; "Tracey Goldstein" <tgoldstein@ucdavis.edu>; "Christine Kreuder Johnson" <ckjohnson@ucdavis.edu>; "predict@ucdavis.edu" <PREDICT@ucdavis.edu>; "Sarah Olson" <solson@wcs.org>; "karesh@ecohealthalliance.org" <karesh@ecohealthalliance.org>
Subject: Re: PMAC abstract LISN Viet Nam

Looks great to me,
Jonna

On Thu, Mar 2, 2017 at 6:43 AM, Amanda Fine <[REDACTED]> wrote:

Hello All,

Attached is an abstract I have worked on with FAO, WHO, CDC and Ministry colleagues in Viet Nam outlining the LISN project to submit to PMAC. The submission deadline is March 30th. We are all circulating the abstract to our respective colleagues/headquarters for clearance to submit and welcome any suggestions for changes. Thanks in advance for taking the time to review the draft. Pawin Padungtod from FAO VN will probably present the LISN work at the conference if the abstract is accepted.

Let me know if you have any questions and if this has the PREDICT OK to submit. As discussed with other colleagues we would acknowledge funding sources, USAID EPT, and the PREDICT consortium in the acknowledgments but let me know if you see anything that would raise concerns with regards to recognition of the different contributors to this effort.

Thank you,

Amanda

--
Amanda E. Fine, VMD, PhD
Wildlife Health Program Associate Director - Asia
Wildlife Conservation Society (WCS)

[REDACTED]
T: [REDACTED]
M: [REDACTED]

From: "William B. Karesh" <karesh@ecohealthalliance.org>
Sent: 03/28/2017 9:53:54 PM (-07:00)
To: "Jonna Mazet" <jkmazet@ucdavis.edu>
Subject: Re: EHP Abstract for PMAC 2018

Cool.

Sent from my iPhone

> On Mar 29, 2017, at 5:24 AM, Jonna Mazet <jkmazet@ucdavis.edu> wrote:

>

> Dear all,

> Very sorry for the extremely late notice. I have decided to submit an abstract to PMAC on our focused ebola work. I have pulled language from our already agreed-upon and edited regional briefing document.

> If I don't hear from you by Thursday noon, I will assume that you would like to be included as an author. If you have comments or edits (or would prefer not to be included), please let me know as soon as you can. Also if you think someone else should be a co-author, please let me know.

> Have a nice day,

> Jonna

>

> PS -- Abstract is limited to 300 words, and there is a possibility that I won't be able to submit, as the PMAC site isn't currently accepting abstracts (even though the deadline has not yet passed).

> <Mazet PMAC EHP 2018 Abstract.docx>

From: Dr. Melinda Rostal <rostal@ecohealthalliance.org>
To: predict-outbreak@ucdavis.edu <predict-outbreak@ucdavis.edu>; Brian Bird <bhbird@ucdavis.edu>
CC: Jon Epstein <epstein@ecohealthalliance.org>; Dr. Billy Karesh <karesh@ecohealthalliance.org>; Peter Daszak <daszak@ecohealthalliance.org>; Emily Hagan <hagan@ecohealthalliance.org>
Sent: 4/12/2017 12:18:05 PM
Subject: [predict] [predict-outbreak] Outbreak updates for both Dhaka and Rajshahi crow die-offs April 12 2017

Hi Outbreak team,

Please see the attached outbreak reports for Dhaka and Rajshahi. We gave an update at a GHSA coordination meeting on the government confirmed H5 tests from both outbreaks.

Please let me know if you have any questions.

Best,
Mindy

PREDICT Outbreak Rapid Report

Today's Date: February 28, 2017

Cumulative day of the outbreak investigation: 48

Working Title of Investigation: Crow_dieoff_Bangladesh_Rajshahi_2017

Please describe the disease signs and symptoms and species affected (humans, domesticated animals, wildlife):

On 12th January, the Director of the Rajshahi Medical college Hospital (RMCH) officially notified the Director of Institute of Epidemiology, Disease Control and Research (IEDCR) about unusual crow die-off at the vicinity of Rajshahi Medical College Hospital (RMCH), likely having started at the beginning the month of January. The clinical signs included crows suddenly falling from trees, torticollis, circling movement, white watery diarrhea and inability to fly. After few moments of observed signs, some of them died. No history of other domesticated animals and human infection were present.

Location	
Country:	Bangladesh
District:	Rajshahi (This is 245km from Dhaka)
Village/Town:	Rajshahi Medical College Hospital (RMCH) & Barakudhi (in the bank of Padma river)
GPS Coordinates (if known):	Rajshahi Medical College Hospital (RMCH) Latitude: 88.5860 Longitude: 24.3711 Barakudhi: Latitude: 88.5972 Longitude: 24.36245
Date that first case(s) of illness occurred (if known or estimate):	January 05, 2017
Date that PREDICT was first notified of outbreak:	January 12, 2017

Key Information	Description of Findings/Actions/Outcomes
How many affected individuals?	Human: Suspected <u>0</u> Confirmed <u>0</u> Deaths <u>0</u> Domestic animal: Suspected <u>8</u> Confirmed <u>1</u> Deaths <u>21</u> Wild animal: Suspected <u>58</u> Confirmed <u>17</u> Deaths <u>38</u>
How was outbreak first noticed?	On January 12, 2017, a member of the Rajshahi Medical College Hospital cleaning staff reported seeing approximately 10 sick or dying crows on the grounds of the hospital and informed the Director of RMCH. The Hospital Director notified the Director of the Institute of Epidemiology, Disease Control and Research (IEDCR) about a crow die-off at RCMH. The Director of IEDCR then reached out to the PREDICT-2 country coordinator (Dr. Ariful Islam) on the same day. IEDCR expressed interest in understanding the geographical distribution, cause and extent of this outbreak and find any epidemiological links between these two outbreak sites (Dhaka and Rajshahi).
Where was the first reported case? What is/was	The crow die-off was first observed at RMCH. Based on the PREDICT

<p>the extent of geographic spread? Include comments on the apparent speed of spread.</p>	<p>team’s observations, a second crow roost experiencing morbidity and mortality approximately 2.5 km from RMCH along the Padma river in Barakudhi was also detected. The team searched Rajshahi city for other crow populations and observed apparently healthy crows. There was no evidence of unusual illness nor any reported die-off from these other roosts according to local residents.</p>
<p>Has the country requested support from PREDICT (include date of request)?</p>	<p>The Director of IEDCR requested PREDICT’s support in this outbreak on January 12, 2017.</p>
<p>If so, which government agency requested PREDICT support?</p>	<p>Institute of Epidemiology, Disease Control and Research and One Health Secretariat of Bangladesh under Ministry of Health and Family Welfare, Government of the people’s Republic of Bangladesh.</p>
<p>When was PREDICT response initiated (date)?</p>	<p>January 12, 2017, the initial response was exploratory to provide recommendations for further engagement</p>
<p>Are other EPT partners involved in the response (which ones and how)?</p>	<p>Only PREDICT was initially engaged by the government of Bangladesh for response activities in Rajshahi. An initial report was issued by IEDCR to Forestry Dept., Director General Health Services (DGHS) and Department of Livestock Services (DLS), regarding crow die-offs in Rajshahi and in Dhaka (<i>see also Dhaka report</i>), on January 16th. On January 18th, the Director of IEDCR notified other Government of Bangladesh (GoB) partners about unusual crow death events at multiple locations in Rajshahi and Dhaka City at the national technical committee meeting at DLS, in which FAO and P&R were present. FAO conducted an additional investigation in Rajshahi in collaboration with DLS following the report by IEDCR.</p>
<p>What type of assistance did PREDICT initially provide? Which PREDICT personnel were involved?</p>	<p>PREDICT was engaged at the start of outbreak response, providing technical guidance and then conducting sample collection and some laboratory testing (in conjunction with the Ministry of Fisheries and Livestock federal reference lab), which continued through the end of the response. PREDICT collected wild bird and feral dog samples, environmental crow fecal samples from under roosts, samples from poultry offal at local markets and environmental poultry fecal samples from some poultry farms; conducted qualitative interviews; transported personnel; transported samples from the field to the PREDICT lab at icddr,b, and to the DLS federal reference lab at the Bangladesh Livestock Research Institute (BLRI).</p> <p>The PREDICT team included Dr. Ariful Islam, PREDICT-2 country coordinator; a veterinary research officer (Dr. Shariful Islam), who led the sample collection in Rajshahi; an anthropologist; a field research assistant; and a field technician who has wildlife expertise. The country coordinator remained in Dhaka to coordinate sample testing and communication with the Government of Bangladesh and PREDICT global. He was in regular communication with the field team in Rajshahi and subsequently became involved in the Dhaka-based crow die-off investigations (see also Dhaka report). At icddr,b, lab testing was overseen by PREDICT Bangladesh lab lead, Dr. Zia Rahman and conducted by 2 research officers.</p>
<p>When was the first official acknowledgement of the outbreak (by which government agency or other reputable body and date)?</p>	<p>PREDICT was first notified of the die-off by The Institute of Epidemiology, Disease Control & Research (IEDCR) on January 12, 2017 and received first official acknowledgement on January 12, 2017 by the Director of IEDCR.</p>
<p>When was a response initiated and by whom? Which agencies were involved? Who was in</p>	<p>The response was initiated by the Director of IEDCR on January 12, 2017. In this outbreak response, the Ministry of Health & Family Welfare, Ministry</p>

<p>charge of the national response?</p>	<p>of Forest and Environment, and Ministry of Fisheries and Livestock were each involved as part of the Government of Bangladesh response. icddr,b was involved as a PREDICT lab partner to support outbreak sample testing. The Bangladesh Livestock Research Institute (BLRI), served as the official national reference lab (under Ministry of Fisheries and Livestock) and performed confirmatory testing for a subset of samples screened at icddr,b. BLRI reports the official laboratory results on behalf of the Government of Bangladesh. Prof. Dr. Meerjady Sabrina Flora, Director, IEDCR was in charge of the national response.</p>																					
<p>Was the cause of the outbreak confirmed by a laboratory? If so, give details, including cause, species, specimen types tested and dates of testing if known.</p>	<p>The cause of outbreak was confirmed by the Government of Bangladesh as H5N1 avian influenza. PREDICT submitted 23 crow cloacal and oropharyngeal swab samples in VTm, 23 crow fecal samples collected underneath a roost, 12 poultry farm environmental samples (swabs from chicken sheds) and 46 environmental fecal and 14 offal samples from 7 live bird markets (LBMs). These samples were sent to the PREDICT lab (icddr,b) on January 18th, 2017. These samples were screened by real time PCR for the M gene, H5, H7, and H9. A duplicate set of samples from the 23 crows was also sent to BLRI for testing for H type and additional testing for N1, N2, N6, and N8.</p> <p>On January 22, 2017 PREDICT received preliminary laboratory test results from icddr,b and confirmatory results from BLRI lab for the crow samples.</p> <p>While test results on some samples are still pending, the Chief Veterinary Officer of the Department of Livestock Services (DLS) officially reported the results from 17 crows as H5N1 positive to OIE on January 21, 2017. [www.oie.int/wahis_2/public/wahid.php/Reviewreport/Review?page_refer=MapFullEventReport&3eported=22498]</p> <p>On January 25th, PREDICT received preliminary results for the submitted environmental samples tested at icddr,b. These samples were sent to BLRI and confirmatory testing is pending.</p> <p>Testing of remaining crow and poultry farm samples is pending, as of January 30th.</p>																					
<p>Where was the laboratory testing performed (name of laboratory)?</p>	<p>icddr,b and Bangladesh Livestock research Institute (BLRI)</p>																					
<p>Number of days between initiation of government response and lab confirmation of laboratory results.</p>	<p>10 days (January 12 to January 21)</p>																					
<p>Summary of the Outbreak:</p>	<p>To be filled after active outbreak activity has ceased</p>																					
<p>Working name of the outbreak (e.g., Yellow Fever – DRC)</p>	<p>Avian Influenza outbreak – Rajshahi, Bangladesh</p>																					
<p>Total number of cases:</p>	<table border="0"> <tr> <td>Human:</td> <td>Suspected</td> <td><u>0</u></td> <td>Confirmed</td> <td><u>0</u></td> <td>Deaths</td> <td><u>0</u></td> </tr> <tr> <td>Domestic animal:</td> <td>Suspected</td> <td><u>8</u></td> <td>Confirmed</td> <td><u>0</u></td> <td>Deaths</td> <td><u>21</u></td> </tr> <tr> <td>Wild animal:</td> <td>Suspected</td> <td><u>58</u></td> <td>Confirmed</td> <td><u>17</u></td> <td>Deaths</td> <td><u>38</u></td> </tr> </table>	Human:	Suspected	<u>0</u>	Confirmed	<u>0</u>	Deaths	<u>0</u>	Domestic animal:	Suspected	<u>8</u>	Confirmed	<u>0</u>	Deaths	<u>21</u>	Wild animal:	Suspected	<u>58</u>	Confirmed	<u>17</u>	Deaths	<u>38</u>
Human:	Suspected	<u>0</u>	Confirmed	<u>0</u>	Deaths	<u>0</u>																
Domestic animal:	Suspected	<u>8</u>	Confirmed	<u>0</u>	Deaths	<u>21</u>																
Wild animal:	Suspected	<u>58</u>	Confirmed	<u>17</u>	Deaths	<u>38</u>																

Summary of PREDICT Team response activities during the outbreak.

The PREDICT team received official request on January 12, 2017 and initiated a response on the same day. The investigation is still ongoing.

During this period, the team sampled 57 sick/dead crows, 123 live bird market (LBM) environmental fecal samples, 23 crow roost fecal samples, 65 environmental fecal samples from poultry farms, 141 environmental samples from live bird markets, and 8 feral dogs in and around the LBMs in Rajshahi. The qualitative team performed observational and informal interviews in the outbreak area, live bird markets and poultry farms.

PREDICT submitted the samples to icddr,b and BLRI labs, and we have received preliminary results for the environmental samples and are awaiting the results of confirmatory testing.

17 crow samples were confirmed positive for influenza A/H5N1 by the Government of Bangladesh – these data were reported to OIE on January 21, 2017.

The work conducted by PREDICT’s wildlife, laboratory and anthropology teams were incorporated into a One Health Report given to IEDCR on February 6, 2017. This formally concluded our field investigations into the crow die-off in Rajshahi.

PREDICT Response Timeline

Working Title of Investigation: *Crow_dieoff_Bangladesh_Rajshahi_2017*

Key Events:

Date	Day #	Notification or Action Taken
January 12, 2017	1	First notification of unusual disease activity by PREDICT team
January 12, 2017	1	Invitation to assist from government received by PREDICT team
January 12, 2017	1	First Outbreak Taskforce meeting attended by PREDICT CC or PREDICT team members
January 12, 2017	1	First deployment of PREDICT teams to outbreak field site
January 13, 2017	2	First specimen collection: 3 crows, 1 offal, and 4 environmental samples
January 14, 2017	3	The PREDICT team sampled 8 crows and collected 5 offal samples and 25 environmental samples
January 15, 2017	4	The PREDICT team sampled 8 crows and collected 2 offal samples and 18 environmental samples
January 16, 2017	5	An initial report was issued by IEDCR to Forestry Dept., Director General Health Services (DGHS) and Department of Livestock Services (DLS), regarding crow die-offs in Rajshahi and in Dhaka The PREDICT team sampled 4 crows and collected 10 environmental samples
January 17, 2017	6	USAID/PREDICT acceptance of government request The PREDICT team sampled 5 crows and collected 2 offal samples and 21 environmental samples
January 18, 2017	7	Director of IEDCR notified other GoB partners about unusual crow death events at multiple locations in Rajshahi and Dhaka City at the national technical committee meeting at DLS, in which FAO and P&R were present.
January 18, 2017	7	First specimens delivered to laboratory. PREDICT submitted 23 crow cloacal and oropharyngeal swab samples in VTM, 23 crow fecal samples collected underneath a roost, 12 poultry farm environmental samples (swabs from chicken sheds) and 46 environmental fecal and 14 offal samples from 7 live bird markets (LBMs). The PREDICT team sampled 10 crows, 8 dogs, and collected 2 offal samples and 22 environmental samples.
January 21, 2017	10	First laboratory confirmed results (BLRI)
January 21, 2017	10	Department of Livestock Services (DLS) officially reported the results from 17 crows as H5N1 positive to OIE
January 22, 2017	11	First laboratory preliminary results (icddr,b)
January 22, 2017	11	First report of results to government and taskforce
January 25, 2017	14	First notification to USAID of government cleared laboratory results
January 25, 2017	14	PREDICT received preliminary results for the submitted environmental samples tested at icddr,b. These samples were sent to BLRI.
February 5, 2017	25	PREDICT contributed to the One Health final report submitted to Dr. Flora, the lead investigator, based at IEDCR. The report included the results from the PREDICT wildlife surveillance and testing and a qualitative analysis conducted by the PREDICT anthropology team.
February 8, 2017	28	This concludes the PREDICT activities surrounding the Rajshahi crow die-off investigation.
February 9, 2017	29	While conducting a site visit to a local hospital for a training on proper disposal of crow carcasses. It was observed that crow die-off was still ongoing. 10 sick/dead crows and one sick pied starling at RMCH were sampled, 1 offal sample and 13

		environmental samples were collected. PREDICT team informed BLRI and CDIL that the crow die-off is still ongoing in Rajshahi and the team collected samples. These samples will be sent to the PREDICT lab for standard viral family testing, including influenza virus.
February 10, 2017	30	The PREDICT team sampled 9 dead crows at Barakudhi, and collected 8 offal samples and 28 environmental samples.
Feb 14, 2017	34	PREDICT is testing all wild bird samples collected for the 5 priority viral families (Influenza, Flavivirus, Coronavirus, Paramyxovirus and Filovirus).
February 15, 2017	35	The field investigation concluded on February 10 th . Testing is ongoing and samples are being entered into EIDITH.
February 28, 2017	48	Family-level testing is on-going.
April 12, 2017	91	<p>The PREDICT Country Coordinator presented the confirmed H5N1 (from Rajshahi) and H5 results (from Dhaka), using BLRI's reference influenza specific assays, from the crow samples that were collected by PREDICT. The Country Coordinator was presenting on behalf of the One Health investigation team and with the consent of the GoB at a GHSA coordination meeting held today. The PREDICT Country coordinator also gave an update on the One Health response and involvement of multiple government partners in the Rajshahi and Dhaka crow die-offs. Attendees at the meeting included: USAID, US CDC, WHO, FAO, DLS, the Forest Department, the Ministry of Health and Family Welfare, IEDCR, icddr,b, PREDICT2, P&R and the One Health Secretariat.</p> <p>Testing by the PREDICT laboratory team at icddr,b using the PREDICT priority virus family detection assays is ongoing.</p>

PREDICT Outbreak Rapid Report

Today's Date: **April 12, 2017**

Cumulative day of the outbreak investigation: **89**

Working Title of Investigation: *Crow dieoff Bangladesh Dhaka_2017*

Please describe the disease signs and symptoms and species affected (humans, domesticated animals, wildlife):
 On 14th January, the PREDICT field team (team members who were not directly involved in investigating the crow die-off in Rajshahi) was sampling bats and observed unusual mortality of crows (*Corvus splendens*) on the premises of Mohakhali Wireless, Dhaka City. The team observed the crows suddenly falling from trees; and clinical signs of: circling, inability to fly, lethargy, torticollis, tremors, and diarrhea. No history or clinical signs were reported or noted in other domesticated animals or people.

Location	
Country:	Bangladesh
District:	Dhaka (This is 245km from Rajshahi)
Village/Town:	Dhaka city: Wireless Mohakhali, Ramna Park, Sohrawardi uddan, Dhaka University, and Modumoti Model Town
GPS Coordinates (if known):	<i>Mohakhali Wireless</i> N23 47.010 E90 24.289 <i>Ramna Park:</i> N23 44.347 E90 23.969 <i>Dhaka University:</i> N2344.087 E9023.499
Date that first case(s) of illness occurred (if known or estimate):	January 14, 2017
Date that PREDICT was first notified of outbreak:	January 14, 2017

Key Information	Description of Findings/Actions/Outcomes
How many affected individuals?	Human: Suspected <u>0</u> Confirmed <u>0</u> Deaths <u>0</u> Domestic animal: Suspected <u>approx. 69</u> Confirmed <u>0</u> Deaths <u>63</u> Wild animal: Suspected <u>190</u> Confirmed <u>0</u> Deaths <u>126</u>
How was outbreak first noticed?	The PREDICT-2 team was conducting routine bat sampling in Dhaka. On January 14, 2017, Country Coordinator, Dr. Ariful Islam, reported observing 4 sick or dying crows on the premises of a telecommunications company where PREDICT was also conducting bat sampling. The Country Coordinator notified the Director of the Institute of Epidemiology, Disease Control & Research (IEDCR) about a second crow die-off (<i>see also PREDICT's report on the concurrent Rajshahi outbreak</i>) on the premises of the telecommunication company, Mohakhali Wireless. The Director of IEDCR then informally and verbally requested the PREDICT-2 team to extend their Rajshahi outbreak response efforts to also investigate the crow die-off in Dhaka. When asked, local residents stated that the crow die-off had started in the beginning of January. IEDCR expressed interest in understanding the geographical distribution,

	cause and extent of this outbreak and find any epidemiological links between these two outbreak sites (Dhaka and Rajshahi).
Where was the first reported case? What is/was the extent of geographic spread? Include comments on the apparent speed of spread.	The crow die-off was first observed at Mohakhali wireless. An additional 4 crow roosts were observed by the PREDICT team that also had evidence of crow morbidity and mortality approximately 7km from Mohakhali at Ramna Park, Suhrawardy Uddan, Modumoti Model Town and Dhaka University. The team searched Dhaka city for other crow roosts and observed apparently healthy crows at 7 additional roosts. Discussions with local residents and additional field observations indicated there was no further evidence of crow mortality events or unusual illness at these other roosts.
Has the country requested support from PREDICT (include date of request)?	The Director of IEDCR requested PREDICT's support in this outbreak on January 14, 2017, as part of the official request for the ongoing Rajshahi outbreak. The director of IEDCR officially acknowledged the outbreak on January 15, 2017.
If so, which government agency requested PREDICT support?	Institute of Epidemiology, Disease Control and Research (IEDCR) and One Health Secretariat of Bangladesh under Ministry of Health and Family Welfare, Government of the people's Republic of Bangladesh.
When was PREDICT response initiated (date)?	January 14, 2017
Are other EPT partners involved in the response (which ones and how)?	On 18 January, IEDCR provided an update of the investigation at the National Influenza Technical Steering Committee coordination meeting. FAO and P&R were present. On the 25 th , there was a second meeting to discuss the outbreak and FAO presented data from ongoing, routine live bird market (LBM) surveillance.
What type of assistance did PREDICT initially provide? Which PREDICT personnel were involved?	<p>PREDICT was engaged at the start of outbreak response, since the team reported the unusual deaths and clinical signs. At IEDCR's request, the team immediately collected crow samples and provided technical advice to IEDCR. The team surveyed nearby crow roosts (within 7 km) and found 4 additional sites where crows had clinical signs and mortality. The PREDICT team visited 14 live bird markets and sampled poultry offal. These markets are in Dhaka close to the outbreak site and are not under routine surveillance by FAO. PREDICT conducted wild bird and feral dog sampling; environmental crow and poultry fecal sample collection; qualitative interviews; transported personnel; transported samples from the field to the PREDICT lab at icddr,b and the Department of Livestock Services (DLS) National Laboratory – The Central Disease Investigation Laboratory (CDIL). Diagnostic analyses are being conducted by the Ministry of Livestock and Fisheries reference lab as well as the reference lab at the Bangladesh Livestock Research Institute (BLRI) and icddr,b.</p> <p>The PREDICT team included Dr. Ariful Islam, PREDICT-2 country coordinator; one veterinary research officer; one anthropologist; one field research assistant; and two field technicians who have wildlife expertise. At icddr,b, lab testing was overseen by PREDICT Bangladesh lab lead, Dr. Zia Rahman and conducted by 2 research officers.</p>
When was the first official acknowledgement of the outbreak (by which government agency or other reputable body and date)?	The Director of the Institute of Epidemiology, Disease Control & Research (IEDCR) first officially acknowledged the crow die-off on January 15, 2017. The response was initiated by the Director of IEDCR on January 14, 2017.
When was a response initiated and by whom? Which agencies were involved? Who was in charge of the national response?	In this outbreak response, the Ministry of Health & Family Welfare, Ministry of Forest and Environment, and Ministry of Fisheries and Livestock were each involved as part of the Government of Bangladesh response. icddr,b was involved as a PREDICT lab partner to support preliminary sample testing. For the Dhaka crow die-off investigation, the Bangladesh Livestock Research Institute (BLRI) and the Central Diagnostic Investigation Laboratory (CDIL) serve as official reference labs (under Ministry of Fisheries and Livestock) and are performing confirmatory

	testing for a subset of samples screened at icddr,b. BLRI and CDIL will report the official laboratory results on behalf of the Government of Bangladesh, once diagnostic testing is completed. Prof. Dr. Meerjady Sabrina Flora, Director, IEDCR is in charge of the national response.
Was the cause of the outbreak confirmed by a laboratory? If so, give details, including cause, species, specimen types tested and dates of testing if known.	The etiology of outbreak was preliminarily identified by laboratory testing, and confirmatory testing is on-going. Note: The PREDICT team has been actively sampling sick or dead crows in Dhaka from Jan 14 th , and the outbreak remains active. Below is a detailed daily summary of PREDICT field activities and samples submitted to lab partners for analysis.
Where was the laboratory testing performed (name of laboratory)?	icddr,b, Bangladesh Livestock Research Institute(BLRI), and Central Disease Investigation laboratory (CDIL)
Number of days between initiation of government response and lab confirmation of laboratory results.	Confirmed diagnostic results from the Government of Bangladesh have not been released.
Summary of the Outbreak:	To be filled after active outbreak activity has ceased
Working name of the outbreak (e.g., Yellow Fever - DRC)	Crow die-off Dhaka
Total number of cases:	Human: Suspected <u> 0 </u> Confirmed <u> 0 </u> Deaths <u> 0 </u> Domestic animal: Suspected <u> approx. 69 </u> Confirmed <u> 0 </u> Deaths <u> 63 </u> Wild animal: Suspected <u> 190 </u> Confirmed <u> 0 </u> Deaths <u> 126 </u>
Summary of PREDICT Team response activities during the outbreak.	<p>Since January 14, 2017, after receiving a verbal request from the Director of IEDCR (the official acknowledgement of the die-off was on the 15th of January), the PREDICT team has been continuing its field investigations and has sampled 174 crows and 3 bats and collected 139 live bird market environmental samples, 63 poultry offal samples, 6 feral dogs and captured 13 wild birds that are co-roosting with crows (species ID pending). We submitted all the samples to icddr,b lab and a subset of samples were submitted to BLRI for confirmatory testing. Additional testing and laboratory systems strengthening also ongoing at CDIL.</p> <p>The qualitative team performed their observational and informal interviews in the outbreak area, live bird markets and poultry farms. The PREDICT team has continued to sample wild crows, as of January 31st, at three of the sites with ongoing crow mortality: Wireless Mohakhali, Ramna Park, Sohrawardi uddan. The anthropology team has one more field site visit and then then will finalize their report. Laboratory diagnostics are ongoing.</p>

PREDICT Response Timeline

Working Title of Investigation: *Crow dieoff_Bangladesh_Dhaka_2017*

Key Events:

