

Ebola: Is your department prepared?

Objectives:

- Define Ebola and why the healthcare system should be prepared for potential outbreaks.
- Discuss the symptoms of the Ebola infection.
- Discuss how Ebola is transmitted.
- Discuss what protocols sterile processing employees should take if exposed with the Ebola virus.

What is Ebola?

There is a new threat to the citizens of the United States as well as people across the country. The threat comes in the form of a virus that can target the human body rapidly, and have adverse effect in the end. So what is this new Ebola virus, or is it so new? According to the Centers for Disease Control and Prevention, “Ebola, previously known as Ebola hemorrhagic fever, is a rare and deadly disease caused by infection with one of the Ebola virus strains. Ebola can cause disease in humans and nonhuman primates (monkeys, gorillas, and chimpanzees)” (Center for Disease Control and Prevention, 2014). There are a total of five different Ebola viruses that can affect humans and/or animals. Ebola has been connected to the infectious strain Filoviridae. The Ebola disease is an acute disease. It is imperative that once diagnosis is confirmed that the patient is promptly treated.

This year (2014) has been the largest epidemic spread of the Ebola virus. Contrary to some beliefs, this virus was around prior to 2014. The first outbreak was actually in the year of 1976. According to the World Health Organization: “Ebola virus disease (EVD) first appeared in 1976 in 2 simultaneous outbreaks, one in Nzara, Sudan, and the other in Yambuku, Democratic Republic of Congo” (World Health Organization, 2014). Small, remote villages in Central Africa had minute outbreaks of the virus once the virus was first identified. Today, the Ebola virus has been seen in more urban and rural areas in West Africa. In the United States, there have been confirmed Ebola cases in four people this year (2014).

What are the symptoms of Ebola?

Once infected with the Ebola virus it can take the patient just a few days to actually exhibit symptoms. This can certainly vary from person to person. According to the Centers for Disease Control and Prevention symptom times can fluctuate: “Symptoms may appear anywhere from 2 to 21 days after exposure to Ebola, but the average is 8 to 10 days” (Centers for Disease Control and Prevention, 2014).

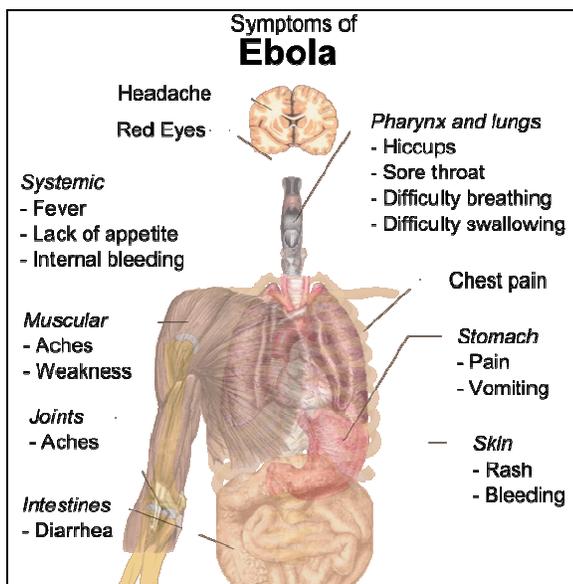


Image retrieved from: http://commons.wikimedia.org/wiki/File%3ASymptoms_of_ebola.png

How is Ebola transmitted?

The natural reservoir of Ebola has yet to be identified. Researchers have confirmed however, various ways the Ebola virus can be transmitted. According to the World Health Organization, Ebola can be transmitted the following ways once the host has been infected by the virus: “Ebola then spreads through human-to-human transmission via direct contact (through broken skin or mucous

membranes) with the blood, secretions, organs or other bodily fluids of infected people, and with surfaces and materials (e.g. bedding, clothing) contaminated with these fluids” (World Health Organization, 2014). According to the CDC, the Ebola virus is not a disease that can be transmitted through water, food, or the air.



Why should the healthcare system be equipped to take on Ebola?

Unfortunately, this year (2014) has been the worst in world history that any healthcare organization has had to worry about treating those infected by the Ebola virus in Africa as well as the United States. Therefore, it is critical that all healthcare workers are trained and equipped with the supplies needed to control the potential spread of the virus throughout the country once a case of Ebola is confirmed within a facility. Because healthcare workers have to be in direct contact with patients diagnosed with the Ebola virus, it puts them in immediate jeopardy of contracting the disease themselves. “Health-care workers have frequently been infected while treating patients with suspected or confirmed EVD. This has occurred through close contact with patients when infection control precautions are not strictly practiced” (World Health Organization, 2014). Healthcare workers have to be adequately trained before treating any patient that has contracted the Ebola virus.

Why should sterile processing be concerned about Ebola?

Sterile processing technicians are already trained to use Universal Precautions which when simply defined is to “treat all instruments, equipment, or used supplies as if they were infectious”. Surgical patients can have infectious diseases or infections such as HIV, Hep B, AIDS, MRSA, VRE, CJD, and yes Ebola! Therefore, sterile processing technicians should still take on the same protocols as they do with any other infectious disease when processing potentially infectious instruments, medical supplies, and/or equipment that may have been exposed with Ebola. To date, there has not been a patient exposed with Ebola that has needed a surgical procedure, but this does not mean that both the operating room and sterile processing departments should not be prepared. So what should the sterile processing technician do once they come in contact with patients? Well according to the CDC all precautions should be taken. “The Association of periOperative Registered Nurses (AORN) recommends that airborne precautions be taken when caring for an Ebola patient in the surgical setting in addition to standard, contact, and droplet precautions” (The Association of perioperative Registered Nurses, 2014).



How would you handle medical supplies, or equipment that has been exposed with Ebola? The answer is simple. Make sure you wear ALL components of your Personal Protective Equipment! These items include ALL of the following: utility gloves (puncture resistant), impervious, fluid-resistant gown with sleeves, shoe covers/boots, and a mask with splash resistant goggles and/or shields. As far as instrument re-processing goes, there has not been any new data confirming that instruments should be cleaned, decontaminated, or sterilized in any other manner. The technician should minimize handling sharps items and instruments to decrease their

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Katrina Simpson, B.S., CST, CSPDT**

Post-Test 2014

- 1. Ebola is a deadly bacterium.
TRUE FALSE
- 2. Ebola was previously known as Ebola hemorrhagic.
TRUE FALSE
- 3. Ebola infections can only spread in humans.
TRUE FALSE
- 4. Ebola is a chronic disease that occurs over a long period of time.
TRUE FALSE
- 5. Ebola virus first appeared in 1986 in the United States.
TRUE FALSE
- 6. Ebola is transmitted through indirect contact.
TRUE FALSE
- 7. Healthcare workers do not have to be concerned with Ebola transmission because they are in a hospital setting.
TRUE FALSE
- 8. While cleaning and/or decontaminating surgical instruments exposed to Ebola, sterile processing technicians do not have to worry about shoe covers if they have a gown on.
TRUE FALSE
- 9. Instruments exposed to Ebola should be thrown in the garbage.
TRUE FALSE
- 10. Sharp items should be handled as minimally as necessary while cleaning, decontaminating, and/or re-processing them.
TRUE FALSE

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Lana Haecherl
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Your certificate will be sent via email if your score is greater than 70%

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