

Ebola Virus Disease

Considerations for countries implementing infection prevention and control at ground crossings and other community-based crossing points.

Background

Infection prevention and control (IPC) activities are designed to prevent transmission of infections, such as Ebola disease (Ebola). While this applies to healthcare settings, it also applies to ground crossings where screening for Ebola may be being conducted during an outbreak. It is important to note that:

- People in community settings do not have the same risk of coming into contact with a sick person (who might have Ebola) as in healthcare settings, nor are the types of interaction the same; **thus**,
- Healthcare IPC practices should not be used in community settings without appropriate modification.

This document is designed to answer frequently asked questions about IPC during Ebola screenings at ground crossings and other community-based crossing points during outbreak response and preparedness activities.

Frequently asked questions

How is Ebola spread?

Ebola virus spreads from person to person through direct contact with blood or body fluids (e.g., urine, saliva, sweat, feces, vomit, breast milk) from a person who is sick with or has died from Ebola or objects (such as needles, cookware, medical equipment, bedding) contaminated with body fluids from a person who is sick with or has died from Ebola¹. There is no evidence that Ebola spreads through the air like COVID or measles.

A person infected with Ebola is not contagious until symptoms appear, which normally occurs between 2 and 21 days after exposure.

¹ Although transmission has been documented from sexual contact with individuals who have recovered from Ebola, that situation is not directly relevant to Ebola screening at ground crossings.



What is IPC for Ebola?

IPC is a set of practices designed to keep infectious diseases from spreading. Some examples of IPC practices include identifying and quickly separating sick people from those who are well (isolation), handwashing, cleaning and disinfecting surfaces or items that could be contaminated with the body fluids of someone with Ebola, handling and disposing of waste properly, and correctly and consistently using personal protective equipment (PPE like gloves, facemask, gown).

What is the risk of Ebola in communities, including at ground crossings and other crossing points?

The level of risk of Ebola in community settings will depend on the number of people with Ebola who have symptoms and thus are infectious.

In a community where Ebola is spreading, the risk of Ebola transmission is higher when people are in close contact with each other. The risk of Ebola transmission is usually lower in community settings than in healthcare settings, where the potential for exposure to body fluids from sick people is much higher. In community settings, there is less risk of coming into contact with sick people, meaning it's less likely that people will be exposed to body fluids from sick people.

However, risks are present when interacting with, or providing direct care to, a symptomatic person with Ebola or when interacting with the body of an individual that has died from Ebola, as may happen at a funeral.

What is important to know about IPC at ground crossings and other community-based crossing points?

IPC practices at ground crossings and other community-based crossing points are intended to protect health screeners, travelers, and the public from Ebola transmission at locations where individuals are moving across international or internal borders or designated points of control.

The likelihood of contact with blood or body fluids from a person infected with Ebola at ground crossing or other crossing points is low. Therefore, IPC at these locations should focus on:

- Avoiding situations that increase direct contact between people (e.g., crowding), **and**
- Ensuring there are clear, feasible, and agreed-upon plans at the screening location for responding to people with symptoms suggestive of Ebola.

What are the key IPC points for primary screening at a ground crossing?

Primary screening in this context is the initial evaluation of a traveler. It includes looking for visible signs of illness, taking temperatures, and asking questions regarding symptoms or exposure. It does not include any activities that require touching or physically examining a traveler.

Key points include:

- Avoiding crowding of people waiting to be processed as this will increase the risk of disease transmission, including Ebola transmission. Ideally, a space of one meter between families or other groups traveling together should be maintained while they are waiting to be screened.
- Screeners should maintain a distance of at least one meter from people being screened and avoid direct face-to-face interaction.
- If a temperature check is part of primary screening, non-contact thermometers help screeners maintain distance and avoid contaminating thermometers.
- To avoid direct face-to-face interaction, stand/sit to the side of the person being screened or place plexiglass or a plastic sheet between the screener and person being screened while maintaining at least a one-meter distance.
- Requiring travelers to wash their hands before or after the screening procedure is not useful in preventing spread of Ebola.
 - » If handwashing stations are available at ground crossings, people crossing the border should be given the option to wash their hands if they desire as part of general health promotion.
- Screeners should perform hand hygiene often. Handwashing stations should be available for screeners and other staff to use regularly, especially if hands become visibly soiled or activities require physical contact with people being screened or their environment (e.g., chair, table).
 - » Soap and water or alcohol-based hand rub are preferred methods for handwashing. Using a 0.05% chlorine solution for handwashing is an acceptable alternative when preferred methods are not available.
- Surfaces and items, including pens, touched by individuals undergoing screening should be cleaned and disinfected regularly.
- PPE should be available nearby in case a person suspected of having Ebola is identified and needs to be assisted to an isolation area.
 - » Screeners must be trained in how to put on and remove (i.e., don and doff) PPE correctly to ensure its safe use.

What is personal protective equipment (PPE)?

PPE is special coverings (e.g. gloves, facemask, and gown) that can be used to protect eyes, mouth, hands, and regular clothes from exposure to blood and body fluids. In non-healthcare settings where the risk of encountering a person sick with Ebola and the risk of exposure to blood or body fluid are low, PPE is not usually needed. In healthcare settings, PPE is a critical component of IPC to keep people safe. However, it must be used correctly and consistently, which requires training and practice. Improper use of PPE or failure to clean or dispose of contaminated PPE appropriately can increase the risk of disease transmission. People should use only the correct PPE needed to safely protect themselves while performing a specific task; in other words, extra PPE is not safer.