Date	Day #	Notification or Action Taken
January 14, 2017 (See Rajshahi report)	1	First notification of unusual disease activity by PREDICT team CC notification to PREDICT lead partner
January 14, 2017	1	Unofficial request from the government for the PREDICT team
January 14, 2017	1	First deployment of PREDICT teams to outbreak field site – PREDICT team was already deployed to the site sampling bats
January 14, 2017	1	First (6) specimen collection
January 14, 2017	1	First specimens delivered to laboratory
January 15, 2017	2	Invitation to assist from government received by PREDICT team
January 15, 2017	2	First Outbreak Taskforce meeting attended by PREDICT CC or PREDICT team members
January 15, 2017	2	First samples (24 oral and cloacal swab samples in VTM) collected from 12 crows and submitted to icddr,b laboratory and preliminary testing completed. These samples were screened by real time PCR for the M gene, H5, H7, and H9. The preliminary results were sent to IEDCR on same day.
January 16, 2017	3	First report of preliminary results to government (Department of Livestock Services and the Forest Dept.) and taskforce by IEDCR. The PREDICT team collected 1 crow sample from Mohakhali Wireless.
January 17, 2017	4	The PREDICT team collected 8 crow samples 6 from Mohakhali Wireless, 1 from Sohrawardi Uddan, and 1 from Ramna Park.
January 18, 2017	5	Additional samples from 23 crows submitted for testing to both icddr,b and BLRI for testing. While conducting non-invasive macaque sampling in Dhamrai, the team identified and collected samples from 2 dead crows. The country coordinator reported the mortality event to IEDCR. The samples were sent to icddr,b and BLRI.
January 19, 2017	6	The PREDICT team collected 1 crow sample from Mohakhali Wireless.
January 20, 2017	7	The PREDICT team collected 5 crow samples, 2 from Mohakhali Wireless and 3 from Ramna Park.
January 21, 2017	8	The Government of Bangladesh (GoB) reported to OIE that there was an outbreak in commercial poultry farms in Dhamrai. This is considered outside of the Dhaka City outbreak region reported here. The team collected 2 crow samples from Ramna Park, 6 feral dog samples, and 36 environmental and 8 offal samples from LBMs around the Dhaka crow outbreak sites.
January 22, 2017	9	The PREDICT team collected 12 crow samples, from Dhaka University, Mohakhali Wireless, Ramna Park, and Suhrawardy Udyan, and 1 wild bird sample from around the Dhaka crow outbreak sites. Additional preliminary testing completed at icddr,b for confirmation at BLRI; supplemental testing methods begun on Predict-collected samples at Central Disease Investigation Laboratory (CDIL) supporting larger lab system
January 23, 2017	10	The PREDICT team collected 8 crow samples from Mohakhali Wireless, Ramna Park, and Suhrawardy Udyan and the team collected 49 environmental and 7 offal samples from LBMs around the Dhaka crow outbreak sites.
January 24, 2017	11	The PREDICT team collected 16 crow samples and 4 wild bird samples from the Dhaka crow outbreak sites, Mohakhali Wireless, Ramna Park, and Anondo Bazar. The team collected 18 environmental and 11 offal samples from LBMs around the

		Dhaka crow outbreak sites.
January 25, 2017	12	The PREDICT team collected 6 crow samples, 8 wild bird samples, and 1 bat sample (<i>Cynopterus sphinx</i>) from Mohakhali wireless. The team collected 10 environmental and 2 offal samples from LBMs around the Dhaka crow outbreak sites.
January 26, 2017	13	The PREDICT team collected 10 samples from crows the Dhaka crow outbreak sites (5 Mohakhali Wireless and 5 Ramna Park). PREDICT submitted an additional 221 samples consisting of 60 crow samples (cloacal and oropharyngeal), including the sampled 28 poultry offal samples (from the 14 live bird markets), 113 environmental fecal samples and 6 feral dog samples to the PREDICT lab at icddr,b.
January 28, 2017	15	The team collected 8 samples from 5 sick and 3 dead crows from from Mohakhali Wireless, Sohrawardi Uddan, and from Ramna Park.
January 29, 2017	16	The team collected 8 samples from 2 sick and 6 dead crows the Dhaka crow outbreak sites, Dhaka University, Mohakhali Wireless, and Ramna Park.
January 30, 2017	17	PREDICT's anthropologist performed observational and informal interviews at one live bird market neighboring Mohakhali outbreak site. The team sampled 12 dead crows from two locations (7 from Mohakhali wireless, and 5 from Ramana Park) and safely packed and shipped carcasses to CDIL for safe disposal. 12 swab samples from the crows were shipped to icddr,b lab for testing. PREDICT team also found 7 new crow roosts with apparently healthy crows and no history of crow die-off according to local residents. The anthropology team has one more field site visit and then then will finalize their report. Additional biological sample and behavioral data collection by Predict (ongoing as usual Predict scope of work). Laboratory diagnostics are ongoing
January 31, 2017	18	PREDICT collected observational behavioral data and conducted informal interviews with vendors at a live bird market neighboring Ramna Park outbreak site. The team sampled 9 dead crows from two locations (7 from Mohakhali Wireless, and 2 from Ramna Park) and safely packed and shipped the carcasses to CDIL for disposal via incineration. Cloacal and oropharyngeal swab samples from 9 crows were shipped to icddr,b lab for preliminary testing. Laboratory diagnostics are ongoing. The PREDICT team identified 5 additional crow roosts with apparently healthy crows and no history of recent crow die-off according to local residents.
February 1, 2017	19	PREDICT collected observational behavioral data and conducted informal interviews with vendors at a live bird market neighboring Sohrawardi Uddan outbreak site. The team sampled 8 dead crows from three locations (6 from Mohakhali Wireless, 1 Sohrawardi Uddan and 1 from Ramna Park) and safely packed and shipped the carcasses to CDIL for disposal via incineration. Cloacal and oropharyngeal swab samples collected from the 8 crows were shipped to icddr,b lab for preliminary testing. Laboratory diagnostics are ongoing. The PREDICT team identified three additional crow roosts with apparently healthy crows and no history of recent crow die-off according to local residents. A regular meeting of all USAID Mission partners, including PREDICT, will take place on February 6, 2017. The Mission Director will be updated on all PREDICT-2

		<p>activities as well as on PREDICT's engagement with the Government of Bangladesh in the investigation of the crow die-off.</p> <p>The PREDICT Country Coordinator updated P&R, FAO, CDIL, IEDCR regarding recent activities.</p>
February 2, 2017	20	<p>The team sampled 8 dead crows from three locations (4 from Mohakhali Wireless, 2 Sohrawardi Uddan and 2 from Ramna Park) and safely packed and shipped the carcasses to CDIL for disposal via incineration. Cloacal and oropharyngeal swab samples collected from the 8 crows and were shipped to icddr,b lab for preliminary testing. Laboratory diagnostics are ongoing. The team also found a recently dead Indian flying fox (<i>Pteropus medius</i>) at a crow die-off site in Sohrawardi Uddan. The bat was necropsied and samples were shipped to icddr,b lab for influenza testing.</p> <p>This concludes the crow sampling in Dhaka.</p> <p>The PREDICT Country Coordinator updated DLS, CDIL, IEDCR regarding recent activities.</p>
February 6, 2017	24	<p>The PREDICT Country Coordinator met with the Mission and EPT partners and gave a general update on the activities surrounding the crow die-off.</p>
February 7, 2017	25	<p>The PREDICT Country Coordinator discussed the status of the outbreak response with the DLS.</p>
February 8, 2017	26	<p>Targeted crow sampling was ceased.</p> <p>The Government of Bangladesh is awaiting formal confirmation of the results.</p> <p>The PREDICT team was again collecting non-invasive macaque samples in Dhamrai, Dhaka (7-8km from Modumoti Model Town) and found one dead crow. The field team collected samples from the crow, the samples are being stored in IEDCR and are available for further analysis if needed. The country coordinator informed IEDCR. The PREDICT team has not been asked to reinitiate outbreak sampling as this is likely part of the outbreak in commercial poultry farm in Dhamrai and will not continue to collect crow samples.</p> <p>Preliminary results from the two crows sampled January 18th and the results were reported to IECDR by email and verbally with DLS.</p> <p>A One Health report (including the qualitative behavioral analysis) is being compiled by IEDCR and the PREDICT team to be given to Prof. Dr. Flora, who is in charge of the national response.</p>
February 13, 2017	31	<p>On request of IEDCR and DLS, as part of a follow up visit to Dhaka and to visit Dhamrai. The team was able to visit the Dhaka sites to see whether the crow die-off was still ongoing. The team observed crow mortalities. The team sampled 25 dead crows from three locations (11 from Mohakhali Wireless, 6 Dhaka University and 8 from Ramna Park) and safely packed and shipped the carcasses to CDIL for disposal via incineration. Cloacal and oropharyngeal swab samples collected from the 25 crows. These samples will be sent to the PREDICT lab for standard viral family testing, including influenza virus.</p> <p>The team was unable to visit Dhamrai at this time.</p>
Feb 19, 2017	37	<p>Following up on the request on February 13, the team visited Dhamrai. No crow mortalities were noted. IEDCR requested the team to conduct cursory sampling of the LBM because those markets are not part of regular FAO surveillance. The PREDICT team collected an additional 23 offal and 10 environmental samples from neighboring LBMs in Savar and Dhamrai.</p>

		We have provided previously collected samples (Dhaka) from 15 crows and 15 LBM offal samples to BLRI for specific influenza testing.
Feb 20, 2017	38	<p>The security staff of telecommunication company, Mohakhali Wireless, informed our team that a dead bat carcass was found on the premises with the dead crows.</p> <p>The PREDICT team visited the site and found 2 dead crows and 1 bat in Mohakhali.</p> <p>The team also found 4 dead crows from two additional locations (2 Sohrawardi Uddan and 2 from Ramna Park) and safely packed and shipped the carcasses to CDIL for disposal via incineration. Cloacal and oropharyngeal swab samples were collected from the 6 crows. The bat (<i>Pteropus medius</i>) was necropsied at CDIL and tissue and swab samples were collected.</p> <p>A second PREDICT team collected 12 offal and 16 environmental samples from neighboring LBMs in Savar and Dhamrai. These LBMs are close to the commercial poultry outbreak sites but are not part of regular FAO surveillance.</p> <p>PREDICT is testing wild bird and bat samples for the 5 priority viral families (influenza, flavivirus, coronavirus, paramyxovirus and filovirus).</p> <p>The PREDICT Country Coordinator updated CDIL and IEDCR regarding recent activities</p>
April 11, 2017	88	<p>The PREDICT Country Coordinator had a meeting to discuss the preliminary results of the crow testing with the Department of Livestock Services (DLS).</p> <p>An official report was submitted from the DLS to the OIE the detection of H5 influenza virus in crow samples collected by the PREDICT team. Laboratory confirmation came from BLRI using influenza specific assays. All locations sampled (Mohakhali Wireless, Ramna Park, Sohrawardi Uddan, Dhamrai and Dhaka University) had crows that were confirmed as H5 influenza positive. They also reported H5 in crows from Hemayetpur, Gulshan, Shahbag, and Savar. A link to the official OIE report (dated today April, 11, 2017) can be found here: https://www.oie.int/wahis_2/public/wahid.php/Reviewreport/Review?page_refer=MapFullEventReport&reportid=23531.</p> <p>The PREDICT Country Coordinator has been given permission by the government to present the confirmed results of testing by BLRI (using their reference influenza specific assays) and the overall outbreak response on behalf of the GoB at the next GHSA Coordination meeting.</p> <p>Testing by the PREDICT laboratory team at icddr,b using the PREDICT priority virus family detection assays is ongoing.</p>
April 12, 2017	89	<p>The PREDICT Country Coordinator presented the confirmed H5N1 (from Rajshahi) and H5 results (from Dhaka), using BLRI's reference influenza specific assays, from the crow samples that were collected by PREDICT. The Country Coordinator was presenting on behalf of the One Health investigation team and with the consent of the GoB at a GHSA coordination meeting held today. The PREDICT Country coordinator also gave an update on the One Health response and involvement of multiple government partners in the Rajshahi and Dhaka crow die-offs. Attendees at the meeting included: USAID, US CDC, WHO, FAO, DLS, the Forest Department, the Ministry of Health and Family Welfare, IEDCR, icddr,b, PREDICT2, P&R and the One Health Secretariat.</p> <p>Testing by the PREDICT laboratory team at icddr,b using the PREDICT priority</p>

virus family detection assays is ongoing

From: Catherine Machalaba <machalaba@ecohealthalliance.org>
To: Jonna Mazet <jkmazet@ucdavis.edu>
Cc: "William B. Karesh" <karesh@ecohealthalliance.org>
Subject: Re: PREDICT Management Team Review-- Essential Role of the Environment in One Health and National Health Security
Sent: Wed, 26 Apr 2017 04:03:39 +0000

Thank you, Jonna! Excellent suggestions- we will edit accordingly.
Thanks as always for your collaboration! :)

Kind regards,
Catherine
Catherine Machalaba, MPH
Health and Policy Program Coordinator

EcoHealth Alliance
460 West 34th Street – 17th floor
New York, NY 10001

1.212.380.4472 (direct)
REDACTED
1.212.380.4465 (fax)
www.ecohealthalliance.org

Science Officer, Future Earth oneHEALTH Project

Chair, Veterinary Public Health Special Primary Interest Group, American Public Health Association

Program Officer, IUCN SSC Wildlife Health Specialist Group

EcoHealth Alliance leads cutting-edge research into the critical connections between human and wildlife health and delicate ecosystems. With this science we develop solutions that promote conservation and prevent pandemics.

On Apr 25, 2017, at 11:46 PM, Jonna Mazet <jkmazet@ucdavis.edu> wrote:

Hi -- a few minor suggestions.
Thanks for keeping up the environmental advocacy,
Jonna

On Fri, Apr 21, 2017 at 11:11 AM, David J Wolking <djwolking@ucdavis.edu> wrote:

Hi PREDICT Management Team,
At Billy and Catherine's request, I am forwarding a briefing document developed with P&R intended to support countries with engaging the environmental sector in national planning for health security. Billy and Catherine would greatly appreciate your review and feedback by April 26th as there are plans to distribute the final version at the WHO-CBD meeting in Geneva on May 3rd.

Thanks in advance!

David

----- Forwarded message -----

From: **Catherine Machalaba** <machalaba@ecohealthalliance.org>
Date: Wed, Apr 19, 2017 at 2:59 PM
Subject: PREDICT Management Team Review-- Essential Role of the Environment in One Health and National Health Security
To: David J Wolking <djwolking@ucdavis.edu>
Cc: "William B. Karesh" <karesh@ecohealthalliance.org>, Amanda Andre <amanda.andre@ecohealthalliance.org>

Dear David,
Please find attached a short briefing document on the role of the environment sector in One Health and health security

that we developed with P&R, intended to assist countries in engaging the environment sector in national action planning for health security.

May we kindly ask for it to be reviewed by Senior Management Team by April 26th so that comments can be incorporated and the document distributed at the WHO-CBD meeting that we are facilitating in Geneva on May 3rd? Thank you so much, and we greatly appreciate the team's help and insight as always!

Kind regards,
Catherine

Catherine Machalaba, MPH
Health and Policy Program Coordinator

EcoHealth Alliance
460 West 34th Street – 17th floor
New York, NY 10001

[1.212.380.4472](tel:1.212.380.4472) (direct)

REDACTED

[1.212.380.4465](tel:1.212.380.4465) (fax)

www.ecohealthalliance.org

Science Officer, Future Earth oneHEALTH Project

Chair, Veterinary Public Health Special Primary Interest Group, American Public Health Association

Program Officer, IUCN SSC Wildlife Health Specialist Group

*EcoHealth Alliance leads cutting-edge research into the critical connections between human and wildlife health and delicate ecosystems.
With this science we develop solutions that promote conservation and prevent pandemics.*

<Role of Environment- National Health Security Planning JM.pdf>

From: "Anna Willoughby" <willoughby@ecohealthalliance.org>
Sent: 06/01/2017 10:32:06 AM (-07:00)
To: "Kevin Olival" <olival@ecohealthalliance.org>; "Jonna Mazet" <jkmazet@ucdavis.edu>; "Peter Daszak" <daszak@ecohealthalliance.org>; "Damien Joly" <djoly@metabiota.com>; "Chris Johnson" <ckjohnson@ucdavis.edu>
Cc: "Brooke Genovese" <bgenovese@ucdavis.edu>; "Alison Andre" <andre@ecohealthalliance.org>
Subject: June cross-PREDICT M&A call
Attachments: P2 Deliverables - Modeling Team - 5.5.16 - FINAL.xlsx

Dear all,

Reminder that we have an upcoming call on Tuesday, June 6th at 11 am PST/2pm EST. Agenda items include:

- Coordination of cross-partner collaborations
- Y4 Deliverables

Attached is the latest deliverables list (Y1-Y3) from May 2016. If you have a more up to date version, please circulate. Also, please circulate any other agenda items you would like to discuss.

Since everyone confirmed calls during international travel, please let me know if you are availability for the July call on:

July 13th at 11 am or 12 pm EST

July 14th at 11 am or 12 pm EST

The August call is currently scheduled for August 8th at 11 am PST/2 pm EST.

Thank you,
Anna

--

Anna Willoughby

Research Assistant

EcoHealth Alliance
460 West 34th Street – 17th floor
New York, NY 10001

1.646.868.4713 (direct)

1.212.380.4465 (fax)

REDACTED

www.ecohealthalliance.org

EcoHealth Alliance leads cutting-edge research into the critical connections between human and wildlife health and delicate ecosystems. With this science we develop solutions that promote conservation and prevent pandemics.

From: "William B. Karesh" <karesh@ecohealthalliance.org>
Sent: 08/02/2017 3:45:17 AM (-07:00)
To: "David Wolking" <djwolking@ucdavis.edu>; "Leilani Francisco" <francisco@ecohealthalliance.org>; "Brian Bird" <bhbird@ucdavis.edu>; "Karen Saylor" <ksaylors@metabiota.com>; "Chris Johnson" <ckjohnson@ucdavis.edu>; "Tracey Goldstein" <tgoldstein@ucdavis.edu>; "Jonna Mazet" <jkmazet@ucdavis.edu>; "sja2127@cumc.columbia.edu" <sja2127@cumc.columbia.edu>; "Jon Epstein" <epstein@ecohealthalliance.org>; "Manjunatha N Belaganahalli" <mbelaganahalli@ucdavis.edu>; "Emma Lane" <lane@ecohealthalliance.org>; "Emily Hagan" <hagan@ecohealthalliance.org>; "Corina Grigorescu Monagin" <cgmonagin@ucdavis.edu>; "Alison Andre" <andre@ecohealthalliance.org>; "Katherine Leasure" <kaleasure@ucdavis.edu>; "Amanda Fuchs" <fuchs@ecohealthalliance.org>; "Brooke Genovese" <bgenovese@ucdavis.edu>
Subject: ed materials: EHP call Tuesday August 1st at 11am-12 Pacific / 2-3pm Eastern / 6PM GMT
Attachments: Boite a Images GUINEE.pdf, ATT00001.htm

Hi everyone,

Attached is the ebola education material from Guinea. It doesn't include wildlife though since it was put out during the heat of the outbreak. Illustrations do show the level of simplicity used though.

There apparently is a longer version from WHO/UNICEF that covers 36 "key messages" but folks in Guinea thought it too long and complicated, thus they developed this short version.

I'm still trying to track down the old one from Congo village outreach programs.

BK

William B. Karesh, D.V.M

Executive Vice President for Health and Policy

EcoHealth Alliance
460 West 34th Street - 17th Floor
New York, NY 10001 USA

+1.212.380.4463 (direct)

+1.212.380.4465 (fax)

www.ecohealthalliance.org

President, OIE Working Group on Wildlife

Co-chair, IUCN Species Survival Commission - Wildlife Health Specialist Group

EPT Partners Liaison, USAID Emerging Pandemic Threats - PREDICT-2 Program

EcoHealth Alliance leads cutting-edge research into the critical connections between human and wildlife health and delicate ecosystems. With this science we develop solutions that promote conservation and prevent pandemics.

On Aug 1, 2017, at 3:18 PM, David J Wolking <djwolking@ucdavis.edu> wrote:

Hi again,

Figured I'd also share these materials too just for reference in case they are useful in planning: a wildlife health handbook we designed for TZ game scouts and wildlife professionals and an example of a disease-specific (RVF) informational resource for agro-pastoral communities. These are the materials that took awhile to develop with artists so I think looking to the quick and simple examples from Ebola and Lassa may be a better bet as Billy, Corina, and Brian mentioned today.

David

On Tue, Aug 1, 2017 at 12:14 PM, David J Wolking <djwolking@ucdavis.edu> wrote:

Hi there,

As follow-up to #3 just sharing the outreach materials we developed for Nepal after the earthquake (2 versions in Nepali and an early draft with English for context - the "infographic"). Also sharing one from Mongolia used for AI prevention (non-PREDICT) that our Nepal partners based the earthquake materials around. We didn't test these for effectiveness so no idea if they were well received or got the message across at the local level (largely low literacy communities in the hills).

David

On Sun, Jul 30, 2017 at 12:15 PM, Brian Bird <bhbird@ucdavis.edu> wrote:

PREDICT Sierra Leone, Guinea, Liberia

“EBOLA HOST PROJECT”

COORDINATION CALL

Tuesday August 1: 11AM Pacific, 2PM Eastern, 6PM GMT.

Toll-free number: **REDACTED**

Access Code: **REDACTED**

International Dial-in number: **REDACTED** (toll charges apply)

Hi folks,

I'll be in Sierra Leone, so if for some reason I can't join can someone from UCD please start the call as a backup? I've rearranged the agenda a bit to hopefully flow better. Also in an effort to at least get a small laugh on the call, I've attached a couple photos that illustrate what happens to a team after a week of lab training with Brett and I. ☺

As always, send me ideas if you want something added to the Agenda.

AGENDA Sept 1, 2017:

1. USAID HQ communications

- a. General budget or other updates/overview (Jonna)
- b. Updates/reminders on Yr4 work plans and Country Briefs (David)

2. Country Specific Communications, Updates, and Challenges

a. Sierra Leone (Brian)

1. Mission communications
2. Laboratory training update
3. Transition to UNIMAK
 1. Liz Leasure to UNIMAK Thursday and Friday (Aug 3-4).
4. Meetings with GoSL (Minister of Agriculture, CMO, DCMO, SLA, EOC weekly meeting...)
5. GPS coordinate problems with field sampling sites

b. Guinea (Corina)

1. Update on last week's trip
2. GoG and Mission comms, VHF lab sub-award, IRB, Permits, etc.
3. Agreement to ship specimens out of Guinea and possible timeline

c. Liberia (Jon)

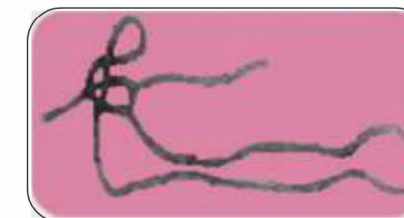
1. Mission Communications

2. Update on NPHL activities and agreements
3. **Communications Strategies in Sierra Leone related to finding and risk reduction (Leilani, all)**
 - a. Any updates from USAID on the incoming SL comms partner?
 - b. Which approaches/methods to take?
 - c. Couple pilot roll-out with National Rabies Day (Sept 28th)?
 - d. Use of preexisting PREDICT-District community liasons as a beta-test audience?
4. **Laboratory updates (Tracey, Simon, Manju)**
 - a. Progress on shipment testing results (Sierra Leone and Liberia)
 - b. Update on Nature publication draft and reviews
4. **Food for thought: How to handle reporting across PREDICT for other high-consequence findings? (all)**
 - a. Any other thoughts on this issue that folks want to raise?
5. **Other partner updates (Billy)**
6. **Next Monthly Call: September 5th 11am-12 Pacific / 2-3pm Eastern**

<HALI Wildlife Health Handbook.pdf><Rift Valley Fever RD3.pdf>



République de Guinée



Coordination Nationale de Lutte contre Ebola

Campagne de lutte contre la maladie à virus Ebola



The World Bank



Organisation mondiale de la Santé



Plan



JAPAN
Official Development Assistance



Liberté · Égalité · Fraternité
AMBASSADE DE FRANCE
EN GUINÉE ET SIERRA LEONE



USAID | GUINEA
FROM THE AMERICAN PEOPLE



Terre des hommes

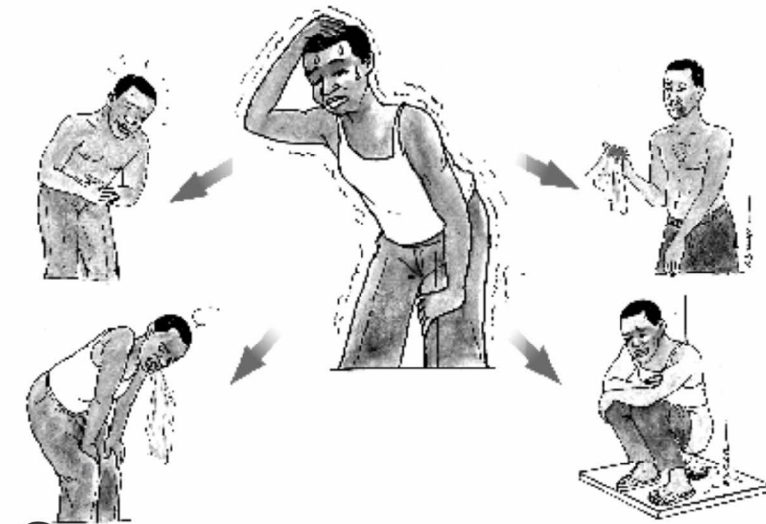
tdh.ch





OS CAR

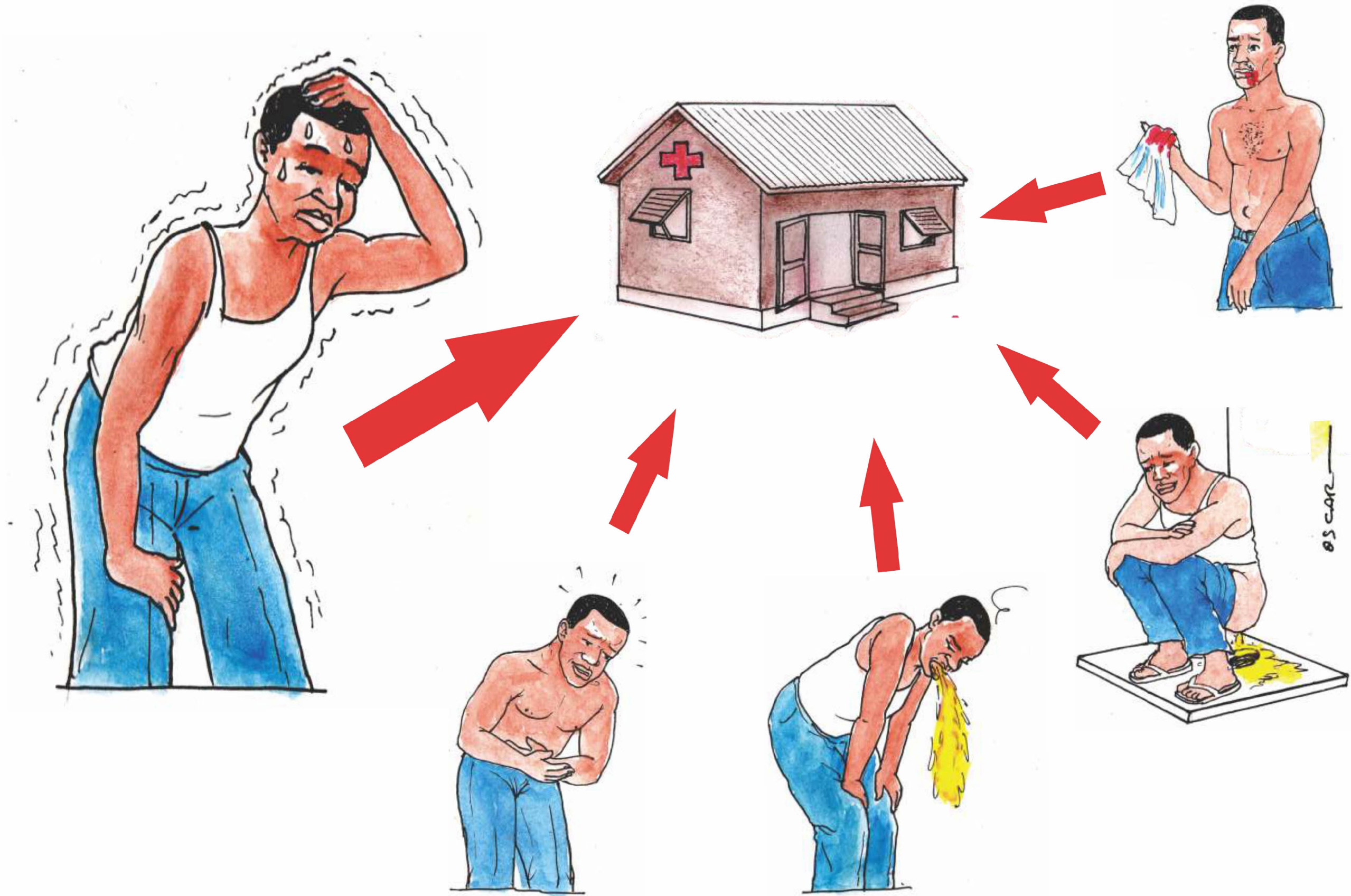


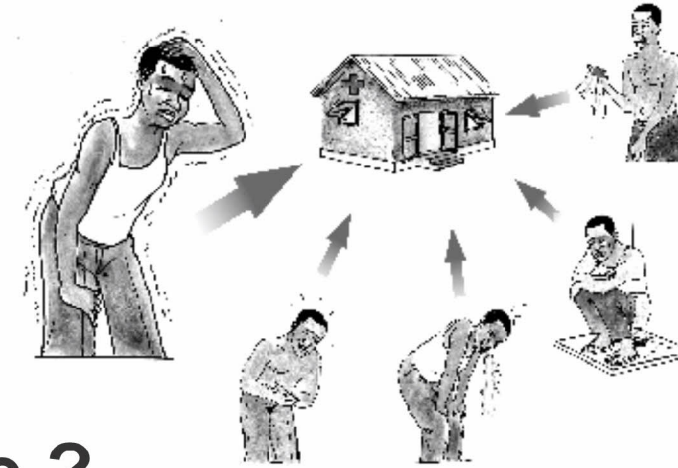


Question: Qu'est-ce qu'on voit sur cette image?

