



# FIELD EPIDEMIOLOGY TRAINING PROGRAM

**Applied Communication Skills** 

### DEBRIEF

The first 2 types of questions each have purposes during investigations. Sometimes we must ask closed-ended questions to get specific information, like dates, times, duration and demographic information. Open-ended questions are the most comfortable for people to respond to. They give the respondent an opportunity to express their own views and explain in their own words.

During investigations, try to avoid multiple choice, two-in-one and judgmental questions. These will limit the information you receive.

GROUP 1	GROUP 2
<ul> <li>How many children do you have?</li> <li>How long have you lived here?</li> <li>Is anyone in your home sick with the flu?</li> <li>What day did the chicken die?</li> </ul>	<ul> <li>Why weren't you able to go to the community meeting?</li> <li>Show me how you store your drinking water.</li> <li>Tell me more about when your family was sick.</li> </ul>
GROUP 3	GROUP 4
<ul> <li>How do you feel about the health care you get and how could it be better?</li> <li>Did you feel fever and nausea?</li> <li>When did you realize he was sick and when did you take him to the clinic?</li> </ul>	<ul> <li>If you had the flu, would you go to the hospital or the clinic?</li> <li>Do you use condoms with all your partners or just your main partner?</li> <li>Would you prefer higher fees or closing the clinic?</li> </ul>
GROUP 5	
<ul> <li>Don't you think you should vaccinate your children?</li> <li>I think you should have reported the dead birds, don't you?</li> <li>Don't you think that the clinic would be safer than going to the midwife?</li> <li>You know it's good to breast-feed your baby, right?</li> </ul>	

### **ACTIVITY 3: HOW TO WRITE TALKING POINTS**

#### Our selected audience is:

#### **Current situation:**

In simple, lay language, describe the outbreak situation. Acknowledge fear, uncertainty, or pain.

**Key action and who should do it:** *Be specific.* 

### Benefits, from audience's point of view:

Provide some motivation to help people care about doing something.

Other rationale, important facts from audience's point of view:

Instructions or information needed to do action:

Who are you, and what are you planning to do to solve the problem? Use "we" for your organization or Ministry.

Where audience can find more information:

## **ACTIVITY 4**

### **OBSERVATION SHEET FOR PRACTICE IN PAIRS**

Student:	Yes	No	Notes:
Acknowledges concerns, fears or other emotions			
Personalizes caring (within first 30 seconds)			
States confidence problem will be solved (even if not all info is available)			
Uses short words (< than 3 syllables English)			
Uses common terms (lay language)			
Uses short sentences (< than 10 seconds)			
Describes risk or situation without statistics			
Shows preparation and competence			
Describes commitment			

### Long words used:

Statistics stated:

Acronyms used:

Areas to practice:

### ACTIVITIES 1 AND 2: TALKING POINTS FOR INTERVIEWS

### TALKING POINTS A: AVIAN INFLUENZA

- It is very difficult for humans to get avian flu.
- But if someone has signs of a serious respiratory infection, they should go to the clinic for care.
- Avoid close contact with chickens. Keep birds in a coop outside your home.
- Always wash your hands after handling chickens, to remove droppings and mucus.
- Cook poultry meat and eggs until well done. Well-cooked eggs and chicken are good for family health.
- The Ministry of Health has trained health workers about avian flu, and your clinic is ready to help you. We are tracking all cases to make sure the disease does not spread.

### TALKING POINTS B: CARING FOR FLU IN THE HOME

- We anticipate that the flu may return.
- If you or anyone in your family is showing signs of the flu, stay home until fully recovered.
- Rest in a separate room or space, to stop spreading the disease to others.
- Assign one person in the family to be a caregiver to the sick family member to avoid exposing all family members to the flu.
- Wash hands before and after patient care.
- Use separate eating and drinking utensils, towels, sheets, and blankets for the sick family member.
- The Ministry of Health is tracking cases of the flu, and has trained health workers about the flu so they are better ready to help patients.

