



Zoonotic Disease Outbreak Tabletop Exercise Facilitator Guide

Title
Biosecurity in Novel Zoonotic Disease Outbreak TTX
Type of event
Simultaneous outbreaks of apparent infectious disease in animals and people across different regions of Yemen.
Agent
Novel zoonotic agent
Primary Goal
Identify current strengths and areas for improvement in biosecurity and disease detection during an outbreak of an unknown, zoonotic disease impacting both people and livestock across Yemen.
Objectives
<ul style="list-style-type: none">Identify roles and responsibilities of key stakeholders based on Yemen's current national disease detection and reporting plans.Identify barriers to detection and reporting a suspected incidence of human infection with a zoonotic disease, concurrent with detection and reporting of a suspected outbreak in the animal population.Characterize and identify gaps and opportunities to improve current practices and procedures in disease detection and investigation (including sample collection, transport, intake, laboratory analysis, disposition, and reporting of test results), in communication, in biosecurity, in biosafety or in other aspects of addressing a zoonotic outbreak.

Participant Handouts

- PowerPoint Slide deck
- Student manual, including charts for exercise activities
- Public Health Emergency of International Concern (PHEIC) flow chart

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Exercise Plan

The duration of the exercise is three days, not including travel days. A detailed agenda will be provided in advance of the tabletop exercise. The first day of the event will begin at approximately 8:00am and discussions will occur until 3:00pm with coffee and tea breaks; meze will also be available during the afternoon. The schedule for the second and third day of the event will be similar to the first day (begin at 8:00am and adjourn at 3:00pm), with an evening business dinner on the second day.

On the final day of the exercise participants and facilitators will have the opportunity to provide feedback through a written evaluation as well as through the “hot wash” discussion of lessons learned during the exercise. Participants will depart Doha the day after the conclusion of the event. A report will be prepared by SNL staff, incorporating evaluations and the participants’ after action report.

Exercise Assumptions

- Agency representatives are well versed in their agencies policies and procedures for disease surveillance and response; ideally, participants will bring copies of existing plans, policies
- Each agency representative will provide guidance during the scenario based on existing policies as well as current practices

Exercise Artificialities/Limitations in Scope

- Discussion limited to biosecurity & disease detection (*Not clinical or diagnostic details*)
- Participants will respond to their experience and organization
- Only discuss past outbreaks as examples, focus conversation on this exercise scenario

Exercise Roles

- **Participants**- All invited participants are expected to participate equally and to share as much information as possible to help us best identify the strengths and areas needing improvement
- **Lead facilitator** is in charge of helping us work our way through the exercise, will go through each section and make sure we cover all of our intended objectives (Introduce Ben unless he is doing this part)-
- **Table facilitator**: Each table will have a facilitator to keep all conversations within the scope of this exercise and make sure we focus on addressing all of the objectives during this limited time. (Introduce Monear, Carrie, Ben)
- **Modeler/Evaluator**: SNL Modeler (introduce Andrew) will not be participating but will be taking down information to help in his creation of a model and he will provide an external, third-party evaluation of the exercise overall



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Exercise Scenario: Background Information

INTRODUCTORY MESSAGE (should this just be part of the powerpoint notes?)

We usually wish we had known in the beginning what we learned by the end of a thorough investigation. As we go through the exercise this week, please keep in mind that during investigations we can be misled by unrelated circumstances and that what may appear to be trivial coincidences may later end up being important elements. We have brought together animal and human health sectors today to get a better sense of what information each group may have during an outbreak and how and when that information may be shared and when it is not shared. There are no "right" or "wrong" answers, no one will be judged for their participation or comments, and we will not be identifying who provided information during any report development.

Facilitator Script:

Starting now, we will be discussing biosecurity and disease detection by going step-by-step through a scenario. This is not an incident which has ever occurred but an example of one which could occur in your country. Remember, we will be going through the scenario in real-time—all we know is the information provided in each of the 4 sections. We will use charts to help us work through the objectives of the exercise during each section.

Let's start with Scenario Part 1:

SCENARIO PART 1

During a break from Monsoon rains on April 1, 2014, a herder purchases ten sheep that recently cleared quarantine procedures at Mukalla port. He intends to take them to his pastoral grazing lands and fatten them up for sale to a trader in Saudi. He loads them into a truck with two of his neighbors and his two teenage sons.