Réponse correcte: Nous voyons un homme qui est malade de la fièvre Ebola.

- **La maladie Ebola commence souvent avec la fièvre comme pour le palu ou la grippe mais cette fièvre est plus forte**
- **Souvent le corps fait mal, on a une très grande fatigue, on vomit (parfois avec du sang), on a la diarrhée (parfois avec du sang), ou bien on voit parfois des taches de sang dans la peau ou des saignements carrément (mais ceci est très rare).**
- **Dans tous les cas, dès le premier signe (la fièvre), il faut savoir que l'on ne doit plus toucher les autres et demander à rester seul dans une chambre pour ne pas donner la maladie aux autres.**





Question: Qu'est-ce qu'on voit sur cette image ?

Réponse correcte: Nous voyons le même malade mais on a ajouté un hôpital. C'est pour dire qu'avec n'importe quel signe de cette maladie, il faut chercher à se faire soigner.

- **Dès les premiers signes de maladie, il faut tout de suite demander aux parents, enfants ou amis d'appeler le comité de veille, les agents de santé, la Croix Rouge ou le 115 pour être transporté au centre de traitement!**
 - **Si on attend trop longtemps, on a moins de chance de guérir.**
 - **Quand quelqu'un est malade il faut tout de suite le faire soigner pour augmenter ses chances de guérir.**
- Il ne faut pas attendre.**



03 car



Question: Qu'est-ce qu'on voit sur cette image ?

Réponse correcte: Nous voyons un malade avec un médecin au centre de traitement Ebola. Le médecin porte des habits de protection.

- **Les médecins et les infirmiers doivent donc porter ces habits sinon, quand ils touchent un malade sans porter ces habits et ces gants, ils tombent malades eux aussi.**
- **Quand quelqu'un est malade, il faut le faire soigner au centre de traitement Ebola pour augmenter ses chances de guérir. Il ne faut pas attendre.**
- **Les parents et les amis peuvent venir voir le malade et lui parler. On peut lui amener à manger, s'il n'est pas trop malade et peut avaler la nourriture.**
- **Le traitement offert au centre, est GRATUIT.**

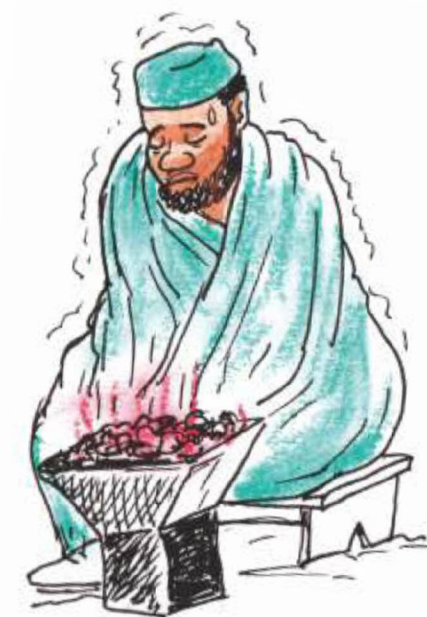
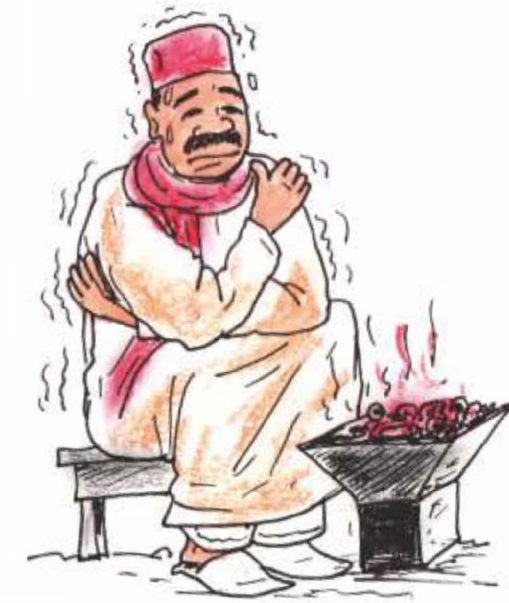
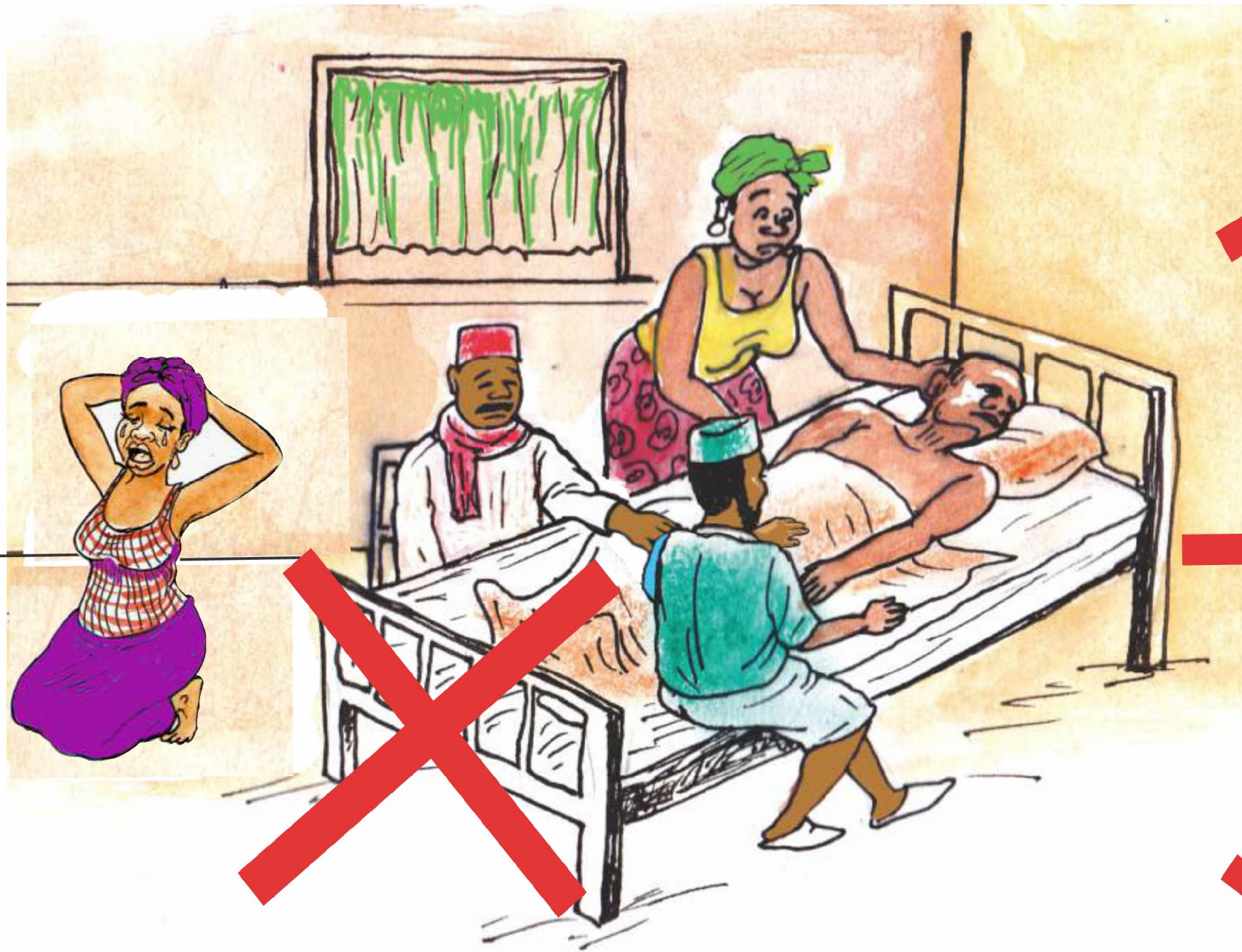




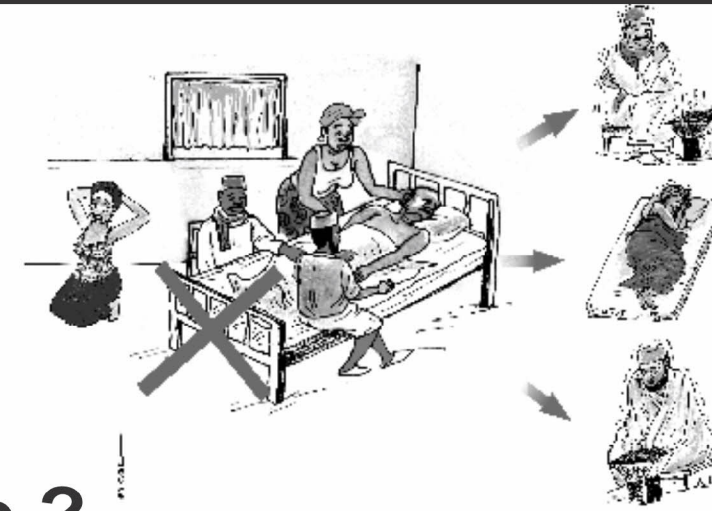
Question: Qu'est-ce qu'on voit sur cette image?

Réponse correcte: Nous voyons un ancien malade sortir du centre de traitement Ebola. Il tient un certificat et un paquet de vivres pour l'aider. Il est accueilli avec joie par ses proches.

- **On peut guérir de la fièvre Ebola si on va au centre de traitement!**
- **Quand quelqu'un sort du centre de traitement, il ne peut plus donner la maladie à un autre. On peut toucher un ancien malade qui est guéri sans rien craindre. Il ne sert à rien d'avoir peur ou de mal parler de quelqu'un qui est guéri. Il faut être content pour lui.**
- **Le paquet contient de l'aide pour les personnes guéries.**



© S CAR



Question: Qu'est-ce qu'on voit sur cette image ?

Réponse correcte: Nous voyons une personne malade de la fièvre Ebola dans sa maison. Plusieurs autres personnes prennent soin de lui et le touchent. Après, on voit qu'elles sont tombées malades aussi.

- **Si un proche à vous est malade ou meurt de la maladie Ebola il ne faut pas le toucher, ni toucher ses habits et ses draps.**
- **Quand on touche une personne qui a la maladie Ebola, on tombe malade aussi.**
- **Ici la seule personne qui a échappé est celle qui n'a pas touché le malade. Il faut donc toujours rester un peu loin du malade et ne pas le toucher.**

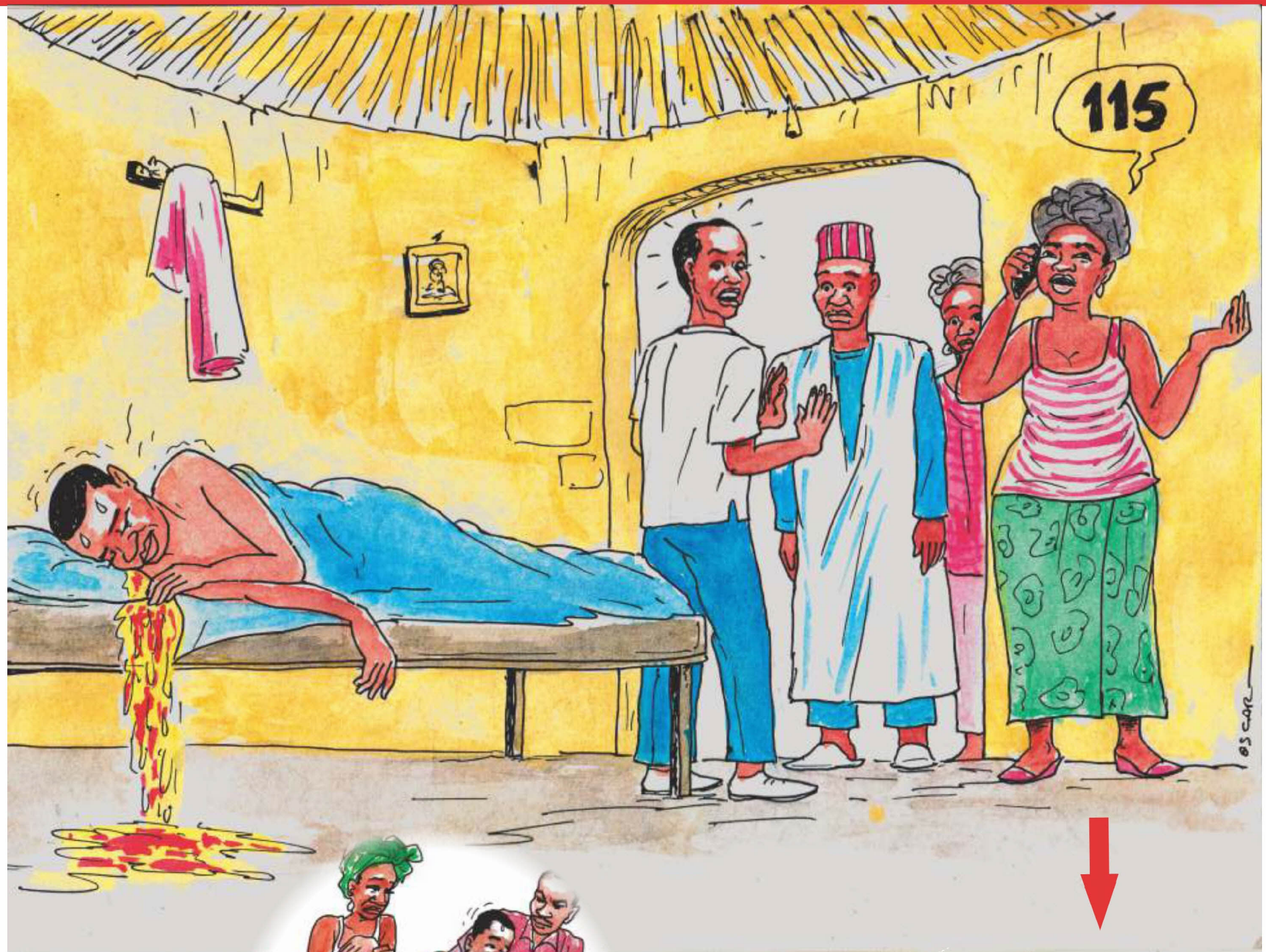




Question: Qu'est-ce qu'on voit sur cette image ?

Réponse correcte: Nous voyons une personne qui refuse de laisser entrer dans la maison des agents communautaires qui sont venus voir une famille touchée par la maladie avec une boîte à images. Nous voyons sa femme dans la maison qui se cache, comme si elle et son mari voulaient cacher le malade aux agents communautaires.

- **Il faut éviter de garder un malade à la maison. Beaucoup de familles sont très endeuillées parce qu'elles ont essayé de cacher leur malade.**
- **Il ne faut pas être violents contre les agents de santé qui viennent voir s'il y a un malade. Ils sont là pour aider le malade à trouver une solution.**
- **Il faut collaborer avec le comité de veille villageois ou de quartier.**

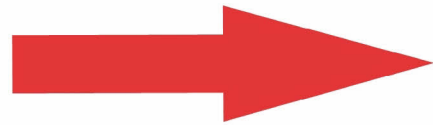




Question: Qu'est-ce qu'on voit sur cette image ?

Réponse correcte: Nous voyons une personne gravement malade de la fièvre Ebola. Un homme empêche que les parents ou les amis viennent à côté de lui. Comme cela, il ne vont pas attraper Ebola eux aussi. Une femme fait venir l'ambulance de la Croix Rouge en appelant le 115. En dessous, on montre qu'il ne faut pas que la femme et l'homme aident le malade eux-mêmes.

- **Si un parent chez vous tombe malade, il faut l'isoler des autres membres de la famille. Même ses autres parents et ses enfants ne doivent pas le toucher !**
- **Le plus souvent, on attrape Ebola parce que l'on veut aider ceux que l'on aime le plus au monde: nos proches parents ou nos amis.**
- **Il faut demander aux équipes de lutte contre Ebola de venir le transporter. Il faut appeler le 115 ou le comité de veille.**



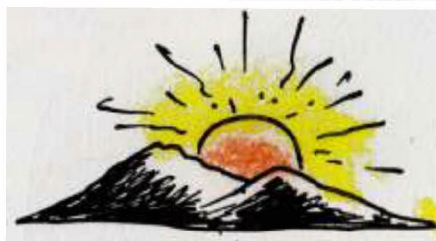
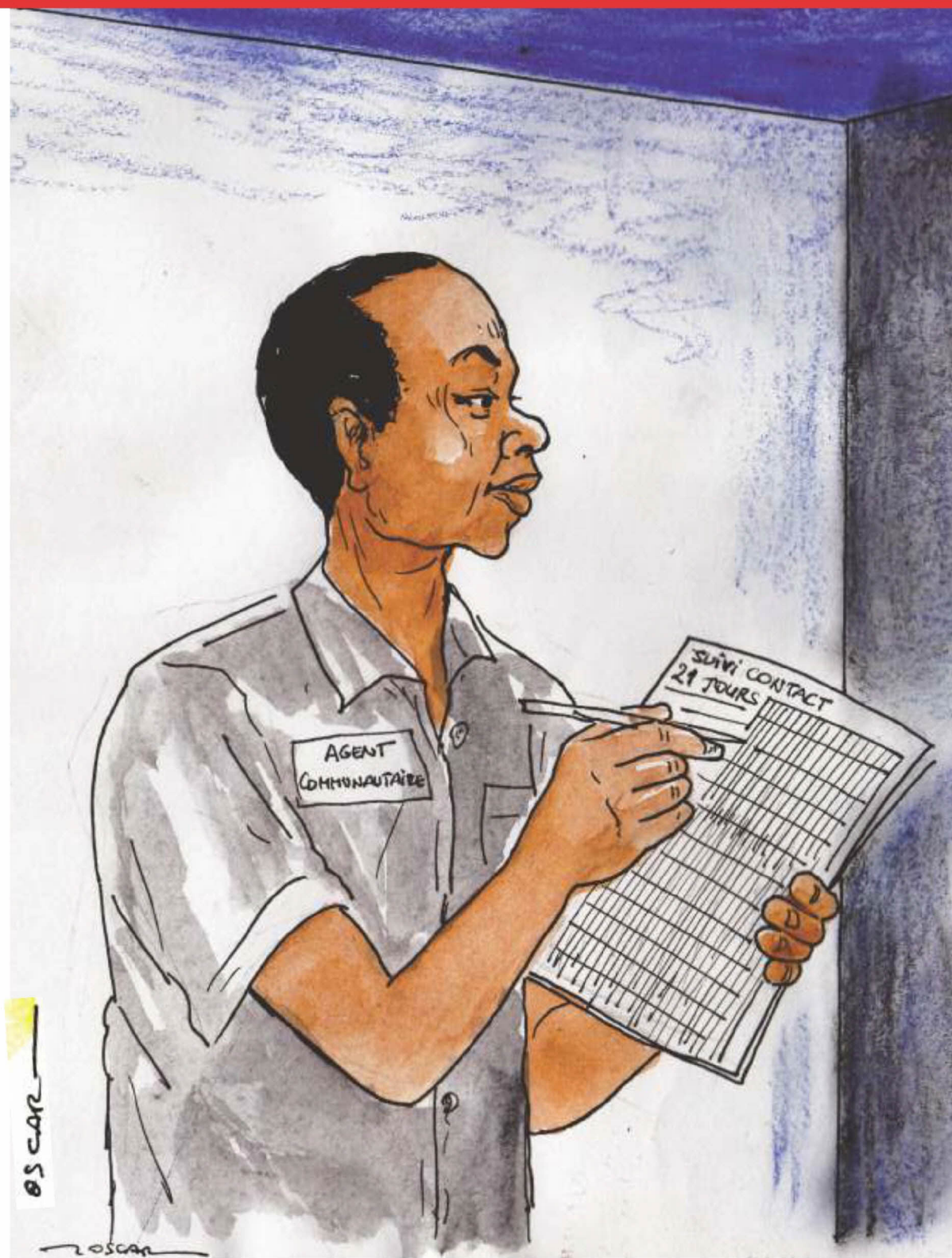
OS car



Question: Qu'est-ce qu'on voit sur cette image ?

Réponse correcte: Nous voyons la femme qui appelle le 115, pour faire venir l'ambulance de la Croix Rouge.

- **Si un proche à vous ou un voisin est malade ou meurt de la maladie Ebola, il ne faut pas le toucher, ni toucher ses habits et ses draps.**
- **Il faut appeler le numéro 115 par téléphone; s'il n'y a pas de téléphone, il faut prévenir le comité de veille ou l'agent de santé.**
- **N'importe où en Guinée maintenant, les secours peuvent arriver. Il faut chercher de l'aide et ne pas transporter le malade vous-même.**
- **Pour toutes les informations sur Ebola il faut appeler le 115 ou le comité de veille pour avoir de bonnes explications.**



matin



midi



soir



nuit

21 jours



Question: Qu'est-ce qu'on voit sur cette image ?

Réponse correcte: Nous voyons que la femme qui avait appelé à l'aide est interrogée par un agent communautaire. On voit du riz et de l'huile qui ont été apporté par l'agent communautaire pour aider la famille qui a eu un malade.

- **Quand il y a eu un malade de fièvre Ebola dans un foyer, des agents doivent d'abord interroger toutes les personnes qui étaient autour du malade pour être sûrs que ses proches ne vont pas aussi avoir des signes de la maladie.**
- **Les agents suivent les personnes qui étaient proches des malades. Si eux aussi ont les premiers signes de la maladie Ebola, ils peuvent vite être transportés au centre de traitement pour augmenter leur chance de guérir.**
- **Cette surveillance par les agents doit durer au moins 21 jours après le dernier contact avec le malade ou le défunt pour être vraiment sûre.**





Question: Qu'est-ce qu'on voit sur cette image ?

Réponse correcte: Nous voyons une personne qui vient dire à un médecin qu'il y a une personne qui a peut être Ebola, chez lui, chez ses voisins ou dans son quartier.

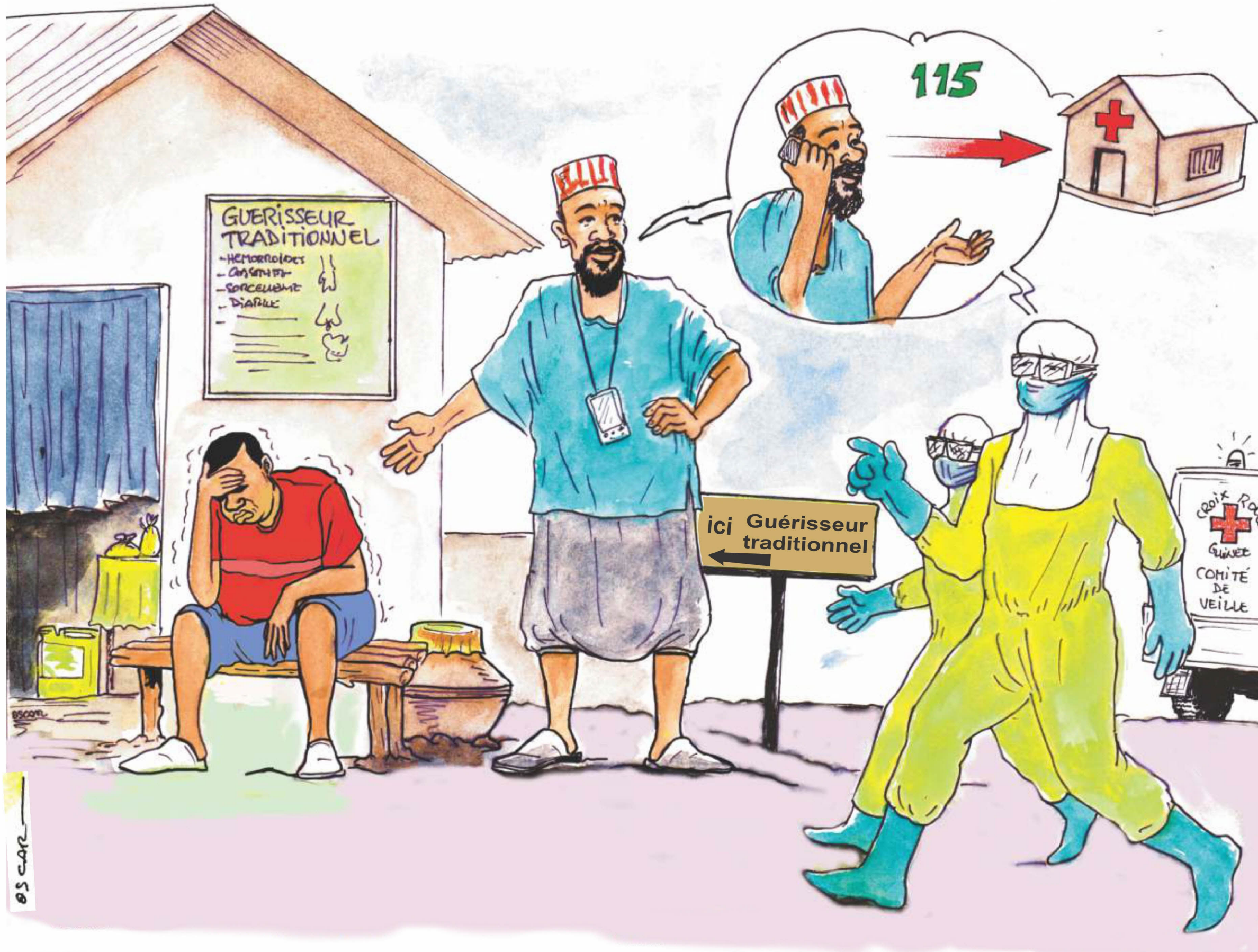
● **Si un proche à vous tombe malade, il ne faut pas le cacher. Il faut appeler le comité de veille, la Croix Rouge, ALIMA, MSF ou le 115 pour faire soigner le malade.**

Vous pouvez sauver le malade et toute sa famille.