### ACTIVITIES 1 AND 2: QUESTIONS FOR INTERVIEWS

- Why did this outbreak occur?
- Why wasn't this prevented?
- Who is to blame?
- When did you begin working on this (were notified of this, determined this)?
- Why weren't you working on this before that time?
- What do these data/information/results mean?
- What are you doing for the people who are sick/got hurt?
- Is our town/neighborhood safe?
- What people do to protect themselves?
- How long until the vaccine/medicine is available?
- Is the situation under control?
- What can we expect?
- Who's in charge?
- What else can go wrong?
- Why hasn't the Ministry put enough resources into this problem?
- What bad things aren't you telling us?

# **ACTIVITY 1**

### **OBSERVATION SHEET: USING TALKING POINTS**

Interviewee:	Yes	No	Notes:
States key messages concisely			
Gives clear action to take; model the action if possible			
ls transparent about information available			
Accurately portrays the risk; doesn't over-reassure or dismiss problem			
Acknowledges uncertainty Explain when more information will be available			
Uses "we" for organization/Ministry			
Speaks clearly			
Speaks at good pace and fluidly (without long pauses, "umms", "errrs")			
Redirects negative questions			
Corrects misinformation, myths or rumors			

Areas to practice:

# **ACTIVITY 2**

### **OBSERVATION SHEET: BODY LANGUAGE**

Interviewee:	Yes	No	Notes:
Leans forward			
Looks at interviewer			
Nods head when interviewer is speaking to show listening and understanding			
Tone of voice is calm and low			
Hands down (away from face) and arms open (not crossed)			
Body is calm, not fidgety			
Face is open and eyebrows raised			
Manner is: ✓ Confident ✓ Patient ✓ Caring			

Areas to practice:

# CHOLERA IN LUSAKA, ZAMBIA (PART 1)

### SITUATION

Cholera epidemics were widespread in Zambia during the 1990s. In response, the Ministry of Health urged use of inhome chlorination with a locally produced bleach solution. The use of the in-home solution increased substantially with a Safe Water System, a point-of-use water disinfection and safe-water storage program. For several years, no further outbreaks were reported.

Then in November 2003-January 2004, the city of Lusaka saw an estimated 2,529 cholera cases and 128 cholera deaths. In December 2003, the city's district health team quickly opened up cholera treatment stations. FIGURE. Treatment and recovery tents at Chawama Cholera-Treatment Center, where more than 100 patients per day were treated at the peak of the epidemic — Lusaka, Zambia, 2004



Photo/CDC

Seven centers were functional by early January 2004, and all patients with suspected cholera were to be referred to these facilities.

About estimated two thirds of Lusaka's residents live in shantytowns without municipal water supplies or sewer systems.

#### **PREPARATION:**

You are a field epidemiologist called in to interview community members from neighborhoods where some cases have originated. The investigation is ongoing, and no results are available yet. Prepare talking points for one audience:

- What would you expect to say to the families who are worried about cholera?
- What can you say to a mother who is caring for a child with diarrhea?
- What can you say to the community leader who approaches you because he heard you were in the neighborhood?
- What can you say to passers-by who see the cholera tent?

Source: CDC (2004), Cholera epidemic associated with raw vegetables – Lusaka, Zambia, 2003—2004, MMWR 53(34):783-6 (September 3).

# CHOLERA IN LUSAKA, ZAMBIA (PART 2)

### SITUATION

Cholera epidemics were widespread in Zambia during the 1990s. In response, the Ministry of Health urged the use of in-home chlorination with a locally produced bleach solution. The use of the in-home solution increased substantially with a Safe Water System, a point-of-use water disinfection and safe-water storage program. The country's Safe Water System showed wide success, and for several years, no further outbreaks were reported.