The five men and ten sheep make the journey back to his tribal grazing lands outside Tarim. Shortly after arriving home, on April 4th, one of the sheep develops respiratory distress, labored breathing, increased respiratory and oral secretions with a dry muzzle, and red eyes (injected conjunctiva/hyperemic membranes). He does not appear lethargic and is not kept separate from the other animals. On April 6th, three of the herder's original sheep develop similar symptoms and diarrhea.

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FACILITATOR SCRIPT:

- **Question for the entire group:**
 - Let's take no more than 5 minutes to talk about whether or not this is an outbreak at this time. Based on the information from the introduction (reference page X in their workbook) would you consider this an outbreak? Why or why not?
- **Now, let's work through the objectives using charts found in your workbook.**
 - Please take a quick look at pages X-Z in your participant workbook. You will see a charts that go through each of the capabilities and objectives we are exploring during this exercise. We will work together to go through the first set of charts. For later sections, we may have each table complete the charts on their own and will have our table facilitator fill out a chart for each table.
 - You will be allowed to keep the information on the charts you fill out in your notebooks
 - Your table facilitator will be filling out your table charts (after this first example make sure to fill out the chart on the center of the table to help us include your thoughts in the report we prepare for you after the exercise)
 - The first set of charts goes through the roles and responsibilities of all of our stakeholders during each part of the scenario/exercise. You do not have to fill out each box in each chart—just the ones that make sense.
 - **Chart #1: Objective 1: Roles & Responsibilities in Disease Detection and Biosecurity**
[Note to facilitator: have someone write answers on a large chart up front]
 - **As you fill out your own chart, please put "0" when no role**
 - **PORT:** We started this section at the Mukalla port. What roles and responsibilities does the port have in disease detection? *[note to facilitator: use questions below to work through the details]*
 - **HERDER:** What do you think the individual herders' role was in disease detecting and reporting? *[note to facilitator: use questions below to work through the details]*

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- We will skip **market/slaughter facility** which are not included here
- **VETERINARIAN:** We did not mention a veterinarian. Is there a role or responsibility for a veterinarian that we could have included during this section?
[note to facilitator: use questions below to work through the details]
- **CVL** Again, they are not mentioned- do they have a role yet?
- **MAI-** They are also not mentioned, would they have had a role we did not include
- *[Now, onto the human health side]* We did not mention a **human health provider, hospital, public health lab, MPHP**—would any of those agencies have had a role? If so, describe
- **External partners:** Were there any international agencies, other countries, nonprofits, or other volunteer organizations who might have been involved at this time? Can you think of any other partners
- **FINAL STEP IN CHART: PLEASE PUT A STAR next to person with the highest level of responsibility for disease detection and/or biosecurity during this section.**

- **Chart #2: Barriers & Strengths to Detection and Reporting**

[Note to facilitator: have someone write answers on a large chart up front]

- As you fill out your own chart, please put “0” if no barrier
- Use questions below to discuss each box on the chart

- **Chart #3: ID Opportunities for Improvement of Practices & Policies**

[Note to facilitator: have someone write answers on a large chart up front]

- Before we start this part, let's make a list of any strengths we identified in disease detection, investigation, reporting, communication & biosecurity
- Based on the discussion of roles and responsibilities, what opportunities for improvement do you want to note for these topics.

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Guidance Questions for Part 1

Objective 1: Roles and Responsibilities of Stakeholders in Disease Detection & Reporting

A. Role of the Port

- a. Are standard procedures in place to check animal health at the Mukalla, other ports?
 - b. Are written records taken for all animals entering the port?
 - i. What information is provided in the records (if yes) including animal breed, sex, age, owner, point of origin and destination, vaccination history
 - ii. Is there a health certificate for the herd or for each animal provided and/or required at the port?
 1. Are there vaccine requirements
 2. What are the health requirements for entry?
 - c. Are animals inspected at port of entry?
 - i. Visually inspected?
 - ii. Examined by veterinarian or paravet? If only in certain circumstances, please specify
 - iii. Are lab tests done at this port by port/quarantine staff? Which tests can be done?
 - d. Are animals examined by a veterinarian (and, if not always, when)
 - e. Does the port have the ability to quarantine or separate out animals?
 - i. How long can sick animals stay in quarantine at the port?
 - ii. Who authorizes and provides guidance about quarantine?
 - iii. Who at the port has the ability to slaughter sick animals? What is the procedure for handling carcasses of animals who are slaughtered or died in transport?