● **Si c'est votre voisin de quartier ou du village, il faut aussi le signaler. En signalant que quelqu'un est malade d'Ebola, vous rendez service à toute la communauté.**

Vous empêchez que toute sa famille, tout le quartier ou tout le village tombe malade aussi.

Il faut toujours signaler vite.



OS CAR



Question: Qu'est-ce qu'on voit sur cette image?

Réponse correcte: Nous voyons un guérisseur qui appelle le numéro 115. Quand l'ambulance arrive, il montre quelqu'un qui est malade et pourrait avoir Ebola.

- **Le guérisseur a raison de montrer le malade à des agents de santé qui vont d'abord se couvrir avant de toucher le malade. Il doit aussi faire attention même si la maladie n'apparaît pas trop grave.**
- **Le guérisseur a ainsi échappé à la maladie et il a peut être sauvé aussi, les parents et les amis du malade.**
- **Il faut toujours appeler le comité de veille ou le 115 pour que des personnes formées et protégées transportent le malade!**





Question: Qu'est-ce qu'on voit sur cette image ?

Réponse correcte: Nous voyons une personne morte, après avoir eu Ebola. Des agents communautaires formés et protégés nettoient le corps et l'enveloppe devant les parents. Ils mouillent les murs et le sol avec un peu d'eau de javel pour tuer le microbe partout.

- **Il faut appeler les agents qui s'occupent des enterrements sans risques. Ils vont venir aider la famille. Ils sont formés pour faire ce travail.**
- **La famille peut assister à distance pour vérifier que le corps est traité dignement.**
- **Dans cette guerre contre Ebola, les morts sont des martyrs. Il est possible de prier auprès du corps du défunt dans le respect des pratiques religieuses mais en gardant une distance du défunt et sans le toucher.**

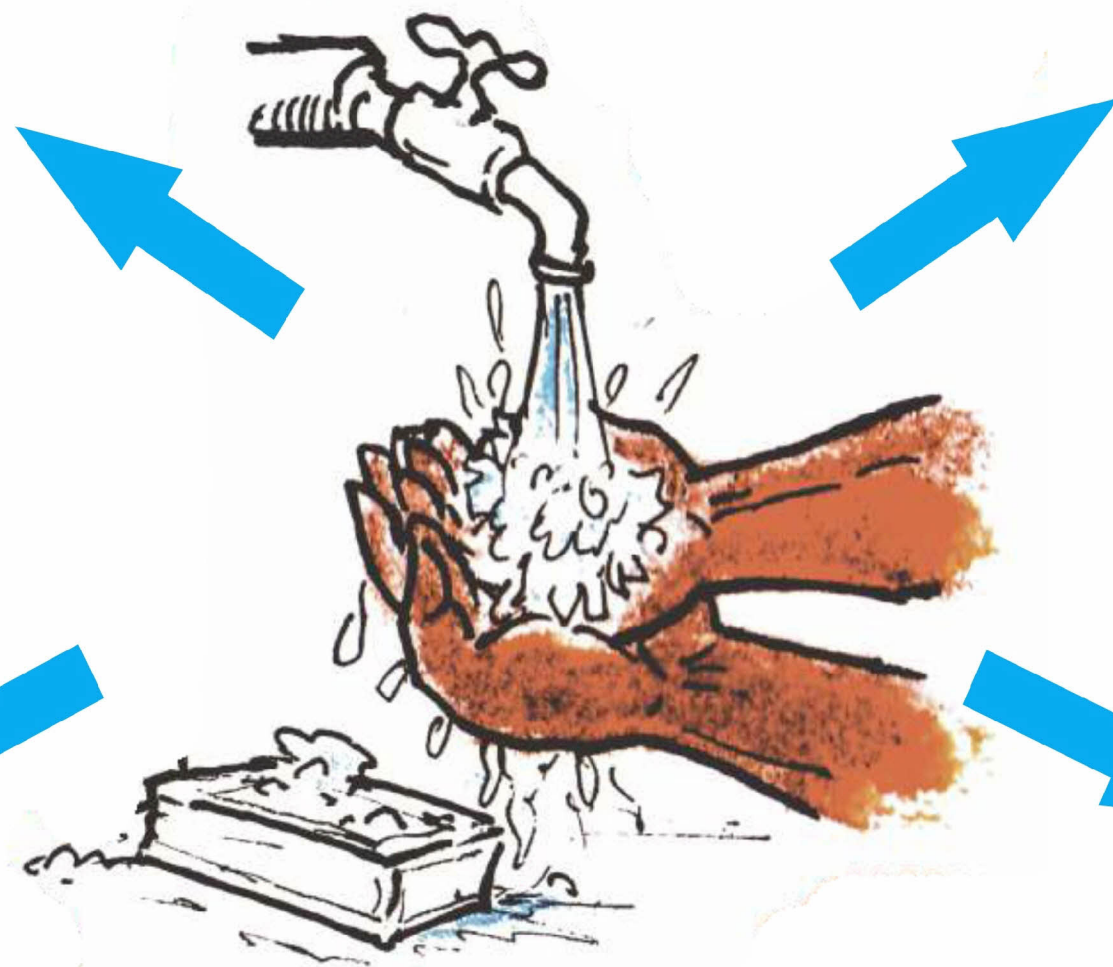
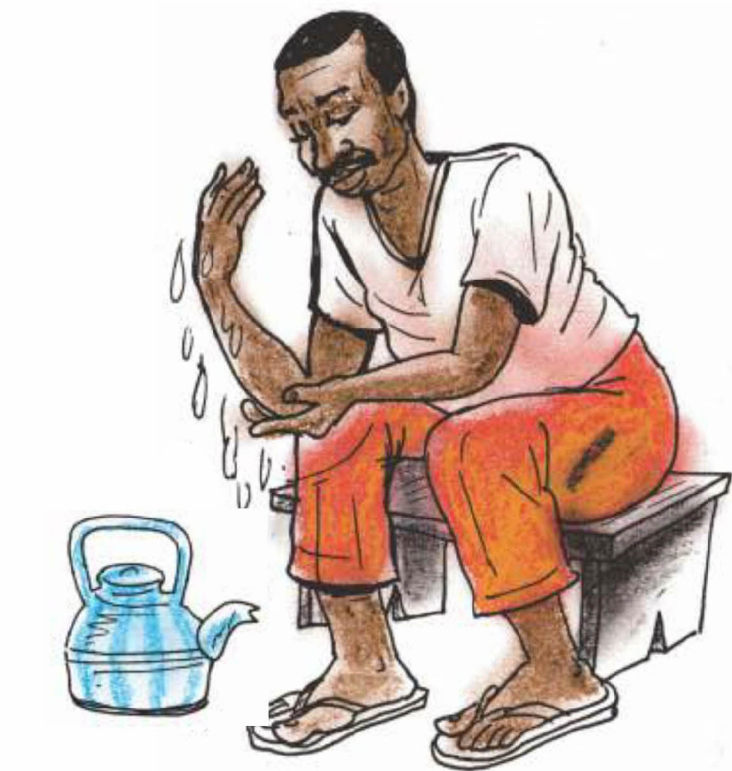




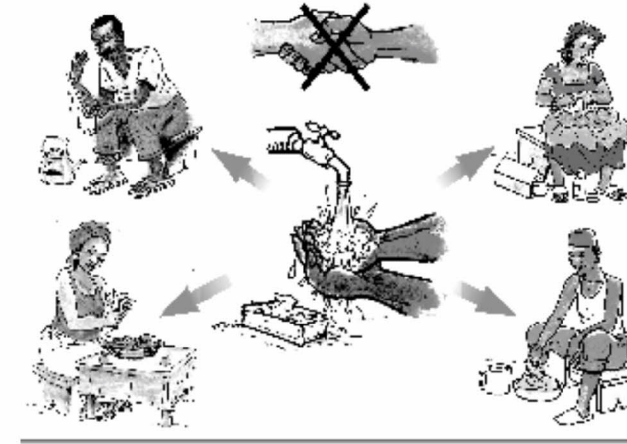
Question: Qu'est-ce qu'on voit sur cette image ?

Réponse correcte: Nous voyons une personne morte de fièvre Ebola, enterrée par des agents communautaires formés et protégés en présence de personnes religieuses et de sa famille.

- **Il faut appeler le comité de veille ou la Croix Rouge pour organiser un enterrement digne, rassurant et sans risques pour éviter la contamination des amis et des parents.**
- **Les agents communautaires doivent expliquer aux familles pourquoi ils doivent se protéger pour ne pas tomber malades.**
- **Les familles peuvent assister à distance pour éviter de tomber malade pendant l'enterrement et se rassurer que tout se passe bien.**



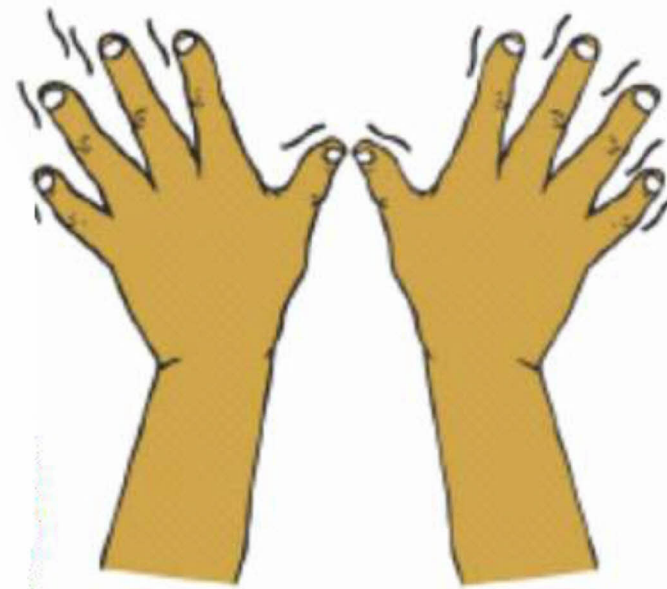
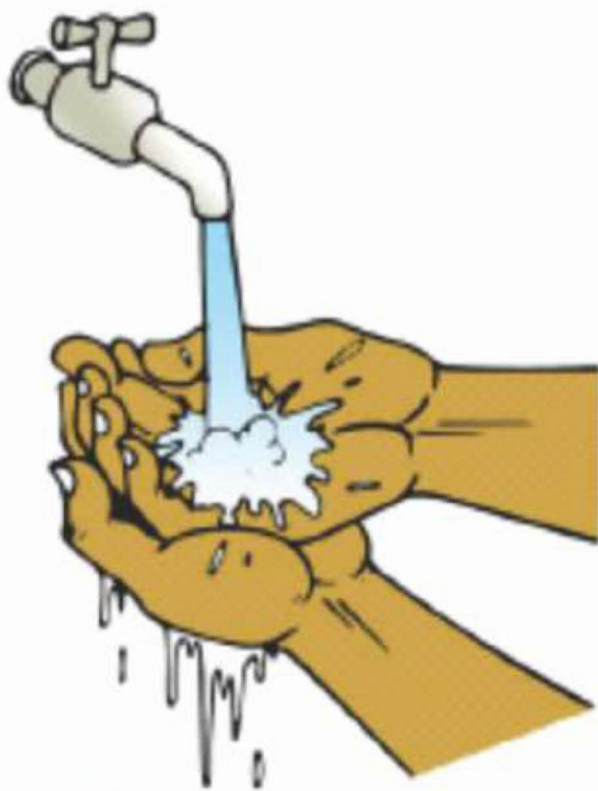
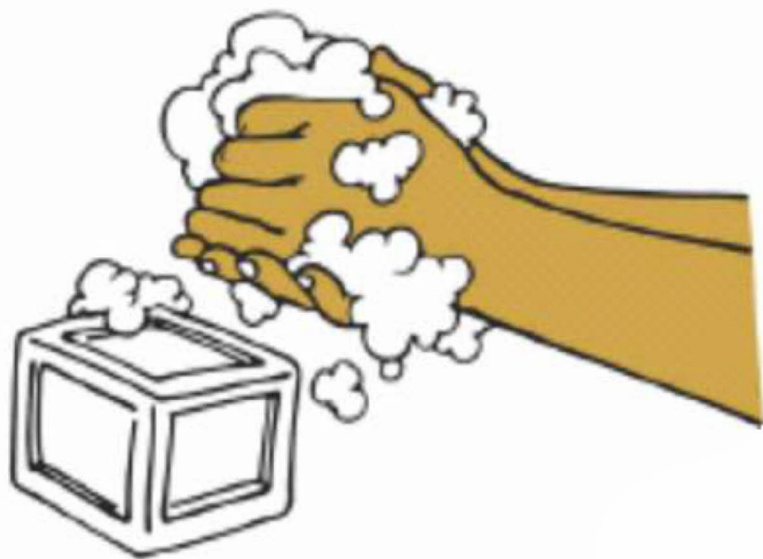
OSCAR

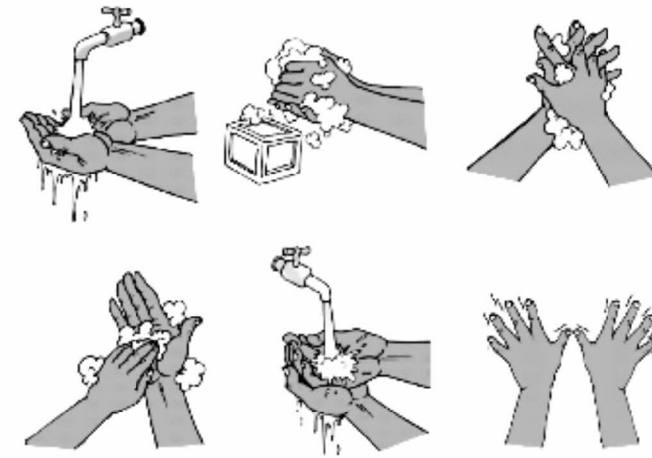


Question: Qu'est-ce qu'on voit sur cette image ?

Réponse correcte: Nous voyons, qu'on ne doit plus se serrer la main. Des personnes se sont lavées les mains avec de l'eau et du savon avant de faire plusieurs activités.

- **En Guinée aujourd'hui, Ebola se transmet de personne à personne par contact avec quelqu'un qui est malade ou avec des objets à lui. On ne sait pas toujours qui est malade.**
- **Il faut donc toujours se laver les mains avec de l'eau et du savon. Ceci est suffisant pour tuer le microbe Ebola.**
- **Il faut se laver les mains souvent; par exemple, avant de commencer les ablutions pour la prière, en rentrant à la maison après le travail, avant de donner les soins à un bébé, avant la préparation de la nourriture et avant de manger.**





Question: Qu'est-ce qu'on voit sur cette image ?

Réponse correcte: Nous voyons comment on doit bien se laver les mains avec le savon.

- **Il faut donc bien prendre son temps pour se laver les mains avec de l'eau propre et du savon pour bien tuer le microbe Ebola. Il faut prendre au moins une minute pour se laver les mains avec le savon.**
- **Il faut bien froter le savon entre les doigts et bien rincer avec de l'eau propre.**
- **Pour sécher, il suffit de bien agiter ses mains à l'air pour que les mains deviennent sèches avec le vent ou il faut trouver un tissu ou une serviette bien propre.**





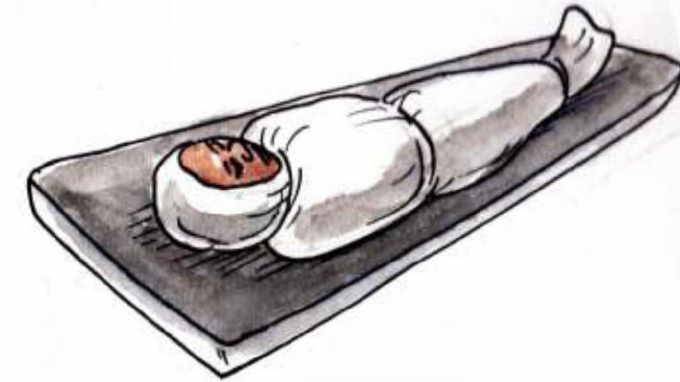
Question: Qu'est-ce qu'on voit sur cette image ?

Réponse correcte: Nous voyons beaucoup de gens qui discutent ensemble.

- **C'est pour dire que la communauté doit être unie et s'organiser ensemble contre la maladie Ebola.**
- **Si tout le monde est uni, vigilant et solidaire, nous pouvons vite éliminer la maladie Ebola de la République de Guinée.**
- **Tout le monde est concerné : les femmes, les hommes, les anciens, les jeunes, les parents, les enfants, les autorités religieuses et administratives. Il faut en parler !**
- **Il faut que tout le monde fasse attention et donne l'alerte même si la personne malade est un être que l'on aime.**

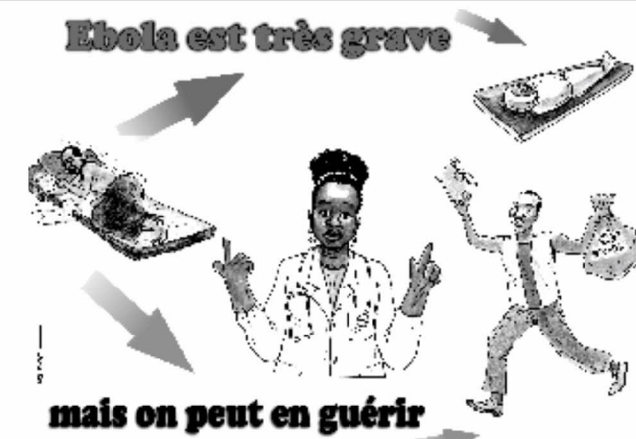
**ON DOIT D'ABORD ARRÊTER EBOLA
ET SAUVER LES MALADES!**

Ebola est très grave



mais on peut en guérir

© S CAR



Question: Qu'est-ce qu'on voit sur cette image?

Réponse correcte: Nous voyons une personne de la santé qui dit qu'Ebola est grave et qu'on peut mourir, mais elle dit aussi qu'on peut en guérir.

- **C'est vrai que la maladie est grave, mais on vient de nous expliquer que si le malade se fait soigner très tôt, il a de grandes chances de guérir.**
- **Si tout le monde se comporte comme expliqué dans cette boîte à images nous pouvons tous éviter d'avoir la maladie Ebola.**
- **Mais si nous avons eu un contact avec un malade, il ne faut pas se cacher, il faut le dire et se faire soigner dès les premiers signes.**

Chaleureuse reconnaissance du peuple de Guinée aux partenaires

ACTION CONTRE LA FAIM-ESPAGNE
AECID
AFRICA GOVERNANCE INITIATIVE-TONY BLAIR
FOUNDATION
AFRICAN DEVELOPMENT BANK
AFRICAN UNION COMMISSION
AMBASSADE DE FRANCE EN GUINEE ET EN SIERRA LEONE
AMBASSADE DE TURQUIE EN GUINEE
AMBASSADE DES ETATS-UNIS
AMBASSADE D' ESPAGNE
CATHOLIC RELIEF SERVICES (CRS)
CDC-ATLANTA
COLOMBIA UNIVERSITY
CONCERN UNIVERSAL
CROIX ROUGE
EPRUS
GUINEA ALUMINA CORPORATION (GAC)
IFES
INSERM
INSTITUT PASTEUR FRANCE
INSTITUT PASTEUR SENEGAL
INTERNATIONAL ORGANISATION FOR MIGRATION (IOM)
INTERNEWS
JAPAN OFFICIAL DEVELOPMENT ASSISTANCE
JHPIEGO/JH UNIVERSITY
LABO KAZAKHSTAN
LABO RUSSE
LABORATOIRE GUINEO-ALLEMAND
MEDECINS SANS FRONTIERES
OCHA
OCPH CARITAS
ORGANISATION MONDIALE DE LA SANTE (OMS)
ORGANISATION OUEST-AFRICAINE DE LA SANTE (OOAS-
RSS)
PLAN INTERNATIONAL
PNUD
PCI-MEDIA IMPACT
PROGRAMME ALIMENTAIRE MONDIALE (PAM)
RIO TINTO
SAVE THE CHILDREN INTERNATIONAL
SS ARMY
STUDIO HIRONDELLE
TERRES DES HOMMES
UNAIDS
UNDSS
UNFPA
UNICEF
UNION EUROPEENNE
UNIVERSITY OF OXFORD
UNMEER
USAID/OFDA/RELIEF INTERNATIONAL/CECI
WORLD BANK

AGENCE POUR LA PROMOTION DES INVESTISSEMENT
PRIVES-GUINEE (APIP)
CONSEIL NATIONAL DES ORGANISATIONS DE LA SOCIÉTÉ
CIVILE (CNOSCG)
JEUNE CHAMBRE INTERNATIONALE-GUINEE
JEUNESSE RESPONSABLE
MANO RIVER UNION
MINISTÈRE DE LA JEUNESSE ET DE L'EMPLOI JEUNE
MINISTÈRE DE LA SANTÉ DE LA RÉPUBLIQUE DE GUINÉE
RADIO RURALE DE GUINÉE
SOGEA CONAKRY
UNITED MINING SERVICES (UMS)
URTELGUI

From: [REDACTED] on behalf of "Jonna Mazet" <jkmazet@ucdavis.edu>
Sent: 11/01/2017 11:45:50 AM (-07:00)
To: "Kevin Olival, PhD" <olival@ecohealthalliance.org>
Cc: "Peter Daszak" <daszak@ecohealthalliance.org>; "Damien Joly" <djoly@metabiota.com>; "Johnson Christine Kreuder (ckjohnson@ucdavis.edu)" <ckjohnson@ucdavis.edu>; "Anna Willoughby" <willoughby@ecohealthalliance.org>; "Brooke Genovese (bgenovese@ucdavis.edu)" <bgenovese@ucdavis.edu>
Subject: Re: For Thursday's P2-wide Modeling and Analytics meeting

Sure, that's good, but if we put item 3 first, it's easier to tell them what time to join & then let them go. Otherwise I'll have to text or run around in the middle of the call to find them and have them join when we're ready.

J

On Wed, Nov 1, 2017 at 11:14 AM, Kevin Olival, PhD <olival@ecohealthalliance.org> wrote:
Thanks Jonna, good idea. Why don't we have Nistara, Diego, and Evan join in at the end of the call to discuss bat methods.

Revised agenda:

1. Bat behavioral intervention modeling projects (per email and Excel sheet from Peter) (~40 min)
2. Year 3 annual report content from P2-wide M&A partners (~10 min)
3. Bat viral shedding seasonality methods and other relevant discussion (last ~10 min of call; have Evan, Nistara, and Diego join in here)

Cheers,
Kevin

Kevin J. Olival, PhD

Vice President for Research

EcoHealth Alliance
[460 West 34th Street – 17th floor](#)
New York, NY 10001

[1.212.380.4478](tel:1.212.380.4478) (direct)
[REDACTED] (mobile)
[@nycbat](#) (twitter)
www.ecohealthalliance.org

EcoHealth Alliance leads cutting-edge scientific research into the critical connections between human and wildlife health and delicate ecosystems. With this science, we develop solutions that prevent pandemics and promote conservation.

On Nov 1, 2017, at 12:59 PM, Jonna Mazet <jkmazet@ucdavis.edu> wrote:

If we want to discuss the various bat methods & coronaviruses, we should add some individuals to the call.

Up to you based on how much time we'll have after what you already have planned.

Thanks,

J

On Wed, Nov 1, 2017 at 7:57 AM, Kevin Olival, PhD <olival@ecohealthalliance.org> wrote:

Hi All,

Another agenda item for tomorrow:

We are currently compiling M&A highlights and M&E indicators for the P2 Annual Report.

Let's discuss any partner-wide M&A activities we should include, or specific activities from your orgs. Feel free to send any bullets on this in advance, or on the call.

I'm attaching "Appendix 1" which includes the M&A products that were included in the Y3 semi-annual report.

Cheers,

Kevin

From: "Peter Daszak" <daszak@ecohealthalliance.org>
Sent: 11/02/2017 2:46:26 PM (-07:00)
To: "Jonna Mazet (jkmazet@ucdavis.edu)" <jkmazet@ucdavis.edu>; "Johnson Christine Kreuder (ckjohnson@ucdavis.edu)" <ckjohnson@ucdavis.edu>; "Damien Joly" <djoly@metabiota.com>; "Kevin Olival, PhD" <olival@ecohealthalliance.org>
Cc: "Anna Willoughby" <willoughby@ecohealthalliance.org>; "Brooke Genovese (bgenovese@ucdavis.edu)" <bgenovese@ucdavis.edu>
Subject: latest draft of the Bat & Other Intervention Project list for EB?
Attachments: Bat & other intervention project list 2 NOV 2017 DRAFT.xlsx
Importance: High

Dear All,

Great talking with all y'all. I've inserted all comments into this draft doc.

Jonna – can we circulate this with the agenda for the next EB call, so that I can explain the background to everyone on that call (just briefly)? I think if we just send it round, people might get annoyed that we didn't put their names on for one thing. They also might start piling on names, or not suggesting names, so it's best if I give the context first on EB.

Anna will send the notes round from today separately....

Cheers,

Peter

Peter Daszak
President

EcoHealth Alliance
460 West 34th Street – 17th Floor
New York, NY 10001

Tel. +1 212-380-4473
www.ecohealthalliance.org

EcoHealth Alliance leads cutting-edge research into the critical connections between human and wildlife health and delicate ecosystems. With this science we develop solutions that prevent pandemics and promote conservation.

From: "Anna Willoughby" <willoughby@ecohealthalliance.org>
Sent: 11/06/2017 1:38:42 PM (-08:00)
To: "Peter Daszak" <daszak@ecohealthalliance.org>; "Jonna Mazet (jkmazet@ucdavis.edu)" <jkmazet@ucdavis.edu>; "Johnson Christine Kreuder (ckjohnson@ucdavis.edu)" <ckjohnson@ucdavis.edu>; "Damien Joly" <djoly@metabiota.com>; "Kevin Olival, PhD" <olival@ecohealthalliance.org>
Cc: "Brooke Genovese (bgenovese@ucdavis.edu)" <bgenovese@ucdavis.edu>
Subject: Re: latest draft of the Bat & Other Intervention Project list for EB?
Attachments: cross-M&A November 2, 2017.docx

Dear all,

Please find the notes from last week's meeting attached, I apologize for the delay.

