

The logo for AFSCME Health & Safety Fact Sheet features the acronym 'AFSCME' in large, bold, white letters on a blue background. Below it, the words 'Health & Safety Fact Sheet' are written in a smaller, white, sans-serif font. To the right of the text is a stylized graphic of a star with several curved lines radiating from it, suggesting motion or energy. The background is split into a blue upper half and a green lower half.

AFSCME

Health & Safety Fact Sheet

Protecting Health Care Workers from Exposure to Ebola

What Is Ebola?

Ebola hemorrhagic fever, first identified in what now is the Democratic Republic of Congo, is a severe, often fatal disease in humans and primates. The first case of Ebola in the U.S. was confirmed in September 2014. The first case of transmission of Ebola to a health care worker in the U.S. was confirmed in October 2014.

Biology and Symptoms

Ebola is considered to be a bloodborne pathogen and not an airborne infectious disease. A person can only be infected from contact with blood or body fluids from a symptomatic person. Ebola breaks down the circulatory system, allowing blood to be present in vomit, stool, urine, saliva and in advance stages of the disease, even sweat. The virus in blood and body fluids can enter another person's body through broken skin or unprotected mucous membranes, for example, the eyes, nose or mouth. The virus can survive on surfaces for several days. People can also be infected by direct contact with objects (such as needles or bed sheets) that contain infectious blood or body fluids.

Symptoms usually appear 8 to 10 days after exposure. However, symptoms can appear as early as 2 days or as long as 21 days after exposure. A person who is infected with Ebola is not infectious (contagious) until symptoms, such as fever, begin. Early symptoms include sudden fever, chills and muscle aches. Around the fifth day, a skin rash may develop. Nausea, vomiting, chest pain, sore throat, abdominal pain and diarrhea may follow. Symptoms become increasingly severe and may include jaundice (yellow skin), severe weight loss, mental confusion, bleeding inside and outside the body, shock and multi-organ failure.

The first symptom someone is likely to show is a fever. A person under investigation (PUI) is someone who has both consistent symptoms and risk factors as follows:

1. Clinical criteria, which includes fever of greater than 38.6 degrees Celsius or 101.5 degrees Fahrenheit, and additional symptoms such as severe headache, muscle pain, vomiting, diarrhea, abdominal pain or unexplained hemorrhage; AND

2. Risk factors within the past 21 days before the onset of symptoms, such as contact with blood or other body fluids or human remains of a patient known to have or suspected to have Ebola; residence in—or travel to—an area where Ebola transmission is active (Guinea, Liberia, Nigeria, Senegal and Sierra Leone) or direct handling of bats or non-human primates from disease-endemic areas.

Who Is at Risk?

- Residents of central and west Africa.
- Persons traveling from Guinea, Liberia, Nigeria, Senegal and Sierra Leone who may have contact with an infectious person or animal.
- Health care workers including those involved with intake, transport and environmental services that may have contact with an infectious person and/or infectious waste.
- Laboratory personnel who may handle infectious samples.
- Airline flight crews including airline and airport ground crews who may have contact with an infectious person or with infectious surfaces or materials.
- Any other person who has close contact with an infectious person.

Preparedness, Protocols and Personal Protective Equipment (PPE)

Health care facilities must activate their preparedness plans now. The recent announcement by the Centers for Disease Control (CDC) that it will deploy infectious disease response teams to any hospital with a confirmed Ebola case does not relieve health care facilities of this responsibility. This includes assessing and ensuring the availability and quality of personal protective equipment (PPE) and infection control supplies.