B. Role of the herder at this point

- a. Would the herder typically contact a veterinarian or paravet for this situation?
- b. Would the herder treat the animals himself or slaughter them at home?
 - i. If yes and slaughter- would the herder eat or discard the carcass (and how would that specifically be done)
- c. Would the farmer wear gloves or other protection when handling a sick animal like this?
- d. How and where does the herder access (if he does) to medication to treat the animals?

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- e. Is there a point at which this herder would have eventually called a vet?
- f. Does this differ by region, economics, other?

C. Role of the veterinary health professional at this point(if called by herder)

- a. Would the veterinary professional conduct any diagnostic testing?
 - i. What types of samples would be taken in this case
 - ii. Do vets consult with the lab, other experts about what samples to take or about sample handling/storage/transport
 - iii. Would vets in the rural areas have cold storage? Locked storage?
 - iv. What type of protection (if any) would the veterinarian wear
 - v. What reporting requirement policies are in place impacting veterinary clinicians
 - vi. To which lab would the vet send the samples
 - 1. What would the timeframe for results of the different tests be?
 - a. Is there a mechanism for STAT results?
 - 2. How does the vet receive the diagnostic results? Is a copy also shared with the owner of the animals?
 - 3. How does the vet communicate results back to the farm?
 - 4. If the vet recommended separating the animals, would that be feasible for most herders?
 - 5. What are the deciding reasons the veterinarian would call the MAI? Are there standard times/procedures?

D. Role of the CVL

- a. If specimens are sent, what biosecurity/safety measures are in place for receiving?
- b. What training is provided to staff in specimen receiving, laboratorians for biosecurity/safety?
- c. What happens to unsatisfactory specimens? Do you tell provider? Do you provide guidance on re-sampling? How often does this occur?
- d. How long are samples and isolates kept at the lab? How are they stored? Destroyed or disposed of?
- e. Are there MOUs in place to share isolates with other labs? Which labs? In or out of the country?

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- f. What mechanisms are in place to report sample findings for critical agents to MAI and MPHP? Is there one for the MPHP lab?
 - i. What reporting requirements are in place?

E. Role of MAI

Would the MAI be involved at this point? (ok to say no) If so...

- a. Does MAI have any interaction with the port—through statute or practice?
- b. If an agent were to be reported from lab/vet to MAI, what reporting authority or requirements does MAI have to share the info with MPHP? Regions? Other countries/intl agencies? The public?
- c. What specific information is requested with disease reporting?
- d. Does MAI have staff dedicated to risk communication within the agency? To the public? Is training in risk comm provided to these staff?
 - i. Are messages prepared in advance to address agents of concern?
 - ii. Are SOPs for risk com in place?

F. Role of MPHP

Would MPHP have a role at this time? (ok to say no)...if yes...

- a. What role does MPHP (if any) with the port in statute or practice?
- b. If an agent were to be reported from lab/vet to MPHP, what reporting authority or requirements does MPHP have to share the info with MAI? Regions? Other countries? The public?
- c. What specific information is requested with disease reporting?
- d. Does MPHP have staff dedicated to risk communication within the agency? To the public? Is training in risk comm provided to these staff?
 - i. Are messages prepared in advance to address agents of concern?
 - ii. Are SOPs for risk com in place?

G. Others' Roles: YASP / trained local partners, External partners- WHO/USG/NAMRU

Objective 2: Barriers to detection and reporting

- i. What would be the barriers to the port addressing this issue?

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- ii. What would be the barriers of the herder from calling a veterinarian?
- iii. Would monsoon weather in April impact veterinary activity and/or shipment of specimens?
- iv. What other barriers are identified in...
 - 1. Disease detection
 - 2. Disease reporting
 - 3. Communication

Objective 3: Identify opportunities to improve and areas of strength in current practices and procedures

- 1. Based on discussion of barriers, roles above

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Facilitator Script:

Now, we are ready to move on to see what happens next. As we go through this next section, think about how we worked through the objectives for part 1—think about our 3 main objectives as you listen to the next part.