We are currently compiling the M&A section of the Y3 Annual Report. We will be including the below cross-partner contributions from the semi-annual. If these projects have updates, or you have any other items to include for Y3 (October 1, 2016 - September 31, 2017) please send relevant figures and descriptions to myself, Kevin, and Peter by this Thursday, November 9th.

- Flavivirus Host Geographic Zone (Chris)
- Viral Sharing Interfaces, Network of P1 hosts and viruses (Chris)
- Viral Ranking Survey (Jonna)

A reminder that the next meeting is scheduled for December 6th at 1 pm PST/4 pm EST. **CALL-IN DETAILS:** 
 pw. 

Please let me know if you have specific items to discuss.

Thank you,
Anna

On Thu, Nov 2, 2017 at 5:46 PM, Peter Daszak <daszak@ecohealthalliance.org> wrote:

Dear All,

Great talking with all y'all. I've inserted all comments into this draft doc.

Jonna – can we circulate this with the agenda for the next EB call, so that I can explain the background to everyone on that call (just briefly)? I think if we just send it round, people might get annoyed that we didn't put their names on for one thing. They also might start piling on names, or not suggesting names, so it's best if I give the context first on EB.

Anna will send the notes round from today separately....

Cheers,

Peter

Peter Daszak

President

EcoHealth Alliance

460 West 34th Street – 17th Floor

New York, NY 10001

Tel. [+1 212-380-4473](tel:+12123804473)

www.ecohealthalliance.org

EcoHealth Alliance leads cutting-edge research into the critical connections between human and wildlife health and delicate ecosystems. With this science we develop solutions that prevent pandemics and promote conservation.

--

Anna Willoughby

Research Assistant

EcoHealth Alliance

460 West 34th Street – 17th floor

New York, NY 10001

1.646.868.4713 (direct)

1.212.380.4465 (fax)

REDACTED (cell)

www.ecohealthalliance.org

Visit our blog: <http://blog.ecohealthalliance.org/updates>

EcoHealth Alliance leads cutting-edge scientific research into the critical connections between human and wildlife health and delicate ecosystems. With this science, we develop solutions that prevent pandemics and promote conservation.

11.02.17

PD, KJO, JM, CKJ, DJ

EE, ARW

CALL-IN DETAILS:

REDACTED

pw.

REDACTED

1. Bat viral shedding seasonality methods and other relevant discussion (~10 min of call; have Evan, Nistara, and Diego join in here)

- EE to continue writing, and will share draft for Nistara + Diego input; follow up with direct skype and calls between EE and Diego and Nistara to dig into the details.
- EE to submit abstract for OHC, February deadline
- Project description (data in/out):
 - Nistara:
 - P1 Coronavirus shedding and bioclimatic variables (forest change) shedding, and forecasting climate scenarios based on microclimate
 - will collaborate with Carlos: talk on next M&A
 - separately, Carlos + Simon working on global landscape risks (EID drivers): add to EB agenda (likely using different landscape data)
 - Diego:
 - P1 Coronavirus shedding species in three countries
 - seasonality and host traits (reproductive information from literature)
 - Bayesian framework
 - KJO to share EDI with reproductive information
 - Evan:
 - P1 multiple countries, multiple species, multiple viral families
 - Fit to each species
 - Reproductive variables + precipitation data

2. Bat behavioral intervention modeling projects (per email and Excel sheet from Peter) (~40 min)

1. Fruit-Bat-Orchard overlap [*Spatial/ENM*]: (UCD to follow-up) add Nistara + Na (JM and cashews)
2. Converting live to non-live markets: Is this good policy in the political reality? CKJ (lead) + Hongying + Karen Saylor
3. Upstream + Downstream viral diversity: KJO to lead Indonesia case-study, UCD may have Cambodia market chain
4. SADS potential outbreak regions [*Spatial/ENM*]: Brooke lead

5. Hunter Behavioral Risk Hotspots: i.e. where should we ban hunting? Include behavioral risk surveys
 - Add CKJ + Jon + P2 Data
 6. Bat Hunting Seasonality: based on seasonality of viral shedding (Evan to lead)
 - Add CKJ + Jon + P2 Data
 7. Bat-Palm Sap overlap: Jon lead
 - Site Characterization forms?
 8. SADS outbreak modeling: Noam + Cale doing China analysis, will then design intervention, may extrapolate to other countries
 9. bat-pig virus contact: Hongying to lead: can make more general than SADS, USAID may be interested in us looking at bat-pig contact more generally
 10. Reducing Market Diversity: estimate recombination potential based on host Diversity + using P2 site characterization data + Simon and Tracy viral data need to be included, CKJ
 11. Viral Sharing within Market Species: CKJ
NEW: Will policies for market-based interventions be accepted (LVF + SQ)
 13. Bat cave biodiversity risk: KJO + lead
Diversity of cave bat species; from predict capture data as a diversity indices
 14. Bat-tourist interaction: + Behavioral team (qualitative work)
Can ask tourists to be included in our questionnaires
ARW: use of social media? Tripadvisor
 15. Bat-Harvester interaction
Willingness to stop mining guano as one of questions?
 16. Bat guano farming:
Experimental data of UV radiation
3. Year 3 annual report content from P2-wide M&A partners (~10 min)
We should include some of the behavioral plan work (above) in the M&E

Next Meeting: December 6th: 1:00 - 2:00 pm PST (10:00 - 11:00 am EST)

From: William B. Karesh <karesh@ecohealthalliance.org>
To: Jonna Mazet <jkmazet@ucdavis.edu>; David Wolking <djwolking@ucdavis.edu>
CC: Evelyn Luciano <luciano@ecohealthalliance.org>; Ava Sullivan <sullivan@ecohealthalliance.org>
Sent: 2/7/2018 12:15:21 PM
Subject: edits to EPT- review.

My suggestion for page 20:

Conclusion 1: Strategic planning at the country, regional, and global levels

EPT2 is a centralized program that several respondents said lacked in-country stakeholders in strategy development. Some EPT-2 project components required standardized methodology across countries in order to produce required deliverables while other components were designed for local customization. The evaluation team agrees with respondents who noted that progress and timelines do and will continue to vary by region and between countries, and that single “cookie-cutter” approaches will not be useful or acceptable to country stakeholders in the long run. We are also concerned that many respondents believe EPT2 is set up independently from USAID Mission strategies, and that the strategic process does not include coordination with other USAID projects or sectors (e.g., economic growth). Without these investments in participation and strategic clarity at the country level, USAID’s ability to continue a leadership role in this field may suffer.

William B. Karesh, D.V.M
Executive Vice President for Health and Policy

EcoHealth Alliance
460 West 34th Street - 17th Floor
New York, NY 10001 USA

+1.212.380.4463 (direct)
+1.212.380.4465 (fax)
www.ecohealthalliance.org

President, OIE Working Group on Wildlife

Co-chair, IUCN Species Survival Commission - Wildlife Health Specialist Group

EPT Partners Liaison, USAID Emerging Pandemic Threats - PREDICT-2 Program

EcoHealth Alliance leads cutting-edge research into the critical connections between human and wildlife health and delicate ecosystems. With this science we develop solutions that promote conservation and prevent pandemics.

From: "Peter Daszak" <daszak@ecohealthalliance.org>
Sent: 03/19/2018 12:40:20 PM (-07:00)
To: "Jonna Mazet (jkmazet@ucdavis.edu)" <jkmazet@ucdavis.edu>; **REDACTED**
REDACTED
Cc: "Brooke Watson" <watson@ecohealthalliance.org>; "Alison Andre" <andre@ecohealthalliance.org>
Subject: The other letter to Science from Bruno and Garry, and a draft response
Attachments: aat6091_Other_seq1_v1.docx, Response to Branco and Garry's letter to Science.docx
Importance: High

Here is their 'letter', and a draft response. We're allowed 600 words max, and 10 refs (see the email from *Science* below). It's the same as before, that *Science* usually tries not to publish these but this one is important because it might go into the printed journal and will have a wider readership.

Please edit and add refs as soon as you can – hopefully by COB Wednesday so I can get it out to the rest of the group and then can respond to Science before the deadline: Wednesday March 28th

Cheers,

Peter

Peter Daszak
President

EcoHealth Alliance
460 West 34th Street – 17th Floor
New York, NY 10001

Tel. +1 212-380-4474
www.ecohealthalliance.org
[@PeterDaszak](https://twitter.com/PeterDaszak)
[@EcoHealthNYC](https://twitter.com/EcoHealthNYC)

EcoHealth Alliance leads cutting-edge research into the critical connections between human and wildlife health and delicate ecosystems. With this science we develop solutions that prevent pandemics and promote conservation.

14-Mar-2018
Manuscript number: aat5918

Dear Dr. Daszak,

We have received a letter on your Science paper and would like to request your written response. To maintain a timely flow of letters, we must receive your response within two weeks (28 March 2018). Please let us know as soon as possible if you will need more time. If your response is received after the deadline, it may not appear in the same issue as the letter.

If the letter is rejected, a copy of your response will be sent to the author, unless you request otherwise. Should you decide a response is not necessary, we would appreciate a message letting us know that you have chosen not to respond.

Your response should be approximately the same length as the letter, and not more than 600 words of text and 10 references. Please be sure to include a list of all response authors.

The letter is attached here and is also available at our manuscript submission and information portal. To upload your response, please login to the portal at <https://cts.sciencemag.org>. Your solicitation record aat5918 is found here. For your convenience, the letter is uploaded in the auxiliary supplementary material section of the manuscript documents tab.

Thank you!

Jennifer Sills
Letters Editor
Science

JS/bw

Response to Branco and Garry

Like Branco and Garry, we all mourn the tragedy of lost lives from the devastating Ebola virus disease outbreak in West Africa. It is because of outbreaks like these that we believe novel approaches to preventing epidemics are required, and why we laid out the rationale for the Global Virome Project (GVP) (1). However, Branco and Garry's letter contains many factual inaccuracies about the goals of the GVP, its differentiation from EPT PREDICT, and the focus of other programs designed to reduce the impact of disease emergence. Firstly, the PREDICT program was not set up to "exert its dominance as a human disease predictive algorithm", nor to "congeal into a predictive algorithm for one of the most studied and better understood viral hemorrhagic fever agents known to infect humans". Rather, its goals are to model and analyze high risk pathways for disease emergence, build capacity to prevent emerging diseases in countries where they are most likely to originate, identify potentially zoonotic viruses in wildlife *before* they infect people, and conduct behavioral risk surveillance and testing in people at high risk disease emergence interfaces (2). Secondly, there were not, as the authors assert, "significant technical and human resources on the ground in the heart of the EVD outbreak region, including a conglomerate of EPT PREDICT scientists". Prior to the beginning of the EVD outbreak, EPT PREDICT was not authorized to work in any of the three countries subsequently affected. PREDICT's capacity to work in the region only began during the later stages of the outbreak, and then with a specific goal to help identify potential animal reservoirs for later spillover. Thirdly, the goal of PREDICT is not to 'predict outbreaks' of Ebola virus disease, something which is not currently possible given the complexities of disease emergence. PREDICT's modeling program is focused on identifying broad patterns in the risk of novel diseases emerging, albeit that this had already pointed to West Africa as an emerging disease 'hotspot' (3, 4). Finally, Branco and Garry's criticism that by 2013 EVD was not 'even acknowledged as a Public Health Emergency of International Concern' is misplaced. Identifying outbreaks as public health emergencies is the remit of the World Health Organization, not of a US-funded development project, no matter its large scale. We note that PREDICT was working in Tanzania when an outbreak of EVD was suspected (REF). PREDICT scientists were asked to support local ministries in identifying the virus in samples, and this outbreak was rapidly contained (REF). While this is a positive result, we do not claim this as a success of the PREDICT project, simply that a team of scientists was in the right place at the right time and able to support the local government's successful containment strategy.

The repeated emergence of Ebola and related viruses, and the increasing frequency by which novel viruses are spilling over from wildlife into people, is exactly why we advocate the need for new approaches that move our strategy to fight disease emergence from one of response to one of prevention. As we stated in our Policy Forum, the goal of GVP is to improve our collaborative efforts to combat emerging viruses "by enhancing (not replacing) current pandemic surveillance, prevention, and control strategies" (1). We look forward to the GVP collaborating with agencies and research groups focused on viruses that have already emerged – the central focus of Branco and Garry's thesis. However, we also urge them to recognize that known viruses probably represent less than 0.1% of the viruses capable of emerging in the future (1). Identifying the majority of the remaining >99.9% of unknown potentially zoonotic viral diversity remains the unique, central goal of the GVP.

1. D. Carroll *et al.*, The Global Virome Project. *Science* **359**, 872-874 (2018).
2. PREDICT Consortium, "Reducing pandemic risk. Promoting Global Health," (One Health Institute, University of California Davis, 2014).
3. K. E. Jones *et al.*, Global trends in emerging infectious diseases. *Nature* **451**, 990-993 (2008).
4. T. Allen *et al.*, Global hotspots and correlates of emerging zoonotic diseases. *Nature Communications* **8**, 1124 (2017).

Carroll *et al.*, (Policy Forum, 23 Feb 2018, p. 872) propose the Global Virome Project (GVP), which will attempt to identify genomic sequences of 71% of viruses present in mammals and birds. GVP represents a major expansion and redirection of the Emerging Pandemic Threats (EPT) PREDICT program funded for the past 8 years by USAID. Perhaps the best opportunity to date for EPT PREDICT to exert its dominance as a human disease predictive algorithm presented itself in late 2013 ahead of the events that now inscribe the scientific and social literature as the most devastating Ebola virus disease (EVD) outbreak in history. Despite the presence of significant technical and human resources on the ground in the heart of the EVD outbreak region, including a conglomerate of EPT PREDICT scientists, the outbreak was not predicted nor was it even acknowledged as a Public Health Emergency of International Concern until it had crossed the borders between 3 countries (Guinea, Sierra Leone, Liberia). The 2013-16 Ebola outbreak highlights a major shortcoming of EPT PREDICT: modern diagnostic and surveillance tools cannot effectively congeal into a predictive algorithm for one of the most studied and better understood viral hemorrhagic fever agents known to infect humans. Nigeria is currently experiencing an unprecedented and unpredicted surge in cases of Lassa fever, a virus originally identified as a human pathogen in 1969. Evolution has collocated many life forms and viruses that are at the threshold of life into symbiotic or commensal existence. How do we sort out agents that might perhaps one day make us ill? The focus ought to be on gaining ground against the many agents, such as Ebola Lassa, MERS, Influenza, and just about every known agent with pandemic potential currently known to cause significant mortality and morbidity in humans.

Luis M. Branco, Ph.D.
Managing Director & Co-Founder
Zalgen Labs, LLC

Robert Garry
Tulane Health Science Center
Department of Microbiology and Immunology
New Orleans, LA 70112

From: REDACTED on behalf of "Jonna Mazet" <jkmazet@ucdavis.edu>
Sent: 03/23/2018 5:11:10 AM (-07:00)
To: "Kevin Olival, PhD" <olival@ecohealthalliance.org>
Cc: "Anna Willoughby" <willoughby@ecohealthalliance.org>; "Peter Daszak" <daszak@ecohealthalliance.org>
Subject: Re: PREDICT partner-wide M&A call; March 6th (Tues) 11 am PST/2 pm EST

Sorry, forgot to say that I agree with the conclusions on the viral curves one, but I think you should double check the content with Simon for a solid double check on original curve useage.

Thanks,
J

On Fri, Mar 23, 2018 at 5:07 AM, Jonna Mazet <jkmazet@ucdavis.edu> wrote:

Hi Anna & Kevin,
Here are the EDIs back.
The look really nice.

Minor comments, with a bit more on the flavi one. That one has a corrupt file that couldn't be saved. I even copied it and tried to save as a fresh file. Wouldn't work. In the end, I pasted unformatted text into a new document and added the edits and comments by hand. I'm also a little more concerned about overlap on that one with other global products. With the edits and as an EDI, I think it's fine, but if it is going to be a pub, we'll want to make sure it's synergistic and comparable with other products near finalization.

Thanks,
Jonna

On Fri, Mar 16, 2018 at 11:02 AM, Kevin Olival, PhD <olival@ecohealthalliance.org> wrote:
No prob Jonna, can wait a few days. You think by the end of next week?

Kevin J. Olival, PhD

Vice President for Research

EcoHealth Alliance
[460 West 34th Street – 17th floor](#)
New York, NY 10001

[1.212.380.4478](tel:1.212.380.4478) (direct)

REDACTED (mobile)

@nycbat (twitter)

www.ecohealthalliance.org

EcoHealth Alliance leads cutting-edge scientific research into the critical connections between human and wildlife health and delicate ecosystems. With this science, we develop solutions that prevent pandemics and promote conservation.

On Mar 16, 2018, at 1:51 PM, Jonna Mazet <jkmazet@ucdavis.edu> wrote:

Hi Anna,

I'm going to need a few more days for the EDI reviews. Alternatively, if you are receiving reviews and will be making changes, I could review the edited, near-final versions after you incorporate changes that you have received.

Sorry for the inability to meet today's deadline,

Jonna

On Mon, Mar 12, 2018 at 3:24 PM, Anna Willoughby <willoughby@ecohealthalliance.org> wrote:

Dear all,

Please find the notes from our call last week. I apologize for the delay. I have also attached the latest version of the Intervention Modeling projects and the Brussels flipchart notes as circulated to EB last week. Action Items include:

- **Everyone** to review the Intervention Modeling sheet and send any revisions
- **Everyone** to send EDI edits by March 16th
- **EHA** to revise EDI branding for PREDICT
- **Kevin** to circulate Intervention Modeling sheet to EB, March 7th (circulated, tabled til March 21st)
- M&A regional workshop to be discussed on EB, March 7th (circulated, tabled til March 21st)
- **Peter** to send revised EDIs to next EB, March 21st

Please let me know if you have any questions or are missing any relevant documents. The next partner-wide M&A call is scheduled for **April 25th 1 pm PST/ 4 pm EST**. I will reach out a week before with agenda items and call details. Feel free to send any agenda items you may have.

Best,
Anna

On Tue, Mar 6, 2018 at 1:35 PM, Kevin Olival, PhD <olival@ecohealthalliance.org> wrote:

Dear all,

Look forward to speaking with you all in 30 min. Call in information is below.

In addition, to the Emerging Disease Insights documents we sent around earlier, attached is the latest version of the intervention modeling policy projects for our discussion.

Cheers,
Kevin

--

Anna Willoughby

Research Assistant

EcoHealth Alliance
[460 West 34th Street – 17th floor](#)
[New York, NY 10001](#)

1.646.868.4713 (direct)

1.212.380.4465 (fax)

REDACTED cell)

www.ecohealthalliance.org

Visit our blog: <http://blog.ecohealthalliance.org/updates>

EcoHealth Alliance leads cutting-edge scientific research into the critical connections between human and wildlife health and delicate ecosystems. With this science, we develop solutions that prevent pandemics and promote conservation.

From: "KANE Yaghouba" <[REDACTED]>
Sent: 04/21/2018 1:42:46 AM (-07:00)
To: [REDACTED]; "Ariful Islam" <arif@ecohealthalliance.org>; "Jon Epstein" <epstein@ecohealthalliance.org>; "Hongying Li" <li@ecohealthalliance.org>; "ckjohnson@ucdavis.edu" <ckjohnson@ucdavis.edu>; "Emily Hagan" <hagan@ecohealthalliance.org>; "Thomas Hughes" <tom.hughes@ecohealthalliance.org>; "Allison White" <white@ecohealthalliance.org>; "olival@ecohealthalliance.org" <olival@ecohealthalliance.org>; "Alice Latinne" <latinne@ecohealthalliance.org>; [REDACTED]
"tgoldstein@ucdavis.edu" <tgoldstein@ucdavis.edu>; "dmciver@metabiota.com" <dmciver@metabiota.com>; "sslithammavong@metabiota.com" <sslithammavong@metabiota.com>; [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED] "Ava Sullivan" <sullivan@ecohealthalliance.org>; [REDACTED]
[REDACTED] "Debapriyo Chakraborty" <chakraborty@ecohealthalliance.org>; [REDACTED]
[REDACTED]
"murrays@si.edu" <murrays@si.edu>; "valituttoM@si.edu" <valituttoM@si.edu>; "Patrick Dawson" <dawson@ecohealthalliance.org>; [REDACTED]
"ghazi@human-link.org" <ghazi@human-link.org>; "William B. Karesh" <karesh@ecohealthalliance.org>; [REDACTED]
[REDACTED] "jayekekbong@metabiota.com" <jayekekbong@metabiota.com>; [REDACTED]
[REDACTED] "Anne Laudisoit" <laudisoit@ecohealthalliance.org>; [REDACTED]
"ksaylors@metabiota.com" <ksaylors@metabiota.com>; "pmulembakani@metabiota.com" <pmulembakani@metabiota.com>; [REDACTED]
"utamoufe@metabiota.com" <utamoufe@metabiota.com>; "kvgilardi@ucdavis.edu" <kvgilardi@ucdavis.edu>; [REDACTED]
"djwolking@ucdavis.edu" <djwolking@ucdavis.edu>; [REDACTED]
[REDACTED]
[REDACTED] "trkelly@ucdavis.edu" <trkelly@ucdavis.edu>; [REDACTED]
"cmonagin@ucdavis.edu" <cmonagin@ucdavis.edu>; "jabelkhiria@ucdavis.edu" <jabelkhiria@ucdavis.edu>; [REDACTED]
[REDACTED] "Jim Desmond" <desmond@ecohealthalliance.org>; [REDACTED]
[REDACTED]
"bhbird@ucdavis.edu" <bhbird@ucdavis.edu>; "ZimmermanD@si.edu" <ZimmermanD@si.edu>; [REDACTED]
"jkamau@primateresearch.org" <jkamau@primateresearch.org>; [REDACTED]
[REDACTED] "wasmith@ucdavis.edu" <wasmith@ucdavis.edu>; "jklane@ucdavis.edu" <jklane@ucdavis.edu>; "jkmazet@ucdavis.edu" <jkmazet@ucdavis.edu>; "Peter Daszak" <daszak@ecohealthalliance.org>
Cc: "Alison Andre" <andre@ecohealthalliance.org>; "Aleksi Chmura" <chmura@ecohealthalliance.org>; "Anna Willoughby" <willoughby@ecohealthalliance.org>; "predict@ucdavis.edu" <predict@ucdavis.edu>; "Noam Ross" <ross@ecohealthalliance.org>
Subject: Re: PREDICT Emerging Disease Insights - 2 pagers

Dear Peter Daszak

Well received. Thank you for sharing

We will do the necessary for wide sharing

Kind regards

Y. Kane
Dakar

Le jeudi 19 avril 2018 à 18:22:10 UTC+1, Peter Daszak <daszak@ecohealthalliance.org> a écrit :

Dear PREDICT global team leads, regional leads and country coordinators,

I am delighted to share with you the latest Emerging Disease Insights (EDIs) 2-pagers from our PREDICT Modeling and Analytics Team. These are 2-page reports on the analyses that our team is doing to guide surveillance and test out ideas about the risk of emergence of novel PREDICT viruses we discover. These three focus on:

1. Measuring viral discovery: Using the viral accumulation curves from PREDICT 1 to determine how many samples we need to collect and test to discover the majority of viruses in a host species
2. Identifying the next Zika virus: Analyzing all known flaviviruses to assess which ones have the characteristics that could allow them to emerge and spread.
3. Economic case for the GVP: Economic analysis of the Global Virome Project sampling and testing strategy, with an estimate of return-on-investment.

These EDIs are intended to be easily understood, provide an interesting background story based on PREDICT that demonstrates how we're using state-of-the-art modeling and analytics, and our data from PREDICT, to better understand the risk of disease emergence globally. Please share them widely with your staff, colleagues and partners! They will also be available publicly from livescience.ecohealthalliance.org , as well as on Basecamp, of course.

We are actively working on other Emerging Disease Insights to be completed this and next year, so please send any ideas you may have: Comments are very welcome!

Cheers,

Peter

Peter Daszak

President

EcoHealth Alliance

460 West 34th Street – 17th Floor

New York, NY 10001

Tel. +1 212-380-4474

www.ecohealthalliance.org

[@PeterDaszak](#)

[@EcoHealthNYC](#)

EcoHealth Alliance leads cutting-edge research into the critical connections between human and wildlife health and delicate ecosystems. With this science we develop solutions that prevent pandemics and promote conservation.

From: predict-request@ucdavis.edu on behalf of "Joseph Adongo AWUNI"

REDACTED

Sent: 07/19/2018 11:30:15 AM (-07:00)

To: "luciano@ecohealthalliance.org" <luciano@ecohealthalliance.org>;
"turner@ecohealthalliance.org" <turner@ecohealthalliance.org>; "sullivan@ecohealthalliance.org"
<sullivan@ecohealthalliance.org>; "musser@ecohealthalliance.org" <musser@ecohealthalliance.org>;
"daszak@ecohealthalliance.org" <daszak@ecohealthalliance.org>; "nguyenr@si.edu" <nguyenr@si.edu>;
"kejela@si.edu" <kejela@si.edu>; "walkeras@si.edu" <walkeras@si.edu>; "zimmermand@si.edu"
<zimmermand@si.edu>; "murrays@si.edu" <murrays@si.edu>; "bedison@metabiota.com" <bedison@metabiota.com>;
"mnguyen@metabiota.com" <mnguyen@metabiota.com>; "ali@metabiota.com" <ali@metabiota.com>;
"erubin@metabiota.com" <erubin@metabiota.com>; "ksaylors@metabiota.com" <ksaylors@metabiota.com>;

REDACTED

"ar3049@cumc.columbia.edu" <ar3049@cumc.columbia.edu>; "sja2127@columbia.edu" <sja2127@columbia.edu>;

"Kirsten Gilardi" <kgilardi@ucdavis.edu>; REDACTED "Elizabeth

Leasure" <ealeasure@ucdavis.edu>; REDACTED

REDACTED

REDACTED

REDACTED

"David John Wolking" <djwolking@ucdavis.edu>; "Jennifer K Lane" <jklane@ucdavis.edu>;

"Kevin N Gonzalez" <kngonzalez@ucdavis.edu>; REDACTED

"cringo@ucdavis.edu" <cringo@ucdavis.edu>; REDACTED "gdaufresne@pasteur-kh.org"

<gdaufresne@pasteur-kh.org>; "dveasna@pasteur-kh.org" <dveasna@pasteur-kh.org>; "ew635@law.georgetown.edu"

<ew635@law.georgetown.edu>; REDACTED "Tracey Goldstein"

<tgoldstein@ucdavis.edu>; "sanumaiya@cmdn.org" <sanumaiya@cmdn.org>; "dibesh@cmdn.org"

<dibesh@cmdn.org>; "Christine Kreuder Johnson" <ckjohnson@ucdavis.edu>; REDACTED

REDACTED

"Woutrina A Smith"

<wasmith@ucdavis.edu>; REDACTED "alioune.fall@isra.sn"

REDACTED "Corina Grigorescu Monagin" <cgmonagin@ucdavis.edu>; "Jaber Amine Belkhiria"

<jabelkhiria@ucdavis.edu>; REDACTED REDACTED

REDACTED

"directiongenerale@eismv.org"

<directiongenerale@eismv.org>; REDACTED

REDACTED

REDACTED

REDACTED

"Tsegaw Fentie"

REDACTED

REDACTED

REDACTED

REDACTED

REDACTED

REDACTED

REDACTED

REDACTED

REDACTED

REDACTED

"Brian H Bird" <bhbird@gmx.ucdavis.edu>; "Brooke Genovese"

<bgenovese@ucdavis.edu>; "hlarman1@jhmi.edu" <hlarman1@jhmi.edu>; "predict@ucdavis.edu"

<predict@ucdavis.edu>; "Hannah R Chale" <hrchale@ucdavis.edu>

Subject: [predict] Re: Mandatory language for Certifications & Invoices

Dear Hannah

Thank you very much for your message.

