



Interim Guidance about Ebola Virus Disease (EVD) Infection for Airline Flight Crew

Overview of Ebola Virus Disease

- Ebola hemorrhagic fever is a severe, often-fatal disease caused by infection with a species of Ebola virus.
- Although the disease is rare, it can spread from person to person, especially among health care staff and other people who have close contact* with an infected person.
 - * Close contact is defined as having cared for or lived with a person with Ebola or having a high likelihood of direct contact with blood or body fluids of an Ebola patient.
 - Examples of close contact include kissing or embracing, sharing eating or drinking utensils, close conversation (<3 feet), physical examination, and any other direct physical contact between people.
 - Close contact does not include walking by a person or briefly sitting across a room from a person
- Ebola is spread through direct contact with blood or body fluids (such as saliva or urine) of an infected person or animal or through contact with objects that have been contaminated with the blood or other body fluids of an infected person
- The likelihood of contracting Ebola is extremely low unless a person has direct contact with the body fluids of a person or animal that is infected and showing symptoms.
- A fever in a person who has traveled to or lived in an area where Ebola is present is likely to be caused by a more common infectious disease, but the person would need to be evaluated by a health care provider to be sure.
- The incubation period for Ebola ranges from 2 to 21 days.
- Early symptoms include sudden fever, chills, and muscle aches.
- Around the fifth day, a skin rash can occur. 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, shock, and multi-organ failure.



Prevention of EVD

The prevention of Ebola virus infection includes measures to

- Avoid contact with blood and body fluids of infected individuals and with objects contaminated with these fluids (e.g., syringes).
- Body fluids – saliva, tears, blood, urine, diarrhea, vomit, phlegm

Management of ill people on aircraft if Ebola virus is suspected

Crew members on a flight with a passenger or other crew member who is ill with:

- a fever,
- jaundice, or
- bleeding and
- who is traveling from or has recently been in a risk area

Follow these precautions:

- Keep the sick person separated from others as much as possible.
- Provide the sick person with a surgical mask (if the passenger can tolerate wearing one) to reduce the number of droplets expelled into the air by talking, sneezing, or coughing.
- Tissues can be given to those who cannot tolerate a mask.
- [Personnel should wear impermeable disposable gloves for direct contact with blood or other body fluids.](#)
- The captain of the airliner is required to inform the Control Tower of any ill passengers who meet specified criteria.
- The ill passenger should be reported before arrival or as soon as the illness is noted.
- PHS medical staff can be consulted to assist in evaluating an ill traveler, provide recommendations, and answer questions about reporting requirements;
- However, reporting to PHS does not replace usual company procedures for in-flight medical consultation or obtaining medical assistance.



What to do if you think you have been exposed:

Any person who thinks he or she has been exposed to Ebola virus either through travel, assisting an ill passenger, handling a contaminated object, or cleaning a contaminated aircraft should take the following precautions:

- Contact Port Health Services (or Call 0800 EBOLAHELP/0800326524357)
- Notify your employer immediately.
- Monitor your health for 21 days. Watch for fever (temperature of 101°F/38.3°C or higher), chills, muscle aches, rash, and other symptoms consistent with Ebola.

When to see a health care provider

- If you develop sudden fever, chills, muscle aches, rash, or other symptoms consistent with Ebola, you should seek immediate medical attention.
 - Before visiting a health care provider, alert the clinic or emergency room in advance about your possible exposure to Ebola virus so that arrangements can be made to prevent spreading it to others.
 - When traveling to a health care provider, limit contact with other people. Avoid all other travel.
- If you are located abroad, contact your employer for help with locating a health care provider. The Embassy/ Consulate in the country where you are located can also provide names & addresses of your retainer hospitals or local physicians



General Infection Control Guidelines for Cabin Crew Members

PURPOSE

- These guidelines provide cabin crew members (flight attendants) with practical measures to protect themselves, passengers, and other crew members when someone onboard is ill with a possible contagious infection.
- The practical measures for protecting yourselves and others include:
 - personal protection,
 - management of an ill traveler,
 - targeted clean-up measures, and
 - post-flight measures.

Since whether an illness is contagious is usually not known at the time, **any body fluid (such as phlegm, diarrhea, vomit, or blood) must be treated as potentially infectious.**

This guideline also provides information on specific measures according to three infection categories: **respiratory, gastrointestinal, and blood-borne.**

As a general preventive measure, airline crew should be up to date on all recommended immunizations and other preventive health measures for their destination. Many infectious diseases can be prevented by vaccines!

ILLNESS CATEGORIES

Respiratory infections:

Symptoms:

Germs (viruses or bacteria) in the respiratory system (such as measles, tuberculosis, influenza, whooping cough, or some pneumonias) can cause symptoms including:

- coughing,
- sneezing,
- fever,
- rash, and
- difficulty breathing.

Similar symptoms may also be caused by noninfectious conditions, such as:

- asthma,
- allergic reactions, or
- reactions to irritating substances.



How infection spreads:

- Coughing, sneezing, or even singing or talking may spread respiratory germs.
- Inhalation of infected person droplets or aerosols expelled into the air by a cough or sneeze.
- Touching contaminated surfaces with your hands, then touching your mouth, eyes, or nose, before washing your hands.

Some infections, such as tuberculosis (TB), do not spread easily without close and prolonged contact, while others, such as measles, can be transmitted after brief contact.

Gastrointestinal infections:

Symptoms:

Germs in the stomach or intestines, such as norovirus, can cause symptoms including:

- nausea,
- abdominal pain,
- vomiting,
- diarrhea,
- or fever.