What PPE is needed for primary screeners at ground crossings?

- No PPE is recommended for routine use by staff doing primary screening at ground crossings. The routine use of PPE in low-risk situations reduces the supplies available for workers with a higher risk of exposure.
- All staff doing primary non-contact screening should keep the recommended one-meter distance between themselves and the people being screened and avoid direct face-to-face interaction.
- PPE should be available on site or kept at a central location where it can be obtained rapidly by screeners if they come into contact with a person with symptoms of Ebola.
 - » For “dry” symptoms (e.g., fever, severe headache, aches and pains in the muscles and joints, weakness and fatigue, sore throat, and loss of appetite): gloves, facemask or goggles, fluid-resistant gown, and fluid-resistant medical or surgical masks.
 - » For “wet” symptoms (e.g., vomiting, diarrhea, and active bleeding): two pairs of clean and intact (no tears or holes) gloves (nitrile preferred inside, with heavy duty outer glove), a respirator for aerosol generating procedures, fluid-resistant coverall and heavy-duty apron (if no coverall is available: gown plus head and neck covering), and waterproof rubber boots.

Example: Community health workers who conduct contact tracing or symptom monitoring for exposed people during Ebola outbreaks have a higher chance of being near a person with Ebola, but a low likelihood of exposure to blood or body fluids. Therefore, these workers mainly protect themselves by maintaining distance and avoiding touching people they are monitoring or objects touched by the people they are monitoring.

What needs to be in place at a ground or community-based crossing point if a person has “wet” symptoms (e.g., vomiting, diarrhea, and active bleeding)?

Ground or other community-based crossing points should have plans and access to supplies needed to close off and safely clean up and disinfect areas contaminated with body fluids. If supplies are not kept onsite, they should be rapidly available from a central location if needed.

Body fluids (e.g., blood, vomit, urine, saliva, sweat, breast milk) have the potential to transmit many infectious diseases, including Ebola. Any time body fluids contaminate a public area, safe cleanup and disinfection is needed to prevent transmission of disease. Safe and effective cleanup and disinfecting of body fluids require:

- In-depth training in proper cleaning and disinfection practices
 - » Always clean before disinfecting, as disinfectant may not adequately kill Ebola virus unless organic materials (e.g., blood, vomit) are removed first.
- Appropriate PPE for “wet” symptoms, as described in the section above.
- Dedicated supplies for cleaning (e.g., clothes or absorbent towels, mops, buckets, soap and water) and disinfection (0.5% chlorine solution) not used for other purposes.
- Hand hygiene supplies, such as soap and water, alcohol-based hand rub, or 0.05% chlorine solution. If hands are soiled, use soap and water first.
- A plan to dispose of waste generated from cleanup that could be infectious (e.g., contaminated PPE). All waste from suspected Ebola cases should be considered highly infectious and kept segregated from general waste and the general waste stream since it requires proper treatment. Thus, the waste plan may include instructions on how to separate potentially infectious waste from general waste, waste collection and temporary storage infrastructure adapted to the setting, safe final disposal onsite or offsite, etc.

For many ground crossings or other community-based crossing points, maintaining trained staff and needed supplies will be challenging, especially in remote or infrequently used ground crossings or other community-based crossing points or when resources are limited. Having an available rapid response team that can assist screeners to respond to a person with symptoms and the cleanup of body fluids might be more feasible than widespread training and keeping supplies of PPE at all ground crossings or other community-based crossing points. This approach will require the ability to close off a contaminated area until the team can arrive, and the area has been cleaned.

What plans should be in place at ground crossings to safely manage a person with suspected Ebola?

Every ground crossing or other community-based crossing point that is conducting Ebola screening should have plans for how primary screening will be performed and what to do if a symptomatic person is identified. These plans should be trained on and exercised on a routine basis at each screening site.

Screening plans will vary depending on factors that include resources, Ebola risk in the population, district- and national-level Ebola case management planning, distance from nearest healthcare facility, and the number of travelers being screened. Three important things needed for appropriate IPC at a ground crossing or other community-based crossing points are:

1. A clearly marked off area where a symptomatic person can wait safely, away from other people, while additional evaluation or transportation to isolation, likely at a healthcare facility or Ebola Treatment Unit (ETU), is being arranged. Privacy of this individual should be respected.
2. A notification plan for screeners if a symptomatic person is found. This plan should include specific contact information for the appropriate public health authority that will be notified and clear instructions about when to notify them. Make all equipment and resources (such as a cell phone and list of phone numbers) necessary for notification available.
3. A pre-identified healthcare facility or Ebola Treatment Unit (ETU) that is closest to the crossing point, a means of transportation that will not expose drivers or others involved in transport (i.e., no motorcycles), and a communication strategy with this healthcare facility.

Are chlorine footbaths needed for IPC at ground crossings?

No, chlorine footbaths are not needed at ground crossings or other community-based crossing points to prevent transmission of Ebola.

There is no evidence to suggest that the bottoms of shoes help spread Ebola in communities. Additionally, chlorine does not work as a disinfectant once it is mixed with organic matter such as the dirt usually found on the bottom of shoes.