HEALTH AND SAFETY FACT SHEET

Ebola disease



Ebola disease is a serious illness that can cause internal bleeding, organ failure and death. It is a type of disease known as a hemorrhagic fever that can affect people and animals and has a high level of mortality.

Several related viruses can cause Ebola disease. These include the Ebola virus, Sudan virus, Bundibugyo virus, Taï Forest virus, Reston virus and Bombali virus. The Ebola, Sudan and Bundibugyo viruses have caused large outbreaks in Africa. The Reston and Bombali viruses have not been associated with disease in humans.

Symptoms

Symptoms usually appear between two and 21 days after infection. People become infectious when they develop symptoms. Early symptoms include fever, intense weakness and fatigue, muscle pain, headache and sore throat. Symptoms can progress to vomiting, diarrhea, rash, impaired kidney and liver function, and internal and external bleeding. Infections can only be confirmed through laboratory testing.

Transmission

Ebola disease is transmitted through contact with the blood or bodily fluids of an infected person or animal that enter through broken skin or the eyes, nose or mouth. Bodily fluids include urine, saliva, sweat, feces, vomit, breast milk and semen. Infection occurs when these fluids enter the body through broken skin or through the eyes, nose or mouth. Transmission can also occur through direct contact with contaminated objects such as bedding, clothing, needles and syringes and other sharps. Workers close to a symptomatic person face a higher risk of exposure during activities that generate airborne particles. This can include patient activity such as coughing, sneezing, or experiencing profuse diarrhea or vomiting, as well as clinical procedures such as intubation, suctioning, bronchoscopy and cardiopulmonary resuscitation.

People remain infectious as long as their blood and bodily fluids contain the virus. Men can transmit the virus through their semen for up to 12 months after recovery.

Canadian context

Workers are most likely to be exposed to Ebola when patients have symptoms but have not yet been diagnosed.

While the risk of Ebola disease exposure in Canada is generally low, it is not equal across the country. Workers in communities served by major international airports and border crossings face a higher likelihood of encountering travellers from outbreak regions before a diagnosis has been made. Health care workers, paramedics and flight attendants at these transit points should be considered at elevated occupational risk during any active outbreak, even when cases have not been confirmed in Canada. This sheet provides general information.

CUPE has produced a companion guideline with detailed recommendations for health care workers, paramedics and flight attendants.

Planning

Employers must take a precautionary approach and protect workers before an exposure occurs and not wait for a confirmed case to begin preparing. Employers need to prepare by ensuring:

- A hazard assessment that accounts for the possibility of Ebola disease exposure remains current
- An inventory of appropriate personal protective equipment is always adequate and accessible
- Workers are trained to know where PPE is located, how to use it, and what to do if they are exposed
- A joint health and safety committee or representative is actively involved in planning and response

Prevention and control

Workers who may be exposed to Ebola disease must receive appropriate training and personal protective equipment before potential exposure.

Health care workers face a risk of contracting Ebola that is about 20 times higher than that of the general public. In high-risk situations, including suspected or confirmed contact with a person with Ebola disease, the minimum PPE standard is the same regardless of the suspected strain:

- A Powered Air-Purifying Respirator (PAPR)
- A Surgical N95 Respirator (Fluid-Resistant) combined with a face shield, where PAPR is unavailable
- A fluid-impermeable full-body suit with no exposed skin
- Double gloves
- Fluid-resistant foot protection.

Workers who may come into contact with someone showing symptoms should treat any suspected case as confirmed until ruled out and apply full barrier precautions described above immediately.

How PPE is removed is as important as how it is put on. Many workplace Ebola infections occur not during patient contact, but when contaminated equipment is removed incorrectly. Workers must be trained and regularly practise putting on and taking off PPE under the supervision of a trained spotter before any potential exposure occurs. Hand hygiene must be performed immediately after removal. Workplaces should establish hot, warm and cold zones to structure safe movement and PPE removal.

During an outbreak, employers must provide workers who deal with the public with Surgical N95 Respirators (Fluid-Resistant) and ensure workers practice good hand hygiene, regularly disinfect surfaces, avoid touching their face and maintain distance from anyone showing symptoms.

All workers have the right to refuse work they believe is unsafe or that they are not trained to perform safely.

Vaccination

Canada has approved a vaccine, Ervebo, that may prevent Ebola disease caused by the Ebola virus. It has not been approved or proven effective on other strains and has only been approved for adults 18 years and older. During an outbreak, the vaccine may be offered to people at risk of exposure.

Exposure

Any worker who has had potential exposure to Ebola disease must seek immediate medical assessment and must not wait for symptoms to develop before doing so. People with suspected or confirmed Ebola disease will be quarantined and public health officials will identify potential contacts.

FOR MORE INFORMATION, CONTACT:

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