It is well noted and the Veterinary Services of Ghana headed by the Director would act accordingly.

Thanks
Joseph Awuni

Get [Outlook for Android](#)

From: Hannah R Chale <hrchale@UCDAVIS.EDU>

Sent: Thursday, July 19, 2018 3:39:07 PM

To: luciano@ecohealthalliance.org; turner@ecohealthalliance.org; sullivan@ecohealthalliance.org; musser@ecohealthalliance.org; daszak@ecohealthalliance.org; NguyenR@si.edu; KejelaE@si.edu; WalkerAS@si.edu; ZimmermanD@si.edu; MurrayS@si.edu; bedison@metabiota.com; mnguyen@metabiota.com; ali@metabiota.com; erubin@metabiota.com; ksaylor@metabiota.com; [REDACTED]
ar3049@cumc.columbia.edu; sja2127@columbia.edu; Kirsten Gilardi; [REDACTED] Elizabeth Leasure;
[REDACTED] [REDACTED] David John
Wolking; Jennifer K Lane; Kevin N Gonzalez; [REDACTED] cringo@ucdavis.edu; [REDACTED]
gdaufresne@pasteur-kh.org; dveasna@pasteur-kh.org; ew635@law.georgetown.edu; [REDACTED]
Tracey Goldstein; sanumaiya@cmdn.org; dibesh@cmdn.org; Christine Kreuder Johnson; [REDACTED]
[REDACTED] Woutrina A Smith; [REDACTED] alioune.fall@isra.sn; Corina Grigorescu Monagin;
Jaber Amine Belkhiria; [REDACTED] [REDACTED] directiongenerale@eismv.org;
[REDACTED] [REDACTED]
[REDACTED] [REDACTED]
[REDACTED] [REDACTED] [REDACTED]
[REDACTED] [REDACTED] Brian H Bird; Brooke Genovese; hlarman1@jhmi.edu;
predict@ucdavis.edu

Subject: Mandatory language for Certifications & Invoices

Dear PREDICT Partners,

Uniform Guidance (UG) 200.415 requires that every Expense Certification Letter and every Invoice signed by your institution's authorized official, must have the exact language/clause below:

"By signing this report, I certify to the best of my knowledge and belief that the report is true, complete, and accurate, and the expenditures, disbursements and cash receipts are for the purposes and objectives set forth in the terms and conditions of the Federal award. I am aware that any false, fictitious, or fraudulent information, or the omission of any material fact, may subject me to criminal, civil or administrative penalties for fraud, false statements, false claims or otherwise. (U.S. Code Title 18, Section 1001 and Title 31, Sections 3729-3730 and 3801-3812)."

Going forward, any Expense Certification or Invoice without this clause will be returned for correction

Please let me know if you have any questions

Thank you!

Hannah Chale

Contracts & Grants Analyst

One Health Institute

University of California, Davis

Cell – **REDACTED**

<http://www.vetmed.ucdavis.edu/ohi/>

From: "Leilani Francisco" <francisco@ecohealthalliance.org>
Sent: 11/06/2018 1:12:49 PM (-08:00)
To: "Jonna Mazet" <jkmazet@ucdavis.edu>; predict@ucdavis.edu
Cc: "Peter Daszak" <daszak@ecohealthalliance.org>; "William B. Karesh" <karesh@ecohealthalliance.org>
Subject: RE: ABSTRACTS: 2019 GHS Conference, Sydney, Australia, June 18-20, 2019

Hi Jonna,

The abstract looks great. I'd be happy to be a co-author on this.

For the title, how about something like, "Ten years of PREDICT: A One Health Approach to Risk Characterization in 30 Countries to Prevent Zoonotic Spillover Pandemics".

Best,

Leilani

From: Jonna Mazet <jkmazet@ucdavis.edu>
Sent: Saturday, November 3, 2018 6:11 PM
To: AOTR/Grant Manager Andrew Clements <aclements@usaid.gov>; Christine Kreuder Johnson <ckjohnson@ucdavis.edu>; Tracey Goldstein <tgoldstein@ucdavis.edu>; Woutrina Smith <wasmith@ucdavis.edu>; Anthony, Simon J. <sja2127@cumc.columbia.edu>; Peter Daszak <daszak@ecohealthalliance.org>; Leilani Francisco <francisco@ecohealthalliance.org>; David J Wolking <djwolking@ucdavis.edu>; Brian Bird <bhbird@ucdavis.edu>; Elizabeth Leasure <ealeasure@ucdavis.edu>; Billy Karesh <karesh@ecohealthalliance.org>; Karen Saylor <ksaylor@metabiota.com>; Suzan Murray <MurrayS@si.edu>; Amanda Fine <afine@wcs.org>
Cc: Predict inbox <predict@ucdavis.edu>; Brooke Genovese <bgenovese@ucdavis.edu>; REDACTED

REDACTED

Subject: Re: ABSTRACTS: 2019 GHS Conference, Sydney, Australia, June 18-20, 2019

Dear Leads & Andrew,

We've discussed on our calls, so you should already be aware, but Andrew has encouraged a Predict submission to the GHSA conference. I have drafted and attached an abstract for your consideration. Please let me know if you would like to: be a co-author, suggest a co-author (I will add the Predict consortium as a co-author; not sure if they will limit the number), or suggest edits. Unfortunately the abstracts are limited strictly to 200 words and must include the specific headings I've used (I did cheat & shorten them a bit from the abstract guidelines to adhere to the 200 word limit).

If you want to be a co-author, I need to hear from you by Nov 7 to be able to make the submission deadline -- sorry for the short turn-around!

Also, if you are volunteering as a co-author, please suggest a cool title.

Thanks in advance,

Jonna

----- Forwarded message -----

From: Ekechi, Chinyere (CDC/CGH/DGHP) <eoib@cdc.gov>
Date: Wed, Oct 31, 2018 at 10:39 AM
Subject: ABSTRACTS: 2019 GHS Conference, Sydney, Australia, June 18-20, 2019
To: Nairobi Global Health Security Agenda Interagency WG <NairobiGHSAWG@state.gov>

Colleagues,

Information sharing.

There is a Call for Abstracts for the **2019 Global Health Security Conference** scheduled to be held **June 18-19, 2019** at the International Convention Centre in Sydney, Australia.

Additional information on the conference themes and format of the abstracts is available on the conference website - <https://www.ghs2019.com/abstracts.php>. The conference deadline for abstract submission is **November 9th, 2018**.

The conference organizers are promoting this meeting as a first of its kind meeting on the topic of GHS that is targeted at partners both in and outside of government. They are requesting abstracts (≤ 200 words) on topics that fit within the following five themes and sub-themes. Abstracts can be submitted for three types of presentations: posters, oral panel presentations, workshops.

1. Health Emergencies: Preparedness & Management

1. Surveillance and outbreak response
2. Health crises & disasters
3. International Health Regulations

2. Emerging Threats & Challenges

1. Antimicrobial resistance
2. Zoonotic pathogens
3. Gain-of-function/deliberate events

3. Partnerships for Global Health Security

1. Global health & the private sector
2. Security sector engagement
3. Civil society participation

4. Governance & Financing for Global Health Security

1. Sustainable financing for global health security
2. Institutional innovation
3. Health system strengthening & resilience

5. New Technologies & Approaches for Global Health Security

1. Biotechnology
2. Medical countermeasures
3. Non-clinical interventions

If you or your partners have ideas that you think would add value to this meeting, please consider submitting an abstract or sharing your ideas.

Best,
Chinyere

Chinyere O. Ekechi

Deputy Director for Programs

Division of Global Health Protection (DGHP)

U.S. Centers for Disease Control and Prevention, Kenya

Mobile: **REDACTED** Email: cekechi@cdc.gov

www.cdc.gov/globalhealth/countries/kenya

Find us online at [Facebook](#) and [Twitter](#)

From: "Woutrina A Smith" <wasmith@ucdavis.edu>
Sent: 01/24/2019 3:17:32 PM (-08:00)
To: "Peter Daszak" <daszak@ecohealthalliance.org>; "Catherine Machalaba" <machalaba@ecohealthalliance.org>; "Molly Turner" <turner@ecohealthalliance.org>; "Evelyn Luciano" <luciano@ecohealthalliance.org>; "William B. Karesh" <Karesh@ecohealthalliance.org>; "Kevin Olival" <olival@ecohealthalliance.org>; "Jon Epstein" <epstein@ecohealthalliance.org>; "Jonna Mazet" <jkmazet@ucdavis.edu>; "Kirsten Gilardi" <kgilardi@ucdavis.edu>; "Christine Kreuder Johnson" <ckjohnson@UCDAVIS.EDU>; "Brian H Bird" <bhbird@gmx.ucdavis.edu>; "Tracey Goldstein" <tgoldstein@ucdavis.edu>; "Elizabeth Leasure" <ealeasure@UCDAVIS.EDU>; [REDACTED] "Brooke Genovese" <bgenovese@ucdavis.edu>; "Sanzero, George" <gsanzer@sandia.gov>; "Jutta Lehmer" <JLehmer@salud.unm.edu>; "Bruce Baird Struminger" <BStruminger@salud.unm.edu>; "McNeil, Carrie S." <csmcnei@sandia.gov>; "Sam Halabi" <sfh9@georgetown.edu>; "Costa, Cristiane" <co123@cumc.columbia.edu>; "Parish, Sarah A." <sp3546@cumc.columbia.edu>; "Hunt, Christine T." <ch3326@cumc.columbia.edu>; "Anthony, Simon J." <sja2127@cumc.columbia.edu>; "Wafaa M. El-Sadr" <wme1@cumc.columbia.edu>; "Jennifer K Lane" <jklane@ucdavis.edu>; "David John Wolking" <djwolking@ucdavis.edu>; "Terra Kelly" <trkelly@ucdavis.edu>; "Omar Romero-hernandez" <oromero@haas.berkeley.edu>; "Federico Castillo" <f.castillo@berkeley.edu>; "lane@ecohealthalliance.org" <lane@ecohealthalliance.org>; "Alison Andre" <andre@ecohealthalliance.org>; "Nicole R Gardner" <nrgardner@ucdavis.edu>; "Amy Armistad" <AARMistad@salud.unm.edu>; "ElByers@salud.unm.edu" <ElByers@salud.unm.edu>
Cc: "Matthew Blake" <mblake@ucdavis.edu>
Subject: Re: One Health Workforce-Next Gen calls
Attachments: Private sector (and NGO) partnerships_OHW-12-18.docx

Thanks to all of you who joined the One Health Workforce - Next Gen working group calls yesterday or today. Here are updates:

1. Call scheduling - For next week, here are the zoom call days/times along with the same zoom call info. All partners welcome, please let me know which calls your group plans to attend so we can plan accordingly.

Zoom Meeting link: [REDACTED]

Or dial by your location:

[REDACTED] US (San Jose)
[REDACTED] US (New York)

Meeting ID: [REDACTED]

Wednesday, January 30, 9-10am PST = 12pm-1pm EST - Overview and Obj 1 & 2 focus for discussion. All partners welcome.

Thursday, January 31, 9-10am PST = 12-1pm EST - Overview and Objective 3 focus for discussion. All partners welcome.

Thursday, January 31, 2-3pm PST = 5-6pm EST - Overview and Obj 1-3 focus for discussion if needed. All partners welcome.

2. Updates from this weeks calls:

Participants: UC Davis; Columbia; EcoHealth Alliance; University of New Mexico; Georgetown; Sandia National Labs.

- NOFO is not yet released but proposal brainstorming, planning, and writing tasks should continue as working groups.
- Partners made introductions and shared organization capabilities.
- Discussions relating to OHW-NG partners, program overview, and to approaches for Obj. 1, 2, and 3 were productive, with action items described below.

Action items:

i. Each organization has received the **excel workbook** that has three pages: one worksheet with a summary showing which consortium partners are active in which countries, one worksheet for an organization to show which types of workforce engagement that have been utilizing in each country, and one worksheet where you can nominate research hub countries along with pros/cons of having a regional hub in that country. Thanks to those of you who have emailed me the excel workbook already, and for those who haven't please do so before our calls next week.

ii. Box folders have been created to facilitate sharing and uploading documents as part of putting together our consortium bid. They contain overview reports and key documents, powerpoint summaries I have used, etc. For this week, please share via the box folder or by email attachment:

a) any **workforce assessment tools or reports** that you are aware of that should be compiled and considered as we move forward with planning our approach;

b) any documents relevant to **workforce engagement of in-service (currently employed) health sector-associated personnel** based on our discussions this week;

c) short summaries or reports of your organization's **successes relating to engaging the private sector**, conducting workforce assessment and training in the Africa and Asia countries, and efforts relating to organizational sustainability and resiliency capacity building. These will feed into the master proposal writing activities. If helpful, attached is a summary of some key private sector partners that Dr. Terra Kelly had started to compile in December. Feel free to make notes on whether you have worked with these groups and also add additional private sector groups who should be considered. Please send this back next week for compilation.

iii. February calendars for **writing workshop** - some partners are happy to contributing to proposal planning and writing via zoom calls and asynchronous tasks, but a couple have asked about opportunities for in person writing workshop time. We could plan an optional writing workshop on the East coast and West coast during the month of February if people are interested, this is best done once the NOFO is in hand. If you are interested in exploring this, please share best and worst date windows with me. For me I am currently scheduled as Tanzania/Ethiopia travel February 9-20, but before or after could work.

Best wishes, Woutrina

Woutrina Smith, DVM, MPVM, PhD
Professor of Infectious Disease Epidemiology
Co-Director, UCGHI Planetary Health Center of Expertise
USAID PREDICT-2 Global Capacity Team and Ethiopia lead
UCD Vet Med: One Health Institute
1042 VM3B Building
1089 Veterinary Medicine Dr
Davis, CA 95616 USA
wasmith@ucdavis.edu
+1 530 219-1369

OHW:NG_Private corporations to consider for private-sector partnerships

GALVMED private partners

- GALVMED is an NGO that has several partnerships with private corporations that would be valuable networks to tap into.

Zoetis

<https://www.zoetis.com/innovation/strategic-partnerships/index.aspx>

- ALPHA initiative in Uganda and Ethiopia – increased availability of veterinary medicines and services and implementation of disease diagnostics infrastructure. Zoetis is incorporating developing veterinary laboratory networks and outreach services into business hubs.

Johnson and Johnson

<https://www.jnj.com/tag/africa>

- Johnson and Johnson is involved in more than 100 partnerships and programs in sub-Saharan Africa—work that's being done by various company teams, such as the Global Public Health and Global Community Impact organizations. Projects include initiatives for improving maternal and infant health and addressing diseases like HIV, tuberculosis (TB) and malaria.

Celgene

<https://www.celgene.com/partnering/>

<https://www.celgene.com/responsibility/global-health/ampath/>

- Major global biopharmaceutical corporation that focuses on discovery, development, and commercialization of products for the treatment of cancer and other severe, immune, inflammatory conditions.

Ceva Animal Health

<https://www.ceva.co.uk/Responsibility/Business-and-scientific-partnerships>

- Global biotech company based in 42 countries and working across more than 110. They have 13 R&D centres, and 21 production sites.

Pfizer

<https://www.pfizer.com/purpose/contributions-partnerships>

- Global biopharmaceutical company with R&D centers and distributors around the world.
- Pfizer has a Global Health Fellowship Program in which Pfizer pairs colleagues with non-profit partner organizations for volunteer skills-sharing assignments.

https://www.pfizer.com/news/featured_stories/featured_stories_detail/global_health_fellows_reflections_from_tanzania

Merck

<https://www.merck.com/about/home.html>

<http://www.msd.com/contact/contacts.html>

- Global healthcare company focusing on human and animal health.

MARS, Inc.

Global company with diverse portfolio – health and wellness, animal health, food production.

<https://www.mars.com/global/>

<https://www.mars.com/global/sustainable-in-a-generation/our-approach-to-sustainability/working-with-others>

Elanco

<https://www.elanco.com/research-development>

- Global company focused on products and services to improve animal health and food safety.

NGO partnerships to consider:

Heifer International

Save the Children

Hellen Keller International – I recently collaborated with Rolf Klemm at Johns Hopkins, who is also based at HKI, on a proposal. He is great to work with. Dale Davis at HKI is also a great contact. TK

From: "Peter Daszak" <daszak@ecohealthalliance.org>
Sent: 03/12/2019 10:24:09 AM (-07:00)
To: "Woutrina A Smith" <wasmith@ucdavis.edu>; "Molly Turner" <turner@ecohealthalliance.org>; "Kevin Olival" <olival@ecohealthalliance.org>
Cc: "Matthew Blake" <mblake@ucdavis.edu>; "Elizabeth Leasure" <ealeasure@UCDAVIS.EDU>; "Jonna Mazet" <jkmazet@ucdavis.edu>
Subject: RE: OHW-NG scope and draft budget

Thanks for the response Woutrina – we're working on numbers now....

Cheers,

Peter

Peter Daszak

President

EcoHealth Alliance
460 West 34th Street – 17th Floor
New York, NY 10001

Tel. +1 212-380-4474

Website: www.ecohealthalliance.org

Twitter: [@PeterDaszak](https://twitter.com/PeterDaszak)

EcoHealth Alliance leads cutting-edge research into the critical connections between human and wildlife health and delicate ecosystems. With this science we develop solutions that prevent pandemics and promote conservation.

From: Woutrina A Smith [mailto:wasmith@ucdavis.edu]
Sent: Sunday, March 10, 2019 8:02 PM
To: Molly Turner; Peter Daszak; Kevin Olival
Cc: Matthew Blake; Elizabeth Leasure; Jonna Mazet
Subject: Re: OHW-NG scope and draft budget

Hi Peter, Kevin, Molly,

We've done our consortium draft budget compilations and review for OHW-NG. Liz can follow tomorrow with more detailed feedback if needed, but not surprisingly we all need to make cuts to our draft budgets and I realize this may mean we also have to prioritize and perhaps reduce the scope of work we can promise. As we've mentioned before, this budgeting exercise is a bit different than usual because we have to leave all the in-country costs to be covered by SEAHOHUN and OHCEA in their lions share of the overall budget. The EHA total cap for the 5 years of the project is \$4.8 million at this point given the other consortium partner scopes that are also being accommodated. Here is how I would approach making your cuts:

- Remove all workshop costs and supplies costs. Not to say that we all won't have those costs, but we'll have to work with SEAHOHUN and OHCEA to pay them.

- Use a phased approach for your personnel, so for example I'm doing a lower % effort in Yr 1 for some staff due to the start up phase that usually means delays in getting started with on the ground work, highest in Yr 2 when we will be doing more training of trainer type activities, and then lower in Yrs 3-5 when the networks should be taking on more of their own training activities, still with our oversight but at a reduced effort and by that time more can likely be done remotely if needed for cost reasons.
- Consider whether you can move some costs from direct costs to a cost share category to meet your 5% requirement and save direct budget where appropriate.
- Reduce travel and consultant effort as needed to make up much of the difference. Especially for expansion countries we can limit travel if needed.

I know reducing budgets is not an easy task given all the amazing work that could be accomplished. And given the cooperative agreement mechanism, I am hopeful that we can work to increase scope as funding and new scope becomes apparent. We'll need updated budget docs this Wednesday to review and then your final approvals for master proposal compilation by Wed March 20.

Best wishes, Woutrina

On Mar 5, 2019, at 5:28 PM, Molly Turner <turner@ecohealthalliance.org> wrote:

Here is the accompanying justification. Apologies for the delay. I am also looping in Matt and Liz whom I realized I neglected to include in my first message, apologies! (I have re-attached the docs previously shared here - slight modification to the budget doc so please use this version).

If OK with you we will add the 5% cost share once we agree on the requested amount.

On Tue, Mar 5, 2019 at 12:30 PM Molly Turner <turner@ecohealthalliance.org> wrote:

Hey Woutrina,

Here's our proposed budget and scope of work. Justification to follow later today.

Cheers,
Molly

--

Molly Turner
Federal Grants Coordinator
EcoHealth Alliance Operations

EcoHealth Alliance
460 West 34th Street, Suite 1701
New York, NY 10001

1.212.380.4469 (office)
REDACTED (mobile)
www.ecohealthalliance.org

EcoHealth Alliance leads cutting-edge scientific research into the critical connections between human and wildlife health and delicate ecosystems. With this science, we develop solutions that prevent pandemics and promote conservation.

--

Molly Turner

*Federal Grants Coordinator
EcoHealth Alliance Operations*

EcoHealth Alliance
460 West 34th Street, Suite 1701
New York, NY 10001

1.212.380.4469 (office)

REDACTED (mobile)

www.ecohealthalliance.org

EcoHealth Alliance leads cutting-edge scientific research into the critical connections between human and wildlife health and delicate ecosystems. With this science, we develop solutions that prevent pandemics and promote conservation.

<EHA OHW SOW.docx><OHW_EHA proposed budget_final_rvsd.xlsx><OHW-NG EHA proposed budget_narrative_final.docx>

From: "Jonna Mazet" <jkmazet@ucdavis.edu>
Sent: 05/29/2019 12:19:42 PM (-07:00)
To: karesh@ecohealthalliance.org
Subject: Away from the Office Re: Accepted: Invitation: P2 D.C. Briefing Planning Meeting @ Fri Jun 7, 2019 11:30am - 12:30pm (EDT) (karesh@ecohealthalliance.org)

Thank you for your message. I am traveling and will only have access to email episodically until June 4th. Brooke Genovese (bgenovese@ucdavis.edu) will be able to assist with urgent requests and will endeavor to forward emergency needs to me and others in the One Health Institute in the meantime. For urgent PREDICT matters, please contact David Wolking (djwolking@ucdavis.edu).

Thank you for your patience,
Jonna

Jonna AK Mazet, DVM, MPVM, PhD
Professor of Epidemiology & Disease Ecology
Executive Director, One Health Institute

School of Veterinary Medicine
University of California
1089 Veterinary Medicine Drive (VM3B)
Davis, CA 95616, USA
+1-530-752-3630

From: "Jonna Mazet" <jkmazet@ucdavis.edu>
Sent: 08/26/2019 8:05:11 PM (-07:00)
To: "Alice Latinne" <latinne@ecohealthalliance.org>; "Ava Sullivan" <sullivan@ecohealthalliance.org>; "Kevin J. Olival" <olival@ecohealthalliance.org>
Cc: "Peter Daszak" <daszak@ecohealthalliance.org>; "David J Wolking" <djwolking@ucdavis.edu>
Subject: Fwd: URGENT REQUEST: PREDICT prep needed for mtgs this week

We're getting copied into all of this, along with the whole USAID management team. Can you please forward us your responses, as well as copy is on comms with Tim in the future, so we always have the info when we get asked about how we have handled the requests?

Thanks,
Jonna

----- Forwarded message -----

From: Andrew Clements <aclements@usaid.gov>
Date: Mon, Aug 26, 2019 at 4:11 AM
Subject: Fwd: URGENT REQUEST: PREDICT prep needed for mtgs this week
To: <djwolking@ucdavis.edu>, Jonna Mazet <jkmazet@ucdavis.edu>
Cc: <predictmgt@usaid.gov>, <predict@ucdavis.edu>

FYI

Andrew P. Clements, Ph.D.
Senior Scientific Advisor
Emerging Threats Division/Office of Infectious Diseases/Bureau for Global Health
U.S. Agency for International Development
Mobile phone: 1-571-345-4253
Email: aclements@usaid.gov

Begin forwarded message:

From: Timothy Meinke <tmeinke@usaid.gov>
Date: August 26, 2019 at 10:48:00 AM GMT+2
To: Joko Imung Pamungkas <jimung@usaid.gov>, Dodi Safari <dodisafari@usaid.gov>, Tina Kusumaningrum <tina.kusumaningrum@usaid.gov>, Juliana Triastuti <juliana.triastuti@usaid.gov>, "Kevin Olival, PhD" <olival@ecohealthalliance.org>, Alice Latinne <latinne@ecohealthalliance.org>, Suryo SAPUTRO <suryo.saputro@usaid.gov>
Cc: PREDICTMGT <PREDICTMGT@usaid.gov>, Monica Latuihamallo <mlatuihamallo@usaid.gov>, Asfri Rangkuti <arangkuti@usaid.gov>
Subject: URGENT REQUEST: PREDICT prep needed for mtgs this week

Hello PREDICTers -

Hoping this finds you well as we wind down a busy summer.

As you know, and given that there will be an official MOH meeting this Wednesday on BAST and agreement paperwork, there are several urgent issues that need PREDICT's immediate attention:

1. Unfortunately, for the BAST recently signed by RISTEKDKTI (Min. of Research and Higher Ed), Professor Ali Ghufon is NOT the actual budget holder and therefore NOT allowed to sign the BAST without their

Secretary General's prior approval. This needs to be rectified immediately by PREDICT and USAID either by: 1) seeking that approval; or 2) seeking the Secretary General's signature. Please advise if you have a preference on how to approach RISTEKDKTI or which option makes better sense and let's coordinate with OHW, which is in the same boat.

2. For the Wednesday meeting, MOH will ask some difficult questions and so we request that PREDICT be represented strongly and at the highest levels. Please be sure to bring along all necessary supporting documents.
3. As RISTEKDKTI is your official counterpart ministry, MOH will ask who your POCs (directorate/working level) are in RISTEKDKTI who can talk about and confirm PREDICT's work. Please also be cautious about highlighting PREDICT's work with OTHER ministries, which could lead to confusion and an MOH question on why RISTEKDKTI is your counterpart if they don't know much about PREDICT.
4. For the centrifuge and cryofreezers, donated through JSI DELIVER, these will NOT be included in the BAST that MOH will sign. What is needed, therefore, is a letter from IPB Vice Rector (who officially received the equipment) stating that it is being used, is in working order, etc. Pak Asfri will follow up with you on this point.
5. For the BAST amounts, MOH has been requesting budget information of all projects and asking detailed questions about amounts (monthly reports, BAST breakdowns, aggregates and totals) and so please make sure that you have that information prepared and handy to discuss and share as needed.
6. Similar to #5, RISTEKDKTI is likely to call PREDICT (and OHW) in on Thursday to discuss these BAST budget issues in detail, FYI.
7. Finally, please share the BAST materials that PREDICT promised at the (successful yet apparently illegal) BAST signing (i.e., monthly report compilation, reports, etc). Please reach out to OHW or us for examples, if needed.

We know that the in-country PREDICT Team is working on these things but due to the importance and time-sensitivity, we wanted to flag this for everyone's awareness and, as needed, action.

Looking forward to ideas and suggestions on making this process as smooth and productive as possible in order to wrap up and allow the rest of the USAID Health portfolio to move forward.

Best...

- Tim

--

You received this message because you are subscribed to the Google Groups "PREDICTMGT" group.

To unsubscribe from this group and stop receiving emails from it, send an email to predictmgt+unsubscribe@usaid.gov.

To view this discussion on the web visit

https://groups.google.com/a/usaid.gov/d/msgid/predictmgt/CAMZG8PSjHfc6_gUr6SJwtLSDfi5zaVsnVjwRc-DNM5DET%2BBEVA%40mail.gmail.com.

