MEMORANDUM

Date: October 20, 2014

To: The Honorable Chair and Members  
Pima County Board of Supervisors

From: C.H. Huckelberry  
County Administrator

Re: Update on Public Health Response Related to Ebola Virus Disease

On October 10, 2014, I provided you with a copy of the October 1, 2014 Public Health Alert related to Ebola and indicated that efforts to harmonize practices and establish regional protocols were beginning.

On October 16, 2014, a Preparedness Planning Kickoff meeting was held at the Pima County Health Department, which was attended by representatives of first-responders, Emergency Medical Service providers, 911 operators, hospitals, community health centers, schools, libraries, physicians, utilities, local jurisdictions, the tourism and hospitality industry, the Tohono O’odham Nation, Pascua Yaqui Tribe, US Federal Bureau of Investigation and US Customs and Border Protection.

To develop an Incident Action Plan and associated protocols in the event such is necessary, five separate Ebola Virus Disease (EVD) Workgroups have been established. These are: 1) Emergency Management, 2) Schools/Public Institutions, 3) Public Safety, 4) Public Information and 5) Healthcare. These EVD Workgroups are scheduled to begin meeting today. I will provide updates on the work of the EVD Planning Committee and Workgroups as efforts regarding regional protocols progress.

The attached PowerPoint Presentation provides an overview of the EVD and the planning efforts in our community. Also attached are responses to Frequently Asked Questions and brief Talking Points. We hope this information will help assure our community that while the likelihood of an outbreak in Pima County is quite remote, our planning will allow us to detect, identify, protect and treat anyone who may become ill.

CHH/mjk

Attachments

c: Jan Lesher, Deputy County Administrator for Medical and Health Services  
Dr. Francisco Garcia, Director, Health Department
Ebola Virus: Questions and Answers

Information about the Disease and How our Community Responds to Public Health Threats

What is Ebola?
Ebola, previously known as Ebola hemorrhagic fever, is a severe, often fatal disease in humans and nonhuman primates (such as monkeys, gorillas, and chimpanzees). Ebola is a rare and deadly disease caused by infection with a virus of the family Filoviridae, genus Ebolavirus.

Ebola is found in several West African countries. The first Ebola species was discovered in 1976 near the Ebola River in what is now the Democratic Republic of the Congo. Since then, outbreaks have appeared sporadically in Africa.

How is Ebola spread?
The virus can be transmitted through direct contact with the blood or secretions of an infected person, or exposure to objects (such as needles) that have been contaminated with infected secretions. It is not spread through the air, water, or food. Exposure to Ebolavirus can occur in health care settings where hospital staff is not wearing appropriate protective equipment, such as masks, gowns, and gloves.

What are the symptoms and signs?
Symptoms are non-specific and may include fever, rash, joint and muscle aches, diarrhea, vomiting, stomach pain, lack of appetite, rash, sore throat, cough. More serious presentations include chest pain, difficulty swallowing, difficulty breathing and bleeding inside and outside of the body. Symptoms may appear anywhere from 2 to 21 days after exposure to Ebola though 8-10 days is most common.

Where does Ebola come from?
The natural reservoir of Ebola virus has not yet been proven, but scientists believe the first patient becomes infected through contact with an infected animal.

What are the risks for Ebola here in Pima County?
Pima County has a low occurrence of international travelers from affected regions in West Africa. A person must be symptomatic in order to spread or transmit the disease and they must have direct contact with an infected, symptomatic person’s body fluids. Even with the case that has occurred in Texas, the risk to our community remains very low.

What are healthcare professionals doing to prepare?
We practice infection control and conduct disease investigations every day—no matter what the illness is or where it comes from. We diligently work with our healthcare and public health partners to be prepared for public health threats and have protocols in place at every level to protect the health and safety of the public.

Contact investigations are something done all the time in our community for diseases like tuberculosis, whooping cough, and sexually transmitted infections. A contact investigation is the process used to identify anyone who may have been exposed if someone becomes ill in our community. Local first response, healthcare, and public health agencies are paying very close attention to this situation, in constant contact with one another, and monitoring our healthcare system very closely for anything suspicious.

The CDC has been preparing for the possibility of cases in the U.S. and have provided state health, first response, county health, and hospital organizations with guidance and tools to deal with a case in our community.

What happens if someone is diagnosed with Ebola?
If there is reason to believe a person has Ebola, the patient is isolated in a hospital setting and public health professionals notified. Samples from the patient can then be collected and tested by a specialized lab to confirm infection.

What is the treatment for Ebola?
Standard treatment for Ebola is limited to supportive therapy: providing treatment for symptoms and treating them for any complicating infections.

Where can I get more information about Ebola in the U.S.?
The Centers for Disease Control (CDC) Ebola webpage is being constantly updated with new information as it becomes available. Follow the link or type in http://www.cdc.gov/vhf/ebola/
Main Messages: Ebola Facts, Readiness, Low Risk

- Ebola is spread through contact with the blood, or body fluids like urine, vomit, saliva, or feces of someone who is infected and actively showing symptoms. It is not spread through the air, water, or food.

- Identifying and preventing the spread of infectious disease is something that we in the healthcare and public health fields are well versed in.

- Even with the case that has occurred in Texas, the risk to our community remains very low.

Ebola Facts

- The virus can be transmitted through direct contact with the blood or secretions of an infected person, and exposure to objects (such as needles) that have been contaminated with infected secretions.