SCENARIO PART 2

In Mukha, on April 10th, several shipments of sheep and goats are loaded into a three-vehicle convoy for overland transport to markets in Sana'a and Taiz. It takes several days to make the journey due to road conditions and the convoy splits off in Taiz with two of the trucks continuing to Sana'a. The animals arrive at the main market in Taiz on April 13th.

Some who are a little sickly appearing are taken straight to abattoirs at a slaughterhouse. The meat is quickly sold and the remaining animals are segregated into smaller groups that will be sent to other smaller markets in the governorate. When the animals arrive in Sana'a on April 14th, there are several dead among the herds. About half of all of the sheep have developed some respiratory distress and increased secretions. A few goat kids have also developed respiratory signs and diarrhea. The trader chooses to have a veterinarian treat the healthiest looking sheep and send the rest to slaughter

Facilitator Script:

- **Question for the entire group**
 - First, let's take another 5 minutes to decide if we would call this an outbreak? Why or why not? Does everyone agree? No right or wrong...
- **Now, let's work through the objectives within our tablegroups. Really think about the details and remember it is okay to put a "0" and not fill out all boxes.**
 - You will have an hour to work through the charts
 - Your table facilitator can help with questions, your workbook also has some questions to think about as you go through the charts
 - We recommend spending no more than 20 minutes on each section
- **Once everyone is finished, we will ask each table to fill in one of the charts up front.** We will then give everyone 15 minutes to look over the other charts. If your group had something another group didn't, you can put a sticky note up with your idea. You can continue to add your sticky notes throughout the next 2 days of the exercise.

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Guidance Questions for Part 2

Objective 1: Roles and Responsibilities of Stakeholders in Disease Detection & Reporting

A. Role of Market

- a. Does either market require any proof of health prior to entry?
- b. Do the markets in Sana'a and Taiz differ in how the animals are housed?
- c. Would the markets provide the trader information about local veterinarians?
- d. Would the markets ever not allow an animal to be sold because it was visibly ill?

B. Role of Trader

- a. Is the trader usually the herder? Or are these separate roles?
- b. During shipment, are animals kept 24-7 on the vehicle or housed in locations where they might comingle with other livestock?
- c. Does the trader require any veterinary clearance to transport the animals (i.e. health certificates)?
- d. Would the trader in this case call a public health or private industry veterinarian?

C. Role of Slaughterhouse

- a. Are there regulations for when a slaughterhouse rejects an animal because it is ill?

D. Role of Veterinarian

- a. Would the veterinarian conduct an exam? Diagnostic testing (type, kind)?
- b. Would a veterinarian in a city have different gloves, mask or other protective gear compared to the veterinarian who might have helped the herder in the rural area in part 1?
- c. Would the city or public health vet conduct different types of diagnostic tests than a vet in a rural area would be able to conduct?
- d. Would any lab samples be evaluated by the veterinarian in the field or would they be sent to the lab?
 - i. Is there a flowchart showing the SOP for sample collection, transport, storage?
 - ii. Is a log kept by vets, labs, others of all samples collected? And, a log kept by the transportation entity?
 - iii. What precautions would be used in sample collection

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- iv. Would the vet have sufficient supplies to take enough samples during the outbreak?
- v. How is chain of custody assured from vet to CVL?
 - 1. What is done if samples are lost? Or paperwork lost?
- vi. How would they be secured for transport?
- vii. Would the vet call the lab to let them know the sample was coming?
- viii. How long until the samples reach the lab (days/hours)?
- ix. How would the vet relay results to the trader?
- x. Would the vet call the MAI or MPHP?

E. Role of MAI

- a. Would the MAI be involved at this point?
 - i. If so, how?
 - ii. Who would have called them?
 - iii. Would they be in communication with MPHP? (see part 1 for questions about MOUS, SOP for risk comm)
 - iv. At what point do they start surveillance
 - 1. And how do they conduct surveillance (lab based, active, passive, etc)
 - 2. What would be the case definition at this point

F. Role of MPHP

- a. Would MPHP be involved at this point?
 - i. If so, how?
 - ii. Who would have called them?
 - iii. Would they contact the MAI if involved?
 - iv. At what point do they start surveillance
 - 1. And how do they conduct surveillance (lab based, active, passive, etc)
 - 2. What would be the case definition at this point

G. Role of Lab

- a. Which lab(s) would be used? (CVL, MPHP?)
- b. How long would it take for the sample to reach the lab?
- c. How would the sample be stored at the lab?
- d. What biosafety and security does the lab have in place to handle this specimen safely?
 - i. How are staff trained in biosecurity
 - ii. What happens to left over material from samples after the tests have been run?