From: "Amponsah, Edith" <EAmponsah@nas.edu>
Sent: 03/12/2020 8:15:38 AM (-07:00)
To: "atennenb@ITS.JNJ.com" <atennenb@ITS.JNJ.com>; "chjohn@iu.edu" <chjohn@iu.edu>; "David Nabarro" <david@4sd.info>; "Eva Harris" <eharris@berkeley.edu>; "Gary A. Roselle" <gary.roselle@va.gov>; "Cristina Cassetti" <ccassetti@niaid.nih.gov>; "Jonna Mazet" <jkmazet@ucdavis.edu>; "Kent Kester" <Kent.Kester@sanofi.com>; "Kumanan Rasanathan" [REDACTED] "Marcos A. Espinal" <espinalm@paho.org>; "Michael Mair" <michael.mair@fda.hhs.gov>; "Peter Sands (peter.sands@theglobalfund.org)" <peter.sands@theglobalfund.org>; "Peter Daszak" <daszak@ecohealthalliance.org>; "Rafael Obregon" <robregon@unicef.org>; "Rick Bright" <Rick.Bright@hhs.gov>; "Rima F. Khabbaz" <rfk1@cdc.gov>; "Sally A. Miller" <millier.769@osu.edu>; "Suerie Moon" <suerie.moon@graduateinstitute.ch>; "Thomas W. Scott" <twscott@ucdavis.edu>; "Timothy Burgess" <timothy.burgess@usuhs.edu>
Cc: "Rita Mueller" <rmuelle5@its.jnj.com>; "debabenn@iupui.edu" <debabenn@iupui.edu>; "Karen Goraleski" <kgoraleski@astmh.org>; "magali@4sd.info" <magali@4sd.info>; "Kathleen.Lee@va.gov" <Kathleen.Lee@va.gov>; "Mary Radford" <maradford@ucdavis.edu>; "vivian.louchie@sanofipasteur.com" <vivian.louchie@sanofipasteur.com>; "Tejada, Ms. Cecilia (WDC)" <tejadace@paho.org>; "Elizabeth.Sadove@fda.hhs.gov" <Elizabeth.Sadove@fda.hhs.gov>; "Jacqui Moseley" <jacqui.moseley@theglobalfund.org>; "Alison Andre" <andre@ecohealthalliance.org>; "Laura Olmedo (lolmedo@unicef.org)" <lolmedo@unicef.org>; "Blatner, Gretta (OS/ASPR/BARDA)" <Gretta.Blatner@hhs.gov>; "vjk1@cdc.gov" <vjk1@cdc.gov>; "dgonzalezpulido@ucdavis.edu" <dgonzalezpulido@ucdavis.edu>; "Pavlin, Julie" <JPavlin@nas.edu>; "Goodtree, Hannah" <HGoodtree@nas.edu>; "Buckley, Gillian" <GBuckley@nas.edu>
Subject: Forum on Microbial Threats Workshop Planning Update

Dear Forum Members,

I am writing to update you all on planning of our upcoming May workshop on vaccine hesitancy and access given the COVID-19 pandemic. As of now, per National Academies' policy, we are to continue planning for an in-person workshop. As things continue to evolve, the National Academies' leadership will reassess this policy as needed. For the time being, we will not be booking any travel until next month and may need to possibly switch to a virtual meeting (webinar) depending on how things play out.

We will update you all as we get more guidance from our leadership.

Thank you for your continued support of the Forum. Please let us know if you have any questions or concerns.

Thank you,

Edith Amponsah, MPH, IBCLC

Research Associate

Forum on Microbial Threats

Health and Medicine Division

The National Academies of Sciences, Engineering, and Medicine

500 Fifth Street, NW

Phone: 202-334-3222

www.nationalacademies.org/HMD

The National Academies of
SCIENCES • ENGINEERING • MEDICINE

From: "Amponsah, Edith" <EAmponsah@nas.edu>
Sent: 05/22/2020 2:06:37 PM (-07:00)
To: "Jonna Mazet" <jkmazet@ucdavis.edu>; "Peter Daszak" <daszak@ecohealthalliance.org>; "David Rizzo" <dmrizzo@ucdavis.edu>; "Sally A. Miller" <miller.769@osu.edu>; "Mary E. Wilson" <mewilson@hsph.harvard.edu>; "Gail Hansen" <[REDACTED]>; "Elizabeth Hermsen" <elizabeth.hermsen@merck.com>; "apruden@vt.edu" <apruden@vt.edu>; "Rushton, Jonathan" <[REDACTED]>; "Casey Barton Behraves" <dlx9@cdc.gov>; "Lichtveld, Maureen Y" <mlichtve@tulane.edu>; "MUMFORD, Elizabeth" <mumforde@who.int>; "jmhughe@emory.edu" <jmhughe@emory.edu>; "Anderson, Kevin" <Kevin.Anderson@HQ.DHS.GOV>
Cc: "Mary Radford" <maradford@ucdavis.edu>; "andre@ecohealthalliance.org" <andre@ecohealthalliance.org>; "Pavlin, Julie" <JPavlin@nas.edu>; "Goodtree, Hannah" <HGoodtree@nas.edu>; "Buckley, Gillian" <GBuckley@nas.edu>
Subject: OHAC Call # 22 Meeting Materials
Attachments: OHAC Mtg 22 Agenda_FINAL.pdf, One Health May 2020.pdf

Dear OHAC members,

Please find the agenda for our call next Tuesday attached here. I have also attached here Dr. Parrish-Sprowl's presentation.

Have a good weekend,
Edith

From: Amponsah, Edith
Sent: Monday, May 4, 2020 1:37 PM
To: 'Jonna Mazet' <jkmazet@ucdavis.edu>; 'Peter Daszak' <daszak@ecohealthalliance.org>; 'David Rizzo' <dmrizzo@ucdavis.edu>; 'Sally A. Miller' <miller.769@osu.edu>; 'Mary E. Wilson' <mewilson@hsph.harvard.edu>; 'Gail Hansen' <[REDACTED]>; 'Elizabeth Hermsen' <elizabeth.hermsen@merck.com>; 'apruden@vt.edu' <apruden@vt.edu>; 'Rushton, Jonathan' <[REDACTED]>; 'Casey Barton Behraves' <dlx9@cdc.gov>; 'Lichtveld, Maureen Y' <mlichtve@tulane.edu>; 'MUMFORD, Elizabeth' <[REDACTED]>; 'jmhughe@emory.edu' <jmhughe@emory.edu>; 'Anderson, Kevin' <Kevin.Anderson@HQ.DHS.GOV>
Cc: 'Mary Radford' <maradford@ucdavis.edu>; 'andre@ecohealthalliance.org' <andre@ecohealthalliance.org>; Pavlin, Julie <JPavlin@nas.edu>; Goodtree, Hannah <HGoodtree@nas.edu>; Buckley, Gillian <GBuckley@nas.edu>
Subject: RE: OHAC Call # 22 Doodle

Hi all,

Our next call will be on **Tuesday May 26th from 2-3pm EST**. Hannah sent a calendar invitation with zoom details. I'm making another call for nominations/recommendations for the next OHAC chair. Please send suggestions before our next call.

Best wishes,
Edith

From: Amponsah, Edith
Sent: Monday, April 27, 2020 10:21 AM
To: Jonna Mazet <jkmazet@ucdavis.edu>; Peter Daszak <daszak@ecohealthalliance.org>; David Rizzo' <dmrizzo@ucdavis.edu>; Sally A. Miller <miller.769@osu.edu>; Mary E. Wilson <mewilson@hsph.harvard.edu>; Gail Hansen' <[REDACTED]>; Elizabeth Hermsen <elizabeth.hermsen@merck.com>; 'apruden@vt.edu' <apruden@vt.edu>; 'Rushton, Jonathan' <[REDACTED]>; Casey Barton Behraves <dlx9@cdc.gov>;

'Lichtveld, Maureen Y' <mlichtve@tulane.edu>; MUMFORD, Elizabeth [REDACTED] <jmhughe@emory.edu>
<jmhughe@emory.edu>; 'Anderson, Kevin' <Kevin.Anderson@HQ.DHS.GOV>
Cc: 'Mary Radford' <maradford@ucdavis.edu>; 'andre@ecohealthalliance.org' <andre@ecohealthalliance.org>; Pavlin,
Julie <JPavlin@nas.edu>; Goodtree, Hannah <HGoodtree@nas.edu>; Buckley, Gillian <GBuckley@nas.edu>
Subject: OHAC Call # 22 Doodle

Dear OHAC members,

Please fill out this doodle poll to let us know your availability for the next OHAC call next month. As discussed on the last call, we will plan to have Dr. John Parrish-Sprowl give a 30 minute presentation before moving forward with a final decision to invite him to join the group.

Link to Doodle: <https://doodle.com/poll/9vw84uzkm7z57dec>

Please let me know if you have any questions or concerns.

Best,

Edith Amponsah, MPH, IBCLC

Associate Program Officer

Forum on Microbial Threats

Health and Medicine Division

The National Academies of Sciences, Engineering, and Medicine

500 Fifth Street, NW

Phone: 202-334-3222

www.nationalacademies.org/HMD

The National Academies of
SCIENCES • ENGINEERING • MEDICINE

*Communication for Whole
Health: A Complexity
Approach to Social and
Behavioral Science*

John Parrish-Sprowl, PhD

Global Health
Communication Center

Indiana University

School of Liberal Arts

IUPUI Campus

Indianapolis, IN USA

johparri@iupui.edu



IUPUI

GLOBAL HEALTH COMMUNICATION CENTER

Both meta theory and theory in the social and behavioral sciences is increasingly being questioned

“The longer we delay the retirement of the TPB, the longer we put off the discovery of a better explanation of health behaviour change.”

Sniehotta, Penseau and Araújo-Soares, 2014

“Currently, and in contrast to most other disciplines, medicine remains largely stuck in the simplistic “reductionist” scientific world view and is resisting the move to complex dynamic “holistic” scientific world view...”

Sturmberg & Martin, 2013

“As researchers we often struggle with the line between parsimony and complexity. The TPB at its most basic has four boxes in order to predict all behaviours from the everyday such as eating through to the rare, including blood or organ donation. It is simple, clear and parsimonious. Sniehotta et al. argue that it is time to retire the TPB. I also agree that we need a new future for psychology. And to get there we need to address the limitations of our education system, our career structure and our paradigm itself. (PsycINFO Database Record (c) 2016 APA, all rights reserved)”

Ogden, 2015



IUPUI

GLOBAL HEALTH COMMUNICATION CENTER

“Classical social science, which is still the dominant mode today, is based on the study of real material objects and forces, but society is hardly real or tangible. You can only touch local instantiations of it, not the totality or abstract idea of it.”

Cooper, 2017

Social and behavioral research when subjected to scrutiny, raises difficult questions

“As you’ve no doubt heard by now, social psychology has had a rough few years. The trouble concerns the replicability crisis, a somewhat antiseptic phrase that refers to the growing realization that often the papers published in peer-reviewed journals — papers with authoritative abstracts and nifty-looking charts — can’t be reproduced.”

Bartlett, 2018

“A new analysis found that only 36 percent of findings from almost 100 studies in the top three psychology journals held up when the original experiments were rigorously redone.”

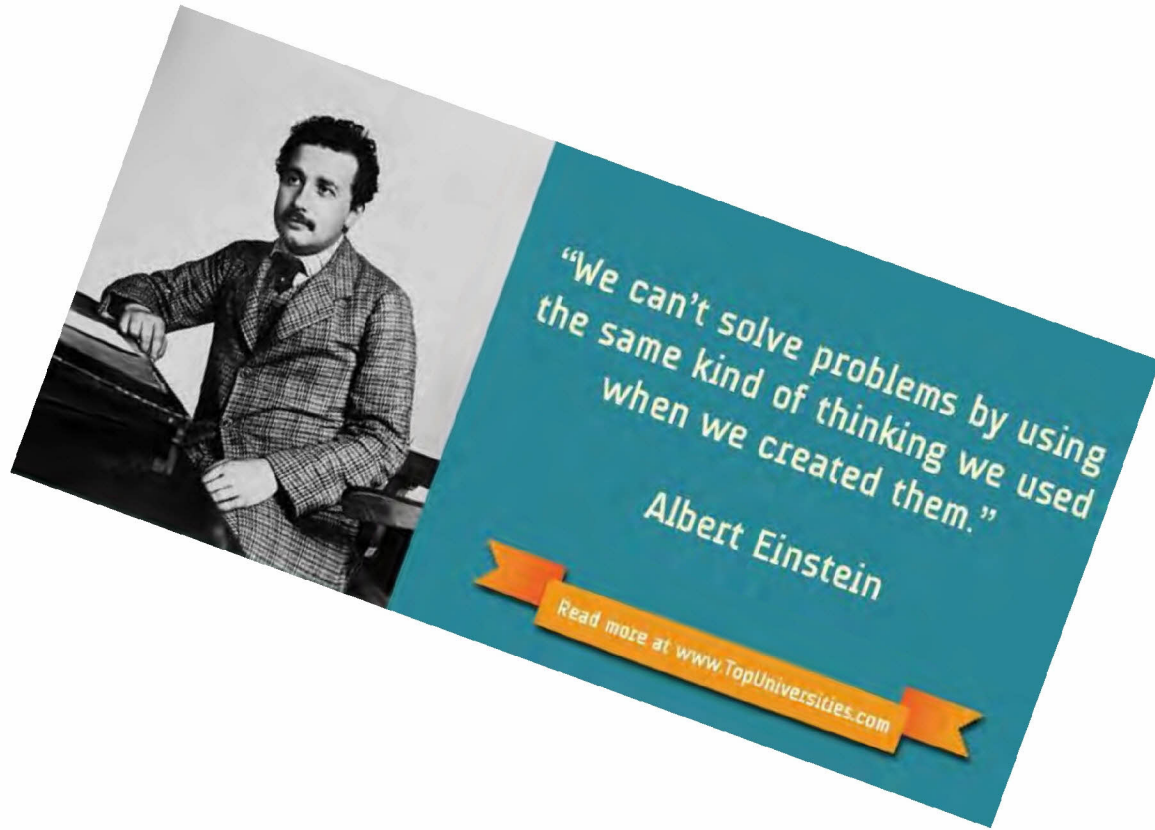
Carey, 2015



IUPUI

GLOBAL HEALTH COMMUNICATION CENTER

In the world, SARS-CoV-2 specifically, and zoonotic diseases generally, serve to signal a need to move beyond our current reductionistic, mechanistic paradigm for the social and behavioral sciences



"I did then what I knew best,
when I knew better, I did better."
--Maya Angelo



Complexity is not simply another theory; it is way of experiencing and understanding everything

“Perception is an actively formed opinion of the world rather than a passive reaction to sensory input from it.”
Ramachandran, 2011

“Complexity is the state of having many different parts connected or related to each other in complicated, often non-linear interactions that are difficult to understand in a more complete manner. Highly complex problems are unpredictable and present dire consequences if not handled properly. They change over time, are unique from moment to moment, and often present shortened reaction times for involved decision-makers to address them (Johnson, 2012). Complex problems, resulting from numerous non-linear interactions, can overwhelm traditional systems that cannot adapt quickly enough; cannot address multiple missions occurring simultaneously; and cannot process information quickly enough to make effective decision-making possible.

Johnson, 2019

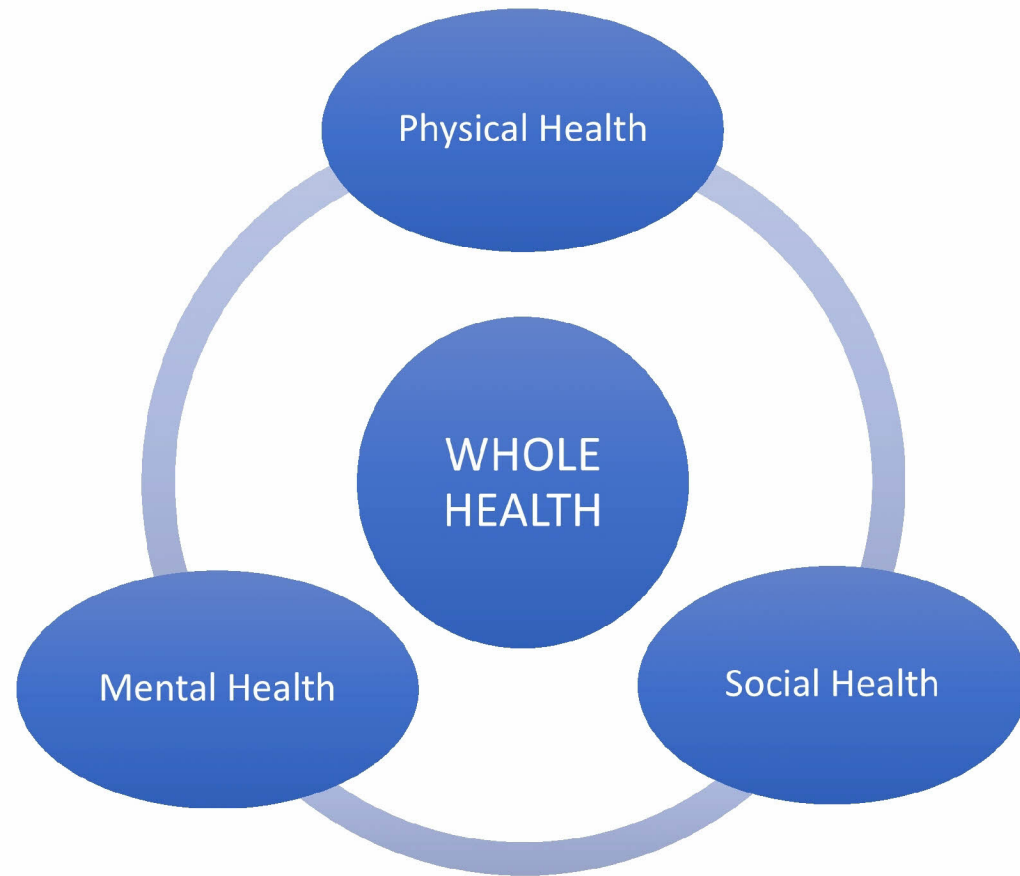
Complexity thinking is a change in mindset—away from understanding the whole arising from understanding its individual parts (the Newtonian approach) toward an appreciation that the whole is different and less than the sum of its parts; viewed in isolation the parts exhibit different properties to those seen in the context of the whole. In addition, the behavior of systems components varies depending on context; changing context may result in “unexpected” changes in the component’s and therefore the system’s behavior. Strumberg & Martin, 2013



IUPUI

GLOBAL HEALTH COMMUNICATION CENTER

Communication for Whole Health: A complexity approach to social and behavioral science



- CWH emerges from theory and research that demonstrate the interdependence of physical, mental and social health.
- “The correlations between physical health and positive social connectedness are the most consistent and robust findings in the field of psychoneuroimmunology—the study of relationships between mind, body, and physical health.” Cozolino, 2014
- We can use our understanding of this to think about innovative ways to improve individual and community health.



Communication for Whole Health: Complexity emerging from multiple disciplines

“Cognition materializes in an
interpersonal space”
-Hasson et al. 2012

“For scholars, the findings of this study carry important implications. First, it reinforces the long-held belief that social support is an important communication process associated with wellbeing. Second, it provides evidence that **variations in support quality can result in different outcomes for recipients**. This expands the stress buffering hypothesis in demonstrating that support quality is an important factor to consider when examining the relationship between support and stress.”

-Faw 2018

“We found that greater positive mood, whether measured repeatedly over a 6-week period around vaccination, or on the day of vaccination, significantly predicted greater antibody responses to influenza vaccination in the least immunogenic viral strain (H1N1).”

-Ayling et al. 2018

“You can’t catch depression in the same way you catch a cold, but the latest research in neuroscience, social psychology, epidemiology, and genetics provides overwhelming support that moods spread through social conditions. Our social lives directly shape our brain chemistry and powerfully affect the way we think and feel.”

-Yapko, Michael 2009



IUPUI

GLOBAL HEALTH COMMUNICATION CENTER



IUPUI

GLOBAL HEALTH COMMUNICATION CENTER



Communication For Whole Health: The complex interplay between all organisms that shapes the health of everyone

Communication is much more than the transfer of information. It plays a key role in creating and shaping the physical, mental, and social qualities of humans because it is both ***Bioactive*** and ***Systemic***

Communication is Bioactive

- Helps shape brain structure by creating, sustaining, and/or altering patterns of neural firing
- Has impact at the epigenetic level-how our genes are activated
- Activates the both the sympathetic and parasympathetic nervous systems
- Plays a role in immune system function, heart disease, cognitive development, as well as mental and social health



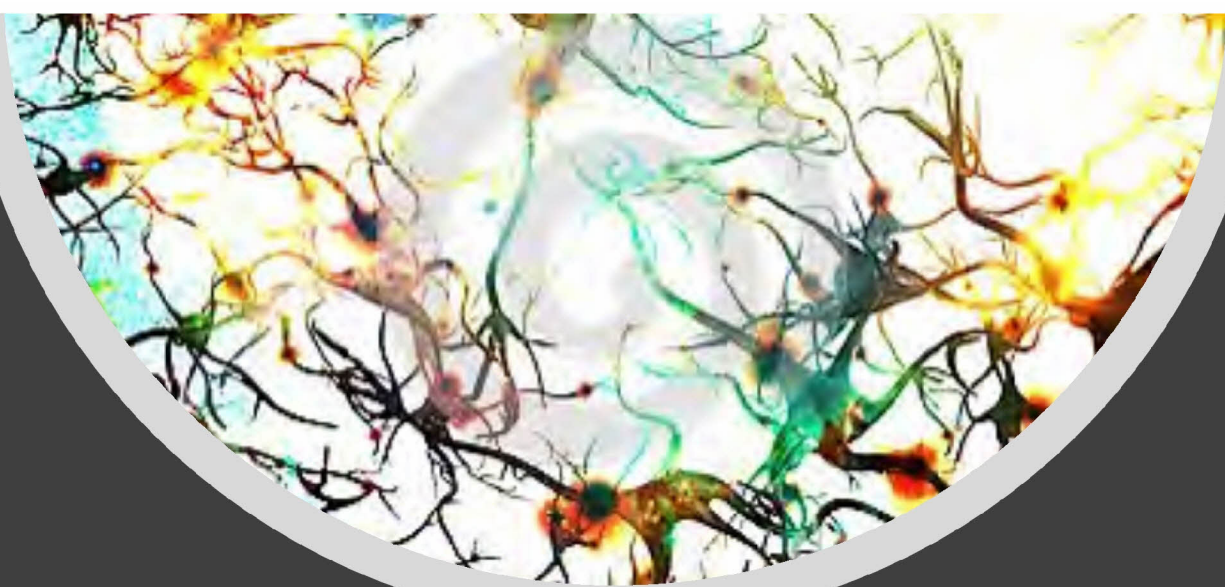
IUPUI

GLOBAL HEALTH COMMUNICATION CENTER

School of Liberal Arts

Communication is systemic

- Everything is interconnected via communication
- We live immersed in a communication ecology
- The choices we make about what we say, and how we say it, have immediate, long term, and systemic implications



IUP
GLOB
Schoc

Informed by science, we know that *HOW* we communicate (connect) is more important than what we say

- Engagement is a relational and systemic process
- Resilience arises from flexible, adaptable linkages in a system
- Community health emerges from the quality of connections between members



Constructing a communication ecology that supports healthy functioning can transform people from this...



To this!





IUPUI

GLOBAL HEALTH COMMUNICATION CENTER
School of Liberal Arts

Community engagement: Creating collaboration to foster whole health

Sierra Leone: Community Engagement during the Ebola Outbreak in 2015-Replacing reactivity with receptivity in frontline staff led to more effective engagement

- **Interactions after 1-day training**
- Frontline staff better able to turn frustration into opportunities for dialogue
- Frontline staff improved conflict resolutions skills and able to de-escalate tense situations
- Frontline staff went beyond their “normal job functions” to address the living conditions of quarantined families – and nurtured greater trust



IUPUI
GLOBAL HEALTH COMMUNICATION CENTER



Enhanced Capacity Building
Training for Frontline Staff
on Building Trust and
Communication
Facilitator's Guide
July 2015



#COMMUNICATE

Infusing mental health and psychosocial support in a Primary Health Care Clinic in Jordan



FACILITATING A HEALTHY COMMUNICATION ECOLOGY

- Our goal was to promote the intentional use of the social environment to improve the health and well-being of patients and staff.
- We worked with **ALL** staff to shift the communication ecology of the clinic from a “culture of reactivity” to a culture of receptivity” to support whole health.
- Specific interventions were designed and implemented in collaboration with clinic staff and tailored to the patient population.



IUPUI

GLOBAL HEALTH COMMUNICATION CENTER





A television and DVD player in the clinic waiting room helps reduce stress for patients and staff.



IUPUI

GLOBAL HEALTH COMMUNICATION CENTER



UCDUSR0015377



Listening to clinic workers about ways to improve work-flow processes leads to positive systemic changes for patients and staff



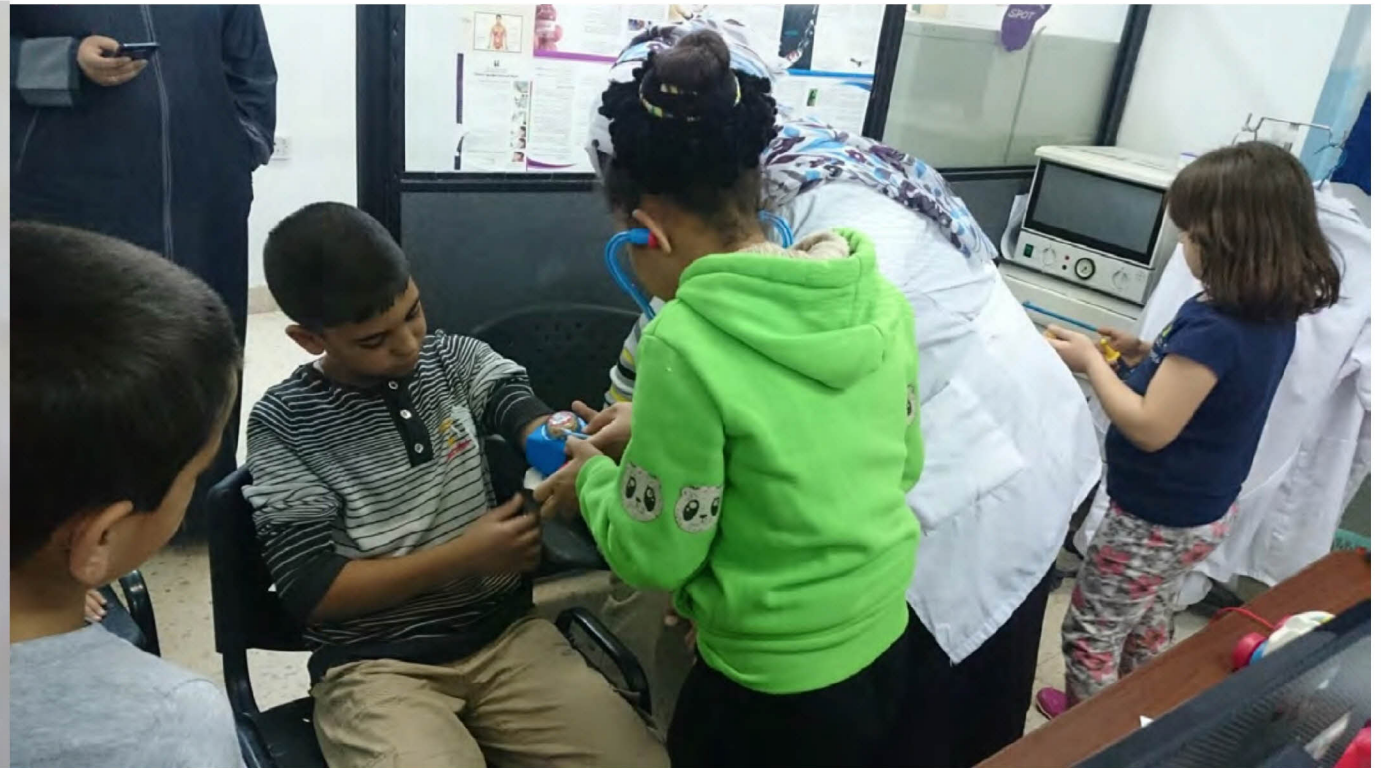
IUPUI
GLOBAL HEALTH COMMUNICATION CENTER

FACILITATING HEALING AND DISCOVERING THE MEANING OF SYSTEMIC CHANGE



Receptionist at clinic: I always felt that my oldest daughter was angry at me, and frustrated. I felt everything was a struggle with her; I even felt she does not like to be around me, and that hurt. After attending the training, I learned about healthy attachment and how kids need grownups to look them in the eyes and give them attention, listen to them and help them understand their feelings and control them. I thought about my previous interactions with my daughters and remembered how I always was running, if I am cooking and one of my daughters come to talk to me, I just dismiss her quickly without even looking her in the eye. I just didn't know that eye contact is that important! So I made an experiment the day I came back home from the training. I sat down with my girls and spent time with them, watched a movie, they cooked with me. **The whole atmosphere in the house was very different, the girls were happy, they listened to me and I listened to them.** My oldest daughter told me you are different today, and she gave me a hug! I can't remember the last time she hugged me. For the rest of the day she just wanted to stay close to me. I can't believe the impact on them and me! I wish I knew about healthy attachment before. Can't thank you enough for the gift you gave me. Now I have big hopes! I want to work on building a healthy relationship with my daughters and you empowered me to do that! Thank you!