Then in November 2003-January 2004, the city of Lusaka saw an estimated 2,529 cholera cases and 128 cholera deaths. In February 2004, the city's district health team began an investigation.

The analysis showed the following:

- Eating raw vegetables was associated with cholera.
- Hand soap was observed in 58% of the patient homes and 90% of the control homes. Presence of hand soap was considered a proxy for actual hand washing and was determined to be protective.
- Drinking untreated water was reported by 67% of patients and 52% of controls, but the association with disease did not reach statistical significance.
- In-home chlorination of drinking water was reported by 66% of cases and 67% of controls. Free chlorine residuals were detected in stored water in 27% of case homes and 20% of control homes.

Consumption of raw vegetables was significantly associated with cholera. Handwashing (as seen by the presence of hand soap) was protective against cholera.

### COMMUNICATION

You are a field epidemiologist called in to interview community members from neighborhoods where some cases have originated. The investigation results just became available.

Prepare talking points for **one audience**:

- What would you expect to say to the **families** who are worried about cholera?
- What can you say to a **mother** who is caring for a child with diarrhea?
- What can you say to the community leader who approaches you because he heard you were in the neighborhood?
- What can you say to **market women** who are selling vegetables?
- What can you say to the journalists, who have come to investigate for the media?

Source: CDC (2004), Cholera epidemic associated with raw vegetables – Lusaka, Zambia, 2003—2004, MMWR 53(34):783-6 (September 3).

SARS OUTBREAK IN AMOY GARDENS HOUSING BLOCK (PART 1)

### SITUATION

In early 2003, residents of Amoy Gardens, a housing complex in Hong Kong, experienced an outbreak of SARS. The outbreak began in mid-March, when a 33-year-old man visited his brother in Block E of Amoy Gardens. The man was having diarrhea at that time, and he used the toilet there. His brother, sister-in-law, and two nurses who attended to him at a nearby hospital subsequently developed SARS.

The outbreak in the housing complex reached its peak on March 24th and declined steadily afterwards. It was hypothesized that all the cases in Amoy Gardens contracted SARS from just one man. By April 15th, there were 321 SARS cases in Amoy Gardens.

### INVESTIGATION

It was hypothesized that the index patient infected a small number of residents within his brother's housing unit through the sewage system, person-to-person contact, and the use of shared communal facilities (such as elevators and stairwells). These residents subsequently transmitted the disease to others both within and outside the unit through person-to-person contact and environmental contamination.

The department of health set up an investigation command center in the lobby of the housing unit. The entire housing complex was surrounded by yellow "caution" tape to limit entry into the buildings. Residents of the unit were evacuated and put in isolation in a hotel.

Public concern increased with the appearance of health workers in full personal protection equipment in the lobby of the unit. The press stationed itself outside the housing complex to follow the investigation minute-by-minute. Local residents around the complex avoided walking on the street.

### COMMUNICATION

You are a field epidemiologist called to work in the command center during the investigation. Prepare talking points for one audience:

- What would you expect to say to the **reporters** outside on the sidewalk?
- What can you say to the **residents** who must be evacuated?
- What can you say to residents who are afraid to come into their buildings after seeing the yellow tape all around?
- What can you say to passers-by who see you in a full protective suit?
- What can you say to the community leaders of this city neighborhood?
- What can you say to the **health workers** of the clinic in this neighborhood?

NOTE: Photos from Time magazine of the investigation team and evacuation: www.time.com/time/asia/photoessays/sars/hongkong/index.html

SARS OUTBREAK IN AMOY GARDENS HOUSING BLOCK (PART 2)

### SITUATION

In early 2003, residents of Amoy Gardens, a housing complex in Hong Kong, experienced an outbreak of SARS. The outbreak began in mid-March, when a 33-year-old man visited his brother in Block E of Amoy Gardens. The man was having diarrhea at that time, and he used the toilet there.