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- e. Would the lab call, email, or mail results to the veterinarian?
 - i. How long would this take
 - ii. If samples were tested, would the laboratory, call the MAI regarding abnormal test results?

H. Others' Roles: YASP / trained local partners, External partners WHO/USG/NAMRU

Objective 2: Barriers to detection and reporting

- i. What would be the barriers to the trader getting veterinary care?
- ii. What would be the barrier for the vet to take a sample and send a sample to a lab?
- iii. What other barriers are identified in...
 - a. Disease detection
 - b. Disease reporting
 - c. Communication

Objective 3: Identify opportunities to improve and areas of strength in current practices and procedures

- 1. Based on discussion of barriers, roles above

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Facilitator Script:

So, we left off yesterday with some sick animals from a port and at a market. As we go through this next section, think about how we worked through the objectives for parts 1 & 2—think about our 3 main objectives as you listen to the next part to help you fill out the charts as completely as possible.

SCENARIO PART 3

On April 18, an adult man presents for treatment for an atypical typhoid illness in Sana'a and given the recent outbreak in Hajja where 7 children died, reports are made by hospital staff to surveillance officer who then informs the Ministry of Public Health and Population (MPHP). MPHP assembles a team to conduct an active case investigation and collect specimens, hoping to identify the source early and implement a swift response to control the outbreak. They begin by interviewing the index case at the hospital.

He is a forty year old university professor. He works in the city and recently attended a university dinner for faculty. He thinks a colleague who is jealous poisoned his food. The same night of the dinner, he experienced severe abdominal cramps,

On April 19, an adult man presents to a clinic in Sana'a with respiratory distress. He works as a truck driver and has no previous history of respiratory disease. Doctors recommend he quit smoking cigarettes and offer him options of wearing a face mask or buying medicine

At the same time in Tarim, the hospital reported to MPHP they have seen 12 cases of severe unexplained respiratory illness in people. None of the hospitalized included young children or older adults; they are teenagers and young to middle-aged adults. A local radio show mentions there are also rumors of respiratory illness spreading nearby, outside of the city limits.

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Facilitator Script:

- **Question for the entire group**
 - First, let's take another 5 minutes to decide if we would call this an outbreak?
Why or why not? Does everyone agree? No right or wrong...
- **Now, let's work through the objectives within our table groups. Really think about the details and remember it is okay to put a "0" and not fill out all boxes.**
 - You will have an hour to work through the charts
 - Your table facilitator can help with questions, your workbook also has some questions to think about as you go through the charts
 - We recommend spending no more than 20 minutes on each section
- **Once everyone is finished, we will ask each table to fill in one of the charts up front.**
We will then give everyone 15 minutes to look over the other charts. If your group had something another group didn't, you can put a sticky note up with your idea. You can continue to add your sticky notes throughout the next 2 days of the exercise.

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Guidance Questions for Part 3

Objective 1: Roles and Responsibilities of Stakeholders in Disease Detection & Reporting

A. Role of the health care provider

- a. How do health care providers hear about outbreaks or abnormal diseases?
- b. Who do the health care providers contact if they are concerned about novel or abnormal clinical symptoms or clusters of cases?
- c. What level of training is provided to health care providers about biosafety and security? Is training required?
- d. Is there a list of required reportable diseases for providers? How do they receive this information? What is the reporting mechanism?

B. Role of the hospital

- a. Would the Sana'a facility have heard about the Hajja outbreak?
 - i. How would they have learned about that outbreak?

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- ii. Would they have been given specific instructions from MOHA or others about testing or treatment?
- b. Would the Sana'a and Tarim facilities have a standard operating procedure in place to determine when and how they contact MPH?
- c. What are the privacy laws (if any) for patient information?
- d. What biosafety protocols would be in place and either of these facilities?
 - i. When a patient comes into the hospital with respiratory symptoms—like the truck driver—what protection (level of precautions) would the nursing staff wear (masks, gloves, goggles, none of the above)? Are the administrative staff given any protection?
 - ii. What would the doctor wear?
 - iii. What would the laboratory staff wear when working with their specimens?
 - iv. How would samples be stored and secured?
 - v. Does the hospital provide and/or require training in infectious disease biosafety & security?