Learning about empowerment inspires clinic staff to create health education workshops for children.





Staff help parents model good health care practices for their children.





CHILDREN need opportunities for positive interaction!



IUPUI
GLOBAL HEALTH COMMUNICATION CENTER



UCDUSR0015383



Letting kids be kids helps calm their brains and their bodies!



IUPUI
GLOBAL HEALTH COMMUNICATION CENTER



The Communication for Whole Health approach, adapted to context, is a useful intervention framework for addressing important needs of patients and frontline workers in resource-scarce primary health care settings.





CLINIC DENTIST USES COMMUNICATION FOR WHOLE
HEALTH SKILLS TO IMPROVE PATIENT CARE

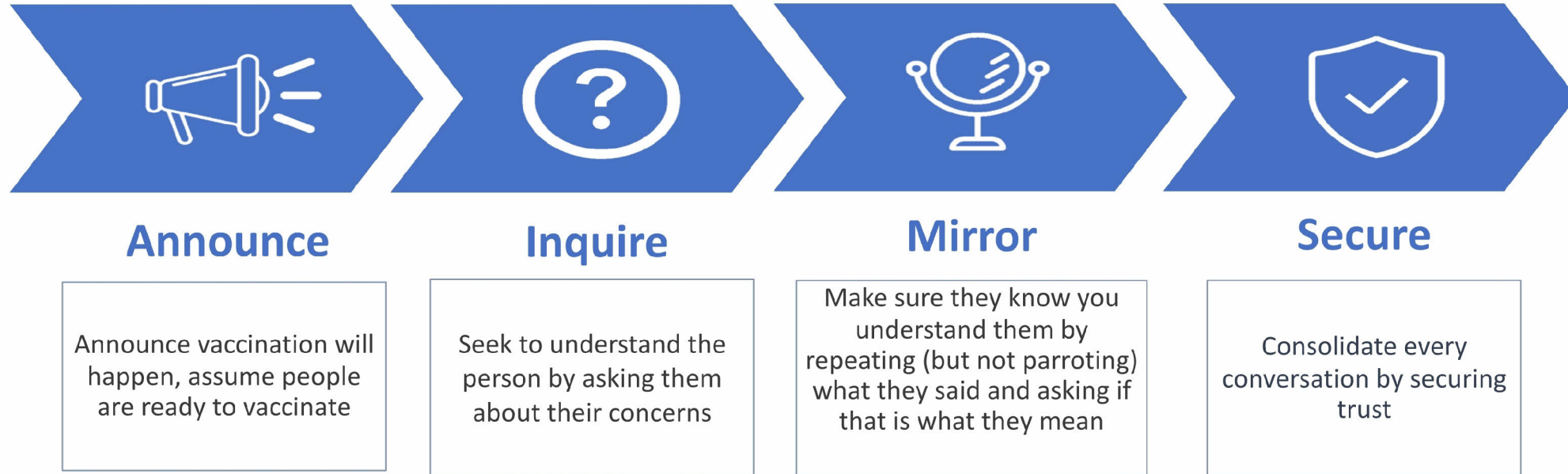
Dentist story: I once had a patient who required a surgical extraction of a tooth, but he had an infection, so I gave him an antibiotic and told him to come back in a week. After a week he came back, I told him he has to wait for another week until the infection cleared out. He was so upset to hear that, especially because he was in pain, and he started yelling at my face. From inside I felt aggravated, to say the least, and I wanted to defend myself because the patient was not respectful and rude, but then I remember the training about Trauma and how it affects patients' brains and I made a decision to calm myself. So I took a deep breath and sat down and asked the patient to set down. After he started to calm down, I explained to him slowly why it is bad to do the surgery if the infection is still there and how the side effects can be worse. He eventually agreed to come back after another week. He came back and I did the surgery and he left the clinic. Two weeks after , the patient came to the clinic and when he saw me, he grabbed my hand and bowed down to kiss it. I was shocked and told him why? He said you understood my pain and you were patient with me, you contained me and helped me even though I was rude. Thank you! If I had not calmed down and breathed that poor guy would have left our clinic upset and in pain and would not have had the means to pay for a private dentist to do the surgery. I saw a smile on the patient's face when he left, and I had the same smile on my face; happy I helped and grateful for the training that taught me how to deal with such a situation.



IUPUI

GLOBAL HEALTH COMMUNICATION CENTER
School of Liberal Arts

The AIMS* Method for Healthy Conversations



*Created and Trademarked by J Parrish-Sprowl & A. Thompson of Sanofi Pasteur



IPA Vaccine Hesitancy Project

**1st International Training of Trainers,
14-16 December 2018 Delhi NCR, India**

Pilots in South Africa and France

International Pediatric Association (IPA)

83 participants from 18 countries in Delhi India, 62 participants from 20 countries in Panama City, Panama

50,000 pharmacists and pharm techs in Walmart

Ministry of Health for the United Arab Emirates

Thank You!!

- John Parrish-Sprowl, PhD
- Global Health Communication Center
- Indiana University
- School of Liberal Arts
- IUPUI Campus
- Indianapolis, IN USA
- johparri@iupui.edu

- All reference citations available on request



The National Academies of
SCIENCES • ENGINEERING • MEDICINE

FORUM ON MICROBIAL THREATS

ONE HEALTH ACTION COLLABORATIVE (OHAC) MEETING #22

Tuesday, May 26, 2020

2:00-3:00pm (ET)

PARTICIPANTS

MEMBERS:

Jonna Mazet (*Chair*), Gail Hansen, Jim Hughes, Maureen Lichtveld, Liz Mumford, Amy Pruden, Dave Rizzo, and Mary Wilson

Tentative/Absent: Kevin Anderson, Casey Barton Behravesh, Peter Daszak, Elizabeth Hermsen, Sally Miller, and Jonathan Rushton

STAFF:

Julie Pavlin, Gillian Buckley, Edith Amponsah, and Hannah Goodtree (National Academies)

STAFF:

MEETING MATERIALS

1. John Parrish-Sprowl presentation (*attached*)

AGENDA ITEMS

1. Welcome & General Check-in (Jonna)
2. Food safety deliverable (Sally and Dave)
 - Past submissions, COVID complications & plans for full manuscript
3. One Health and state and local medical associations (Gail)
 - Update on subcommittee
 - Op-ed submission update
4. “Communication for Whole Health: A Complexity Approach to Social and Behavioral Science” by Dr. Parrish-Sprowl
5. Discussion of chair (Jonna)
6. Other brief updates
 - Next Forum workshop: “The Critical Public Health Value of Vaccines – Tackling Issues of Access and Hesitancy” (Julie)
 - Items from OHAC members
7. Next steps and action items (Edith)
 - OHAC Meeting #23

From: "Wilson, Mary E." <mewilson@hsph.harvard.edu>
Sent: 05/27/2020 11:33:48 AM (-07:00)
To: "Lichtveld, Maureen Y" <mlichtve@tulane.edu>; "Jonna Mazet" <jkmazet@ucdavis.edu>; "Amponsah, Edith" <EAmponsah@nas.edu>
Cc: "Peter Daszak" <daszak@ecohealthalliance.org>; "David Rizzo" <dmrizzo@ucdavis.edu>; "Sally A. Miller" <miller.769@osu.edu>; "Gail Hansen" [REDACTED] "Elizabeth Hermsen" <elizabeth.hermsen@merck.com>; "apruden@vt.edu" <apruden@vt.edu>; "Rushton, Jonathan" [REDACTED] "Casey Barton Behravesh" <dlx9@cdc.gov>; "MUMFORD, Elizabeth" [REDACTED] "jmhughe@emory.edu" <jmhughe@emory.edu>; "Anderson, Kevin" <Kevin.Anderson@hq.dhs.gov>; "Mary Radford" <maradford@ucdavis.edu>; "andre@ecohealthalliance.org" <andre@ecohealthalliance.org>; "Pavlin, Julie" <JPavlin@nas.edu>; "Goodtree, Hannah" <HGoodtree@nas.edu>; "Buckley, Gillian" <GBuckley@nas.edu>
Subject: Re: OHAC Call # 22 Meeting Materials

I also agree that he would bring valuable knowledge and perspective to the discussion and would favor inviting him to join OHAC.

Best,
Mary

From: "Lichtveld, Maureen Y" <mlichtve@tulane.edu>
Date: Wednesday, May 27, 2020 at 10:58 AM
To: Jonna Mazet <jkmazet@ucdavis.edu>, "Amponsah, Edith" <EAmponsah@nas.edu>
Cc: "daszak@ecohealthalliance.org" <daszak@ecohealthalliance.org>, David Rizzo <dmrizzo@ucdavis.edu>, "Sally A. Miller" <miller.769@osu.edu>, "Wilson, Mary E." <mewilson@hsph.harvard.edu>, Gail Hansen [REDACTED] Elizabeth Hermsen <elizabeth.hermsen@merck.com>, "apruden@vt.edu" <apruden@vt.edu>, "Rushton, Jonathan" [REDACTED] Casey Barton Behravesh <dlx9@cdc.gov>, "MUMFORD, Elizabeth" [REDACTED] "JMHUGHE@emory.edu" <jmhughe@emory.edu>, "Anderson, Kevin" <Kevin.Anderson@hq.dhs.gov>, Mary Radford <maradford@ucdavis.edu>, "andre@ecohealthalliance.org" <andre@ecohealthalliance.org>, "Pavlin, Julie" <JPavlin@nas.edu>, "Goodtree, Hannah" <HGoodtree@nas.edu>, "GBuckley@nas.edu" <GBuckley@nas.edu>
Subject: RE: OHAC Call # 22 Meeting Materials

Thank you Jonna for the meeting yesterday and the presentation. Prof Parrish-Sprowl brings an aspect that has been under-recognized in many areas. This was the impetus of my own research examining the impact of exposures to chemical and non-chemical stressors as shared during the call. his discussion on the role of communication as well as the relationship with early markers of exposure renovate well.

In short, I support him joining OHAC.
Regards,

Maureen Y. Lichtveld, MD, MPH
Professor and Chair
Freeport McMoran Chair of Environmental Policy
Associate Director Population Sciences, Louisiana Cancer Research Consortium
Director GROWH Research Consortium
Director, Center for Gulf Coast Environmental Health Research, Leadership and Strategic Initiatives
Past President, Hispanic-Serving Health Professions Schools
Tulane University School of Public Health and Tropical Medicine
Department of Global Environmental Health Sciences
1440 Canal Street, suite 2100

New Orleans, Louisiana 70112
Tel: 504-988-7904
Fax: 504-988-1726
Email: mlichtve@tulane.edu
www.gulfcoastenvironmentalhealth.com

From: Jonna Mazet <jkmazet@ucdavis.edu>
Sent: Tuesday, May 26, 2020 2:20 PM
To: Amponsah, Edith <EAmponsah@nas.edu>
Cc: Peter Daszak <daszak@ecohealthalliance.org>; David Rizzo <dmrizzo@ucdavis.edu>; Sally A. Miller <miller.769@osu.edu>; Mary E. Wilson <mewilson@hsph.harvard.edu>; Gail Hansen [REDACTED]
Elizabeth Hermsen <elizabeth.hermsen@merck.com>; apruden@vt.edu; Rushton, Jonathan [REDACTED] Casey Barton Behavesh <dlx9@cdc.gov>; Lichtveld, Maureen Y <mlichtve@tulane.edu>; MUMFORD, Elizabeth [REDACTED] jmhughe@emory.edu; Anderson, Kevin <Kevin.Anderson@hq.dhs.gov>; Mary Radford <maradford@ucdavis.edu>; andre@ecohealthalliance.org; Pavlin, Julie <JPavlin@nas.edu>; Goodtree, Hannah <HGoodtree@nas.edu>; Buckley, Gillian <GBuckley@nas.edu>
Subject: Re: OHAC Call # 22 Meeting Materials

External Sender. Be aware of links, attachments and requests.

ly, if
we receive a majority of positive feedback, Edith can help me to send out a call for a vote. I do think a focus in our next call should be on developing new deliverables, so deciding on this invitation could shape some of that discussion. Please advise and have a good day,
Jonna

On Fri, May 22, 2020 at 2:06 PM Amponsah, Edith <EAmponsah@nas.edu> wrote:

Dear OHAC members,

Please find the agenda for our call next Tuesday attached here. I have also attached here Dr. Parrish-Sprowl's presentation.

Have a good weekend,
Edith

From: Amponsah, Edith
Sent: Monday, May 4, 2020 1:37 PM
To: 'Jonna Mazet' <jkmazet@ucdavis.edu>; 'Peter Daszak' <daszak@ecohealthalliance.org>; 'David Rizzo' <dmrizzo@ucdavis.edu>; 'Sally A. Miller' <miller.769@osu.edu>; 'Mary E. Wilson' <mewilson@hsph.harvard.edu>; 'Gail Hansen' [REDACTED] 'Elizabeth Hermsen' <elizabeth.hermsen@merck.com>; 'apruden@vt.edu' <apruden@vt.edu>; 'Rushton, Jonathan' [REDACTED] 'Casey Barton Behavesh' <dlx9@cdc.gov>; 'Lichtveld, Maureen Y' <mlichtve@tulane.edu>; 'MUMFORD, Elizabeth' [REDACTED] 'jmhughe@emory.edu' <jmhughe@emory.edu>; 'Anderson, Kevin' <Kevin.Anderson@HQ.DHS.GOV>
Cc: 'Mary Radford' <maradford@ucdavis.edu>; andre@ecohealthalliance.org' <andre@ecohealthalliance.org>; Pavlin, Julie <JPavlin@nas.edu>; Goodtree, Hannah <HGoodtree@nas.edu>; Buckley, Gillian <GBuckley@nas.edu>
Subject: RE: OHAC Call # 22 Doodle

Hi all,

Our next call will be on **Tuesday May 26th from 2-3pm EST**. Hannah sent a calendar invitation with zoom details.

I'm making another call for nominations/recommendations for the next OHAC chair. Please send suggestions before our next call.

Best wishes,
Edith

From: Amponsah, Edith

Sent: Monday, April 27, 2020 10:21 AM

To: Jonna Mazet <jkmazet@ucdavis.edu>; Peter Daszak <daszak@ecohealthalliance.org>; 'David Rizzo' <dmrizzo@ucdavis.edu>; Sally A. Miller <miller.769@osu.edu>; Mary E. Wilson <mewilson@hsph.harvard.edu>; 'Gail Hansen' [REDACTED] Elizabeth Hermsen <elizabeth.hermsen@merck.com>; 'apruden@vt.edu' <apruden@vt.edu>; 'Rushton, Jonathan' [REDACTED] Casey Barton Behravesh <dlx9@cdc.gov>; 'Lichtveld, Maureen Y' <mlichtve@tulane.edu>; MUMFORD, Elizabeth [REDACTED] 'jmhughe@emory.edu' <jmhughe@emory.edu>; 'Anderson, Kevin' <Kevin.Anderson@HQ.DHS.GOV>

Cc: 'Mary Radford' <maradford@ucdavis.edu>; 'andre@ecohealthalliance.org' <andre@ecohealthalliance.org>; Pavlin, Julie <JPavlin@nas.edu>; Goodtree, Hannah <HGoodtree@nas.edu>; Buckley, Gillian <GBuckley@nas.edu>

Subject: OHAC Call # 22 Doodle

Dear OHAC members,

Please fill out this doodle poll to let us know your availability for the next OHAC call next month. As discussed on the last call, we will plan to have Dr. John Parrish-Sprowl give a 30 minute presentation before moving forward with a final decision to invite him to join the group.

Link to Doodle: <https://doodle.com/poll/9vw84uzkm7z57dec>

Please let me know if you have any questions or concerns.

Best,

Edith Amponsah, MPH, IBCLC

Associate Program Officer

Forum on Microbial Threats

Health and Medicine Division

The National Academies of Sciences, Engineering, and Medicine

500 Fifth Street, NW

Phone: 202-334-3222

www.nationalacademies.org/HMD

The National Academies of
SCIENCES • ENGINEERING • MEDICINE

From: "Amponsah, Edith" <EAmponsah@nas.edu>
Sent: 06/05/2020 7:26:09 AM (-07:00)
To: "Jonna Mazet" <jkmazet@ucdavis.edu>
Cc: "Peter Daszak" <daszak@ecohealthalliance.org>; "David Rizzo" <dmrizzo@ucdavis.edu>; "Sally A. Miller" <millers.769@osu.edu>; "Mary E. Wilson" <mewilson@hsph.harvard.edu>; "Gail Hansen" <[REDACTED]>; "Elizabeth Hermsen" <elizabeth.hermsen@merck.com>; "apruden@vt.edu" <apruden@vt.edu>; "Rushton, Jonathan" <[REDACTED]>; "Casey Barton Behraves" <dlx9@cdc.gov>; "Lichtveld, Maureen Y" <mlichtve@tulane.edu>; "MUMFORD, Elizabeth" <[REDACTED]>; "jmhughe@emory.edu" <jmhughe@emory.edu>; "Anderson, Kevin" <Kevin.Anderson@hq.dhs.gov>; "Mary Radford" <maradford@ucdavis.edu>; "andre@ecohealthalliance.org" <andre@ecohealthalliance.org>; "Pavlin, Julie" <JPavlin@nas.edu>; "Goodtree, Hannah" <HGoodtree@nas.edu>; "Buckley, Gillian" <GBuckley@nas.edu>
Subject: RE: Call for vote to invite Dr. Parrish-Sprowl

Hello,

This is a gentle reminder to please cast your vote by completing this [poll](#) if you have not done so already. The poll will close on Monday, June 8th.

Thank you,
Edith

From: Amponsah, Edith
Sent: Tuesday, June 2, 2020 6:37 PM
To: 'Jonna Mazet' <jkmazet@ucdavis.edu>
Cc: Peter Daszak <daszak@ecohealthalliance.org>; David Rizzo <dmrizzo@ucdavis.edu>; Sally A. Miller <millers.769@osu.edu>; Mary E. Wilson <mewilson@hsph.harvard.edu>; Gail Hansen <[REDACTED]>; Elizabeth Hermsen <elizabeth.hermsen@merck.com>; apruden@vt.edu; Rushton, Jonathan <[REDACTED]>; Casey Barton Behraves <dlx9@cdc.gov>; Lichtveld, Maureen Y <mlichtve@tulane.edu>; MUMFORD, Elizabeth <[REDACTED]>; jmhughe@emory.edu; Anderson, Kevin <Kevin.Anderson@hq.dhs.gov>; Mary Radford <maradford@ucdavis.edu>; andre@ecohealthalliance.org; Pavlin, Julie <JPavlin@nas.edu>; Goodtree, Hannah <HGoodtree@nas.edu>; Buckley, Gillian <GBuckley@nas.edu>
Subject: Call for vote to invite Dr. Parrish-Sprowl
Importance: High

Dear OHAC members,

Please let us know your preference in inviting Dr. John Parrish-Sprowl to join the One Health Action Collaborative by completing this brief [poll](#). I have attached his presentation here for those who were not able to join the call last week.

Link to voting poll: <https://www.surveymoz.com/s/5633420/OHAC-Member-Vote>

Best,
Edith

From: Jonna Mazet <jkmazet@ucdavis.edu>
Sent: Tuesday, May 26, 2020 3:20 PM
To: Amponsah, Edith <EAmponsah@nas.edu>
Cc: Peter Daszak <daszak@ecohealthalliance.org>; David Rizzo <dmrizzo@ucdavis.edu>; Sally A. Miller <millers.769@osu.edu>; Mary E. Wilson <mewilson@hsph.harvard.edu>; Gail Hansen <[REDACTED]>; Elizabeth Hermsen <elizabeth.hermsen@merck.com>; apruden@vt.edu; Rushton, Jonathan

REDACTED Casey Barton Behravesh <dlx9@cdc.gov>; Lichtveld, Maureen Y <mlichtve@tulane.edu>; MUMFORD, Elizabeth REDACTED jmhughe@emory.edu; Anderson, Kevin <Kevin.Anderson@hq.dhs.gov>; Mary Radford <maradford@ucdavis.edu>; andre@ecohealthalliance.org; Pavlin, Julie <JPavlin@nas.edu>; Goodtree, Hannah <HGoodtree@nas.edu>; Buckley, Gillian <GBuckley@nas.edu>
Subject: Re: OHAC Call # 22 Meeting Materials

Thanks to all of you who were able to join today. Please respond to this chain with your reactions and thoughts on whether we should ask Professor Parrish-Sprowl to join the OHAC. If you would like a call to discuss, we will get that scheduled. Alternatively, if we receive a majority of positive feedback, Edith can help me to send out a call for a vote. I do think a focus in our next call should be on developing new deliverables, so deciding on this invitation could shape some of that discussion.

Please advise and have a good day,
Jonna

On Fri, May 22, 2020 at 2:06 PM Amponsah, Edith <EAmponsah@nas.edu> wrote:

Dear OHAC members,

Please find the agenda for our call next Tuesday attached here. I have also attached here Dr. Parrish-Sprowl's presentation.

Have a good weekend,
Edith

From: Amponsah, Edith
Sent: Monday, May 4, 2020 1:37 PM
To: 'Jonna Mazet' <jkmazet@ucdavis.edu>; 'Peter Daszak' <daszak@ecohealthalliance.org>; 'David Rizzo' <dmrizzo@ucdavis.edu>; 'Sally A. Miller' <miller.769@osu.edu>; 'Mary E. Wilson' <mewilson@hsph.harvard.edu>; 'Gail Hansen' REDACTED; 'Elizabeth Hermsen' <elizabeth.hermsen@merck.com>; 'apruden@vt.edu' <apruden@vt.edu>; 'Rushton, Jonathan' REDACTED; 'Casey Barton Behravesh' <dlx9@cdc.gov>; 'Lichtveld, Maureen Y' <mlichtve@tulane.edu>; 'MUMFORD, Elizabeth' REDACTED jmhughe@emory.edu <jmhughe@emory.edu>; 'Anderson, Kevin' <Kevin.Anderson@HQ.DHS.GOV>
Cc: 'Mary Radford' <maradford@ucdavis.edu>; andre@ecohealthalliance.org <andre@ecohealthalliance.org>; Pavlin, Julie <JPavlin@nas.edu>; Goodtree, Hannah <HGoodtree@nas.edu>; Buckley, Gillian <GBuckley@nas.edu>
Subject: RE: OHAC Call # 22 Doodle

Hi all,

Our next call will be on **Tuesday May 26th from 2-3pm EST**. Hannah sent a calendar invitation with zoom details.

I'm making another call for nominations/recommendations for the next OHAC chair. Please send suggestions before our next call.

Best wishes,
Edith

From: Amponsah, Edith
Sent: Monday, April 27, 2020 10:21 AM
To: Jonna Mazet <jkmazet@ucdavis.edu>; Peter Daszak <daszak@ecohealthalliance.org>; 'David Rizzo'

<dmrizzo@ucdavis.edu>; Sally A. Miller <miller.769@osu.edu>; Mary E. Wilson
<mewilson@hsph.harvard.edu>; 'Gail Hansen' [REDACTED]; Elizabeth Hermsen
<elizabeth.hermsen@merck.com>; 'apruden@vt.edu' <apruden@vt.edu>; 'Rushton, Jonathan'
[REDACTED]; Casey Barton Behravesch <dlx9@cdc.gov>; 'Lichtveld, Maureen Y'
<mlichtve@tulane.edu>; MUMFORD, Elizabeth [REDACTED] 'jmhughe@emory.edu'
<jmhughe@emory.edu>; 'Anderson, Kevin' <Kevin.Anderson@HQ.DHS.GOV>
Cc: 'Mary Radford' <maradford@ucdavis.edu>; 'andre@ecohealthalliance.org'
<andre@ecohealthalliance.org>; Pavlin, Julie <JPavlin@nas.edu>; Goodtree, Hannah
<HGoodtree@nas.edu>; Buckley, Gillian <GBuckley@nas.edu>
Subject: OHAC Call # 22 Doodle

Dear OHAC members,

Please fill out this doodle poll to let us know your availability for the next OHAC call next month. As discussed on the last call, we will plan to have Dr. John Parrish-Sprowl give a 30 minute presentation before moving forward with a final decision to invite him to join the group.

Link to Doodle: <https://doodle.com/poll/9vw84uzkm7z57dcc>

Please let me know if you have any questions or concerns.

Best,

Edith Amponsah, MPH, IBCLC

Associate Program Officer

Forum on Microbial Threats

Health and Medicine Division

The National Academies of Sciences, Engineering, and Medicine

500 Fifth Street, NW

Phone: 202-334-3222

www.nationalacademies.org/HMD

The National Academies of

SCIENCES • ENGINEERING • MEDICINE

From: "Jonna Mazet" <jkmazet@ucdavis.edu>
Sent: 09/03/2020 12:16:46 PM (-07:00)
To: "Peter Daszak" <daszak@ecohealthalliance.org>
Cc: "David Wolking" <djwolking@ucdavis.edu>; "Johnson Christine Kreuder (ckjohnson@ucdavis.edu)" <ckjohnson@ucdavis.edu>; "Robert Kessler" <kessler@ecohealthalliance.org>; "Eunah Regina Cho" <eecho@ucdavis.edu>; "Matt Blake" <mblake@ucdavis.edu>
Subject: Re: GVP & Predict twitter accounts both suspended right now.

----- Message truncated -----