The outbreak in the housing complex reached its peak on March 24th and declined steadily afterwards. It was hypothesized that all the cases in Amoy Gardens contracted SARS from just one man. By April 15th, there were 321 SARS cases in Amoy Gardens.

### INVESTIGATION

The investigation team evacuated the housing unit where the outbreak began. The results of the investigation found that:

The index patient with diarrhea infected a small group of residents through the sewage system, personto-person contact, and the use of shared communal facilities (such as elevators and stairwells).



Residents came into contact with small sewage droplets containing viruses. These droplets flowed out of bathroom floor drains when exhaust fans where turned on.

- Contaminated droplets could then have deposited virus on various surfaces, such as floor mats, towels, toiletries, and other bathroom supplies.
- These patients then transmitted the disease to others both within and outside the unit through person-to-person contact and environmental contamination.

### COMMUNICATION

You are a field epidemiologist called to work during the investigation. Prepare talking points for **one audience**:

- What would you expect to say to the **reporters** outside on the sidewalk?
- What can you say to the **residents** who were evacuated?
- What can you say to residents of other buildings who are afraid of an outbreak in their building?
- What can you say to the community leaders of this city neighborhood?
- What can you say to the **health workers** of the clinic in this neighborhood?

NOTE: Photos from Time magazine of the investigation team and evacuation: www.time.com/time/asia/photoessays/sars/hongkong/index.html

# **BOTULISM IN ARGENTINA**

### SITUATION

In 1998, a Buenos Aires hospital telephoned the Ministry of Health to report two possible cases of botulism. Both patients were drivers for the same bus company and drove the same route and shift. The patients knew each other but worked on different days of the week.

To find additional cases, the Ministry contacted all employees of the bus company and hospitals were asked to report any patients with acute neurologic illnesses that could be botulism. Family members of cases were questioned about whether they also had symptoms of botulism. In addition, the Ministry developed a press release for the local news media.

The Ministry identified seven additional patients with neurologic signs consistent with botulism.

All patients were drivers from the same bus company and drove the same route.

### COMMUNICATION

You are on the investigation team to help question family members and other bus drivers about the outbreak. The investigation is ongoing, and no results are available yet.

Prepare talking points for **one audience**:

- What would you expect to say to the **families** who are worried about botulism?
- What can you say to the other **bus drivers**?
- What can you say to the **community leader** who approaches you because he heard you were in the neighborhood?
- What can you say to **reporters** who saw the press release and are investigating the story?

#### BACKGROUND

**Outbreaks** of botulism have been linked to improperly preserved **vegetables**, fruits, and meats including fermented fish products, sausages, smoked meat, and seafood. *Clostridium botulinum* is a spore-forming obligate anaerobic bacterium (i.e., it cannot grow in the presence of oxygen). The spores are widespread in soil and dust worldwide. The toxin is produced in improperly canned, **low-acid** or alkaline foods and in pasteurized and lightly cured foods held without adequate refrigeration, especially in airtight containers. The toxin is destroyed by boiling; inactivation of spores requires much higher temperatures.

The clinical syndrome of botulism is dominated by neurologic signs and symptoms. Dryness of the mouth, drooping eyelids, and blurred and double vision are usually the earliest neurologic complaints. These initial symptoms may be followed by disturbances in speech, difficulties swallowing, and peripheral muscle weakness. If respiratory muscles are involved, ventilatory failure and death may result. The average incubation period for botulism is 18-36 hours, but symptoms can occur as early as six hours or as late as 10 days after exposure.

Source: CDC Web site www2a.cdc.gov/epicasestudies/

# **DENGUE IN INDONESIA**

### SITUATION

In 2004, Indonesia conducted a study of dengue rates across the archipelago. Dengue hemorrhagic fever (DHF) rates were collected and analyzed from all sub districts, along with demographic and weather patterns.