C. Role of the patient

- a. Would most people come in to the hospital, call an ambulance or see another provider given these severe respiratory symptoms?
- b. How does the public learn about potential infectious disease outbreaks and about appropriate prevention, when to seek care and treatment?
- c. Would family support medical isolation or use of appropriate precautions to reduce spread?

D. Role of the MPH

- a. Who would respond to a call from the hospital?
- b. How would they respond? Would they have a local team or central team address the potential outbreak?
- c. Would they call the MAI or the lab for other surveillance?

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d. How would they know whether these cases were more or different than expected during that time of year?

E. Role of the MAI

- a. Would the MAI play a role during this part?
- b. What SOP are in place to require communication from MPHP to MAI?
- c. What is the timeframe expected for MAI to hear about a human disease outbreak? What is the source used to hear about that information?

F. Role of the human public health laboratory

- a. If specimens are sent, what biosecurity/safety measures are in place for receiving?
- b. What training is provided to staff in specimen receiving, laboratorians for biosecurity/safety?
- c. What happens to unsatisfactory specimens? Do you tell provider? Do you provide guidance on re-sampling? How often does this occur?
- d. How long are samples and isolates kept at the lab? How are they stored? Destroyed or disposed of?
- e. Are labs impacted or required to abide by privacy laws?
- f. Are there MOUs in place to share isolates with other labs? Which labs? In or out of the country?
- g. What mechanisms are in place to report sample findings for critical agents to MAI and MPHP? Is there one for the MPHP lab? What reporting requirements are in place?

G. Others' Roles: YASP / trained local partners, External partners- WHO/USG/NAMRU ...

Objective 2: Barriers to detection and reporting

- i. What would be the barriers to the hospital identifying these cases as a possible outbreak? To correctly diagnosing the disease?
- ii. What would be the barriers to having lab testing done for these patients?
- iii. What are the barriers between the human and animal health labs and health agencies in terms of communication during outbreaks?
- iv. What other barriers are identified in...

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- a. Disease detection
- b. Disease reporting
- c. Communication

Objective 3: Identify opportunities to improve and areas of strength in current practices and procedures

1. Based on discussion of barriers, roles above

Other: In the event of “rumors” or media reports of illness that MPH did not hear about from the lab or hospital, what efforts are taken to follow up (if any) to investigate? Who would investigate?

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Facilitator Script:

Now, we will see what happens next. Just as you did for the other sections, we will be focusing the discussion after on our objectives; so, please keep them in mind while you listen to the next part of the scenario.

SCENARIO PART 4

Meanwhile, in Mukha, from April 16-26, several pens of sheep and goats in the quarantine facility developed labored breathing, increased respiratory secretions, and oral lesions. No hoof lesions were identified. Quarantine officials conducted rapid tests showing negative results for FMD or PPR. A quarantine staff member even tested two specimens for avian influenza, which was negative. Animals were cleared for import if the trader was willing to pay for veterinary examination and medicine. If not, the animals were condemned. Several traders expressed outrage as their herds were not ill prior to being penned with other animals at various stages in their quarantine process.

Overall, if just one animal were sick in a pen, approximately 65% of the other hoofstock in the pen would contract similar respiratory symptoms. New animals became sick within 72 hours of being placed in a pen which housed ruminants with respiratory illness. Among the smallest, weakest kids and lambs, mortality rate reached 100% prior to the completion of the 10 day quarantine; among the adult animals and healthier kids and lambs, mortality rate remained under 10% and would remain ill with respiratory symptoms for 1-3 days and would stay off feed as the oral lesions healed for an additional 3-7 days. Neither camels nor large ruminants (cattle) developed the respiratory symptoms

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Facilitator Script:

- **Question for the entire group**
 - First, let's take another 5 minutes to decide if we would call this an outbreak?
Why or why not? Does everyone agree? No right or wrong...
- **Now, let's work through the objectives within our table groups. Really think about the details and remember it is okay to put a "0" and not fill out all boxes.**
 - You will have an hour to work through the charts
 - Your table facilitator can help with questions, your workbook also has some questions to think about as you go through the charts
 - We recommend spending no more than 20 minutes on each section
- **Once everyone is finished, we will ask each table to fill in one of the charts up front.**
We will then give everyone 15 minutes to look over the other charts. If your group had something another group didn't, you can put a sticky note up with your idea. You can continue to add your sticky notes throughout the next 2 days of the exercise.