If a patient in a U.S. hospital is suspected or known to have Ebola virus disease, health care teams should follow standard, contact and droplet precautions, including the following recommendations:

- Create a clinical care team: It should be led by a senior level experienced clinician that includes at a minimum a hospital infection control specialist, a senior nurse, an infectious disease specialist and critical care consultants.
- Assign a senior staff member to coordinate testing and reporting: This person should be from the clinical care team reporting results from the hospital laboratory, state health department laboratory, CDC and state and local public health departments.
- Isolate the patient: Patients should be isolated in a single patient room (containing a private bathroom) with the door closed.
- Wear appropriate PPE: *The CDC just released revised guidelines for personal protective equipment for health care workers involved in patient care of a confirmed or suspected Ebola patient. See Guidance on Personal Protective Equipment To Be Used by Healthcare Workers During Management of Patients with Ebola Virus*

Disease in U.S. Hospitals, Including Procedures for Putting On (Donning) and Removing (Doffing) at <http://www.cdc.gov/vhf/ebola/hcp/procedures-for-ppe.html>

Because Ebola is spread by contact, PPE should be worn to cover all exposed skin. **Health care providers entering the patient's room AT A MINIMUM should wear:** gloves, gown (fluid resistant or impermeable), eye protection (goggles or face shield) and respiratory protection. Additional personal protective equipment might be required in certain situations (e.g., copious amounts of blood, other body fluids, vomit or feces present in the environment), including but not limited to double gloving, disposable shoe covers and leg coverings.

- Restrict visitors: Avoid entry of visitors into the patient's room (see CDC's infection control guidance on procedures for monitoring, managing and training of visitors).
- Avoid aerosol-generating procedures: If not possible, PPE should include respiratory protection (N95, a higher filtering face piece respirator or powered air purifying respirator (PAPR)) and the procedure should be performed in an airborne infection isolation room.
- Implement environmental infection control measures: Diligent environmental cleaning and disinfection and safe handling of potentially contaminated materials is of paramount importance, as blood, sweat, vomit, feces, urine and other body secretions represent potentially infectious materials. Use a U.S. Environmental Protection Agency (EPA)-registered hospital disinfectant with a label claim for a non-enveloped virus (e.g., norovirus, rotavirus, adenovirus, poliovirus) to disinfect environmental surfaces in rooms of patients with suspected or confirmed Ebola virus infection.

Proper Donning and Doffing of PPE Is KEY

Removing contaminated PPE properly is a critical part of infection control and worker protection. Putting on and taking off PPE properly takes time and practice. Watching a video is simply not enough. Workers should practice and perform drills before working with an infectious patient. To remove PPE properly, always remember, “Dirty to Dirty, Clean to Clean.” Never touch your face, eyes or remove your respirator with dirty gloves or unwashed hands. Gloves and gowns should be turned inside out without touching the contaminated side. Always wash thoroughly after removing PPE.

Laws or Standards to Protect Health Care Workers

Employers are required to protect workers against exposure to bloodborne pathogens such as Ebola. Workers must not be discriminated against for raising legitimate safety concerns.

The OSHA Bloodborne Pathogens Standard (29 CFR 1910.1030) requires an employer to have a written Exposure Control Plan to determine which work tasks might be “reasonably anticipated” to expose employees to infectious or potentially infectious materials. The plan must also describe

the measures the employer will take to prevent or reduce exposure. These measures must include annual training of workers and providing appropriate personal protective equipment (PPE) such as impermeable gloves and gowns. Employers must provide access to hand washing facilities, or if not feasible, to antiseptic hand cleaners.

The OSHA Personal Protective Equipment/General Requirements Standard (29 CFR 1910.132) requires the employer to conduct a job hazard assessment to determine whether hazards are present that require the use of PPE. If PPE is required, the employer must provide it at no cost. The employer must train employees who are required to use PPE. Training must cover when and where to use PPE, how to use PPE, the limitations of relying on PPE and how to maintain and dispose of PPE.

The OSHA Respiratory Protection Standard (29 CFR 1910.134) requires the employer to implement a written respiratory protection program where respirators are required to protect worker health. The employer must medically evaluate and annually train and fit-test workers who will use respirators.

Information on the Ebola crisis changes often. For the most recent information, please visit the AFSCME webpage at: www.afscme.org/ebola

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For more information about protecting workers from occupational hazards, please contact the AFSCME Department of Research and Collective Bargaining Services at 1625 L Street, NW, Washington, DC 20036 or osha@afscme.org