The study found:

- Temperature was not correlated with DHF
- Rainfall and humidity was correlated with DHF
- Fogging (spraying with pesticides) was found to be ineffective
- High density neighborhoods in the capital, Jakarta, had high incidence of DHF.
- Water tested from storage containers inside and outside of homes showed evidence of larvae.

### COMMUNICATION

You are called in to visit a crowded urban neighborhood to begin a dengue eradication program. Prepare talking points for **one audience**:

- What would you expect to say to a **family** who is worried about the disease?
- What can you say to the **community leader** who approaches you because he heard you were in the neighborhood?
- What can you say to health workers at the local clinic?
- What can you say to the **reporter** who heard about the study's results?

#### Typical water containers in Indonesia that can be potential breeding place for dengue mosquitoes



# H1N1 INFLUENZA IN CHAMPASAK

### SITUATION

Along the border of Thailand and Lao, extended families live in both countries and are successful in trade and commerce. The family owns a business that serves both communities; it has several shops in both countries and imports products from all over the region. There is extensive travel across the borders to transport merchandise and deliver products to the different stores as well as oversee activities and check on business. Nipone, 36, a son of the business owner whose home is in Champasack, visits a relative in Thailand and another in Lao, as well as goes on purchasing business that takes him to China, Vietnam, and Thailand.

After a recent purchasing trip he returns to his village and participates with his family in celebration for the Lao Water Festival. He seems many people, eats dinner with his family, including family visiting from other parts of Lao. A few days after the festival he became ill with chills and fever and body aches.

Initially his wife, Pinney, thought it was a sickness that would get better in a day or so but instead he became sicker. She is now worried and talked to her neighbor who was a community health worker and described Nipone's symptoms.

### INVESTIGATION

The Field Epidemiologist is called in and works with the community health worker to interview the family. The investigation is ongoing, and no results are available yet.

### COMMUNICATION

Prepare talking points for one audience:

- What would you expect to say to the family who is worried about the disease?
- What can you say to the community leader who approaches you because he heard you were in the neighborhood?
- What can you say to health workers across the border?

#### H1N1 INFLUENZA OUTBREAK IN A UGANDAN SECONDARY SCHOOL

### SITUATION

Bushenyi town in Southwest Uganda is a busy agricultural town with about 425,000 residents. The 500 boys at the local Kitabi Seminary, a residential school for secondary students, come from families around the district. The students visit the town often for shopping and cultural activities, and their family members visit the school regularly.

In September 2009, a district health officer reported a suspected influenza-like illness in Kitabi Seminary. A team from the epidemiology and surveillance division of the Ministry of Health and the Uganda virus research institute arrived the following day to conduct a rapid investigation.

#### INVESTIGATION

The team set out to:

- Collect samples from symptomatically sick students for laboratory testing
- Record the presenting symptoms from students
- Guide the district and the school on appropriate control measures.

A total of 173 students fell ill within 5 days. The first ill students had just returned from their holidays 5 days earlier. School officials sent some students home before realizing the extent of the spread of the disease.

The main symptoms reported by the ill students were headache, cough, runny nose, fever, and chest pain. Ill students were isolated in a small room designated as the school's sick bay, and in one dormitory. The ventilation in the dormitories was inadequate, and beds were double bunks. The team collected nasal and pharyngeal swabs from 10 symptomatic cases for laboratory analysis. Eight samples tested positive for H1N1.

The outbreak team set up a treatment centre in the school, and administered 480 doses of oseltamivir, an anti-viral medication.

### COMMUNICATION

You are part of the outbreak team called in to help follow-up with students and the community. Prepare talking points for **one audience**:

- What would you expect to say to **families** who are coming to the school to check on the health of their sons, who are in isolation?
- What would you expect to say to **families** whose son was sent home after falling ill?
- What would you say to other school leaders and staff from Bushenyi's other schools?
- What would you expect to say to the community leaders of Bushenyi, who are concerned about the outbreak spreading into the town?
- Some students live outside the district. What would you expect to say to other **district health officers** from these districts?