- The viruses that cause Ebola are often spread through families and friends because they come in close contact with infectious secretions when caring for ill persons.

- Exposure to Ebola can occur in health care settings where hospital staff are not wearing appropriate protective equipment, such as masks, gowns, and gloves.

- Symptoms may appear anywhere from 2 to 21 days after exposure to Ebola though 8-10 days is most common.

- Signs and symptoms may include: fever, rash, joint and muscle aches, diarrhea, vomiting, stomach pain, lack of appetite, rash, sore throat, cough, chest pain, difficulty swallowing, difficulty breathing and bleeding inside and outside of the body.

- The natural reservoir of Ebola virus has not yet been proven, but scientists believe the first patient becomes infected through contact with an infected animal.

Preparedness and Awareness

- We practice infection control and conduct disease investigations everyday – no matter what the illness is or where it comes from.

- We diligently work with our healthcare and public health partners to be prepared for public health threats and have protocols in place at every level to protect the health and safety of the public.

- Contact investigations are something done all the time in our community for diseases like tuberculosis, whooping cough, and sexually transmitted infections. A contact investigation is the process used to identify anyone who may have been exposed if someone becomes ill in our community.

- Local first response, healthcare, and public health agencies are paying very close attention to this situation, in constant contact with one another, and monitoring our healthcare system very closely for anything suspicious.

- The CDC has been preparing for the possibility of cases in the U.S. and have provided state health, first response, county health, and hospital organizations with guidance and tools to deal with a case in our community.
Risks

- Pima County has a low occurrence of international travelers from affected regions in Africa.
- A person must be symptomatic in order to spread or transmit the disease.
- A person must have direct contact with an infected, symptomatic person’s body fluids.
- Unlike the public health systems in the affected regions of West Africa (Liberia, Sierra Leon, Guinea), the infection control practices and disease investigation capabilities work closely and effectively every day.

Diagnosis

- If there is reason to believe a person has Ebola, the patient is isolated and public health professionals notified.
- Samples from the patient can then be collected and tested by a specialized laboratory to confirm infection.

Treatment

- Standard treatment for Ebola is limited to supportive therapy: this includes treating the symptoms, balancing the patient’s fluids and electrolytes, and treating complicating infections.

Prevention

- The World Health Organization (WHO) continues to monitor the evolution of the Ebola virus disease (EVD) outbreak in West Africa.
- Isolation of Ebola HF patients from contact with unprotected persons.
- Use infection-control measures (such as complete equipment sterilization and routine use of disinfectant) wearing of protective clothing (such as masks, gloves, gowns, and goggles).
Ebola Virus Disease
EVD Description

- Hemorrhagic fever with case fatality rate up to 90%
- Endemic areas: Central and West Africa
- Wildlife reservoir: bats implicated
- No cases in humans ever reported in U.S. (until Oct 2014)
Transmission

• Incubation period: usually 8-10 days (range 2-21 days)

• High-risk individuals
  • Health care workers
  • Family members/others in close contact with patients

How do you get the Ebola virus?

Direct contact with

1. Body fluids of a person who is sick with or has died from Ebola. (blood, vomit, pee, poop, sweat, semen, spit, other fluids)

2. Objects contaminated with the virus (needles, medical equipment)

3. Infected animals (by contact with blood or fluids or infected meat)
Facts about Ebola in the U.S.

- You can’t get Ebola through air
- You can’t get Ebola through water
- You can’t get Ebola through food
Signs and Symptoms

- Early signs non-specific: fever, chills, malaise, weakness, muscle pain
- GI signs: (~5d post fever) nausea, vomiting, diarrhea, abdominal pain
- Late signs: (~7d post fever) bleeding, multi-organ dysfunction leading to shock and death
Transmission

When is someone able to spread the disease to others?

Ebola only spreads when people are sick. A patient must have symptoms to spread the disease to others.

After 21 days, if an exposed person does not develop symptoms, they will not become sick with Ebola.
Pima County EVD Preparedness Planning Effort

- PCHD began internal planning with input/feedback ADHS in late Sept
- Preparedness Planning Kick-off Meeting 10/16
  - 58 in room/4 via phone
  - Representing first-responders, EMS, 911, hospitals, community health centers, schools, TON/PYT, FBI, CBP and various PC entities
# EVD Workgroups

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Response

Detect: Find those at risk for exposure
  • Fever/symptoms w/in 21d of travel to affected area
  • Isolate suspect case and transfer for treatment
  • Contact tracing/21 d monitoring

Protect: Optimize infection control
  • Standard contact/droplet precautions
  • Decontamination & Biosafety

Plan:
  • Develop & exercise facility specific response
  • Communicate/coordinate
What triggers action in Pima County?

- Identification of a credible EVD exposure, either
  - Low-risk:
    - Household or brief contacts of confirmed/suspect OR
    - HC workers from facilities without PPE
  - High-risk (blood/body fluid exposure):
    - Percutaneous/mucous membrane contact OR
    - Direct skin contact/exposure OR
    - Processing blood/body fluids w/o PPE or biosafety precautions OR
    - Contact with dead body without PPE
Key Messages

• Individuals
  • If symptomatic, self identify travel to endemic areas/facilities

• Providers
  DETECT: High suspicion for travelers returning from endemic areas
  PROTECT: Optimize infection control, isolation & PPE processes
  PLAN: Develop & exercise facility/system specific response

• Opinion leaders
  • Coordination is happening at every level
  • Help identify missing partners
  • Stay alert but keep it in perspective