Guidance Questions for Part 4

Objective 1: Roles and Responsibilities of Stakeholders in Disease Detection & Reporting

A. Role of quarantine facility

- a. Does the quarantine facility keep records for animals coming through?
 - i. If so, what information is included
 - ii. Is disease information routinely screened
 - iii. Is a veterinary letter or health certificate required?
- b. What standard operating procedures are in place in the quarantine related to sick animals?
- c. Does the quarantine facility have criteria to decide when veterinary examinations will be required prior to clearance?
- d. Do they have their own vet or use a local vet?
- e. For testing done in-house, how are samples stored, secured?
- f. Are lab technicians trained in safe handling of the samples? What PPE if any is available?
- g. Can they ship lab tests to the state lab?
- h. Are they in direct communication with MAI or MPHP?
- i. If they decide the animal will be condemned—who kills the animal, where is the body taken and disposed? Whose responsibility is it to see this is completed safely?

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B. Role of the veterinarian

- a. What tests would the veterinarian likely conduct?
- b. What protective equipment would the veterinarian have/use during examination of sick animals at a quarantine station?
- c. Can the veterinarian recommend no more mixing of sick and healthy animals?

C. Role of the trader

- a. In this case, what decision do you think the traders will make?
- b. Can they use their own or do they pay the quarantine vet for treatment?

D. Role of the Lab

- a. Would you expect the vets to send samples to the lab at this point?
 - i. From how many animals?
 - ii. Is there a protocol for sending specimens from quarantine to the lab?
 - iii.

E. Role of MAI

- a. Would the MAI be involved at this point?
 - i. If so, how?
 - ii. Who would have called them?
 - iii. Would they be in communication with MPHP?
 - iv. At what point do they start surveillance
 - 1. And how do they conduct surveillance (lab based, active, passive, etc)
 - 2. What would be the case definition at this point

F. Role of MPHP

- a. Would MPHP be involved at this point?
 - i. If so, how? , Who would have called them?
 - ii. Would they contact the MAI if involved?
 - iii. At what point do they start surveillance
 - 1. And how do they conduct surveillance (lab based, active, passive, etc)
 - 2. What would be the case definition at this point

G. Others' Roles: YASP / trained local partners, External partners WHO/USG/NAMRU

Objective 2: Barriers to detection and reporting

- i. What other barriers are identified in...

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- a. Disease detection
- b. Disease reporting
- c. Communication

Objective 3: Identify opportunities to improve and areas of strength in current practices and procedures

- 1. Based on discussion of barriers, roles above

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Facilitator Script:

Congratulations, we have come to the final section. After we read what happens next, we will have a brief discussion about what happens *after*—reports, discussions, and plan revisions. Instead of using the same charts from Parts 1-4, we will practice drafting our own hotwash and after action reports.

While we are working on this, our modeling expert will be preparing a presentation of his findings for you and will be sharing those this afternoon. At the end of the day, we will have an additional written evaluation for each of you to fill out to share your thoughts on the exercise and lessons learned.

SCENARIO PART 5

July 30, MAI reports that a total of 2000 sheep have died from this unknown outbreak; an estimated 10,000 were effected. The CVL and the public health laboratory and their international collaborators report that electron microscopy and advanced PCR has shown both the sheep and the people to have had a similar, novel parapoxvirus. No new animal cases were detected after biosecurity and biosafety measures were implemented at markets, quarantine stations and on ranches since June 15. MPH report 857 hospitalizations of people meeting case definition; 200 were lab-confirmed for the novel virus. Thirty deaths were attributed to this virus, including 2 staff who worked at the quarantine station and 1 veterinarian. The last hospitalized human case was reported to MPH on June 28.

FACILITATOR SCRIPT:

- *Go to slide show on AAR and hotwash*
- *Conduct the brief hotwash – 3 strengths/3 weakness model*
- *Work through the practice AAR*

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