Similar symptoms may also be triggered by a sensitivity or allergy to a food or food additive.

How infection spreads:

- Vomiting or diarrhea may spread germs to surfaces that other people may touch and then touch their mouth with contaminated hands.
- Through contaminated food or liquids, e.g. if an ill person prepares food or drink for other people.

Blood-borne infections:

Symptoms:

- Certain infections, such as
- HIV/AIDS,
- hepatitis B and C, and
- viral hemorrhagic fevers,

are carried in the bloodstreams of infected people.



A person with one of these infections may have symptoms such as:

- jaundice (a yellow appearance of the skin or white parts of the eyes) in the case of hepatitis B or C;
- or, unexplained bleeding of the skin, eyes, or gums (as in the case of hemorrhagic fevers),

Note: a person with some of these diseases may not have any symptoms at all, yet still be contagious.

How infection spreads:

When body surfaces that can easily absorb blood-borne pathogens, such as:

- open cuts,
- scrapes, or
- mucous membranes (lining of mouth, eyes, or nose)

come into direct contact with infectious (or infected) bodily fluids.



GENERAL INFECTION CONTROL MEASURES

Personal protection

- **Treat any body fluid as though it is infectious**
- **Hand hygiene is the single most important infection control measure**
 - Wash hands with soap and water for at least 20 seconds after assisting ill travelers or coming in contact with body fluids or surfaces that may be contaminated.
 - An alcohol-based hand cleaner is an alternative to hand-washing but will not be effective if hands are visibly soiled.
 - Avoid touching your mouth, eyes, and nose with unwashed or gloved hands.
- **Disposable gloves (*gloves do not replace proper hand hygiene*)**
 - Wear impermeable, disposable gloves when:
 - physically tending to an ill traveler
 - coming in contact with body fluids (such as used tissues, blood, vomit, or diarrhea), potentially contaminated surfaces or lavatories
 - Remove gloves carefully to avoid contaminating yourself or your clothing.
 - Properly dispose of soiled gloves after use into a plastic bag, and do not re-use.
 - Wash your hands with soap and water or with an alcohol-based hand cleaner after removing gloves.
- **Face masks**
 - Surgical-type face masks worn by an ill person may help reduce the spread of respiratory germs from coughing, sneezing or talking; however, surgical facemasks are not recommended for use by a person who is not ill.

Management of ill person

- **Minimize the number of persons directly exposed to the ill traveler**
- **Keep interactions with the ill traveler as brief as possible**
- **Respiratory infections***
 - Ask the ill traveler to cover his or her mouth with a tissue when coughing or sneezing.
 - Provide tissues, if necessary.
 - Provide a plastic bag for disposing of used tissues.
 - Ask the ill traveler to wear a face mask particularly for persistent cough, if it can be tolerated and one is available.
 - Encourage the ill traveler to wash hands and/or use alcohol-based hand cleaner (if available).



- Separate the ill traveler from others by 6 feet, if possible, and without compromising flight safety or exposing additional passengers.
- Follow the instructions in “*Targeted Clean-Up*” below, as necessary.

*Note: measles and rubella (German measles) are caused by respiratory viruses with rash and fever being prominent signs. Therefore, follow these respiratory illness infection control measures if the ill traveler has a fever and rash

Gastrointestinal infections

- Seat the ill traveler(s) close to a lavatory, if possible.
 - If possible, restrict the use of that lavatory to only the ill traveler(s).
 - If traveler is vomiting, provide air-sickness bags.
 - Provide a plastic bag for disposing of used air-sickness bags.
 - Encourage the ill traveler to wash hands and/or use alcohol-based hand cleaner (if available).
 - Follow the instructions in “*Targeted Clean-Up*” below as necessary.
- **Blood-borne infections**
 - If the ill traveler is actively bleeding, such as from an injury or nosebleed, provide first aid according to your airline’s guidelines.
 - Separate the ill traveler from others far enough to reduce the likelihood of blood splattering on other people, if possible.
 - Provide a plastic bag for disposing soiled tissues or towels.
 - Follow the instructions in “*Targeted Clean-Up*” below as necessary.

Targeted Clean-Up*

- Hard (nonporous) surfaces, such as tray tables, TV monitors, seat arms, windows and walls that are visibly soiled: remove visible contaminations, then clean with a cleaning or disinfectant agent approved by your airline.
- Soft (porous) surfaces, such as carpeted floor or seat cushions that are obviously soiled, such as with vomit or diarrhea: first remove as much of the contaminant as possible, then cover the area with an absorbent substance, followed by an impermeable material, such as plastic, to reduce the risk of spread beyond the immediate area or into the air.
- If a contaminated item can be easily removed, is small enough to fit inside a plastic bag (such as a pillow, blanket or small cushion), and will not cause significant disruption to passengers by removing



- it (such as in a full flight), carefully place it inside a plastic bag** and tie or tape the bag shut securely to avoid leaking.
 - Dispose of used cleaning materials in a plastic bag,** immediately after use. *Note:actions should be consistent with company policy
- **Biohazard bag if available; otherwise secure in plastic bag and label as biohazard

Post-Flight Measures

- **Properly dispose of contaminated items**
 - Place all receptacles that have been used by the ill traveler, as well as all bags containing materials used to clean up, in a plastic bag and tie it securely (see ** above).
- **Notify cleaning crew of areas that have been contaminated (specify respiratory, gastrointestinal, and/or blood-borne body fluids) which may need more than routine cleaning or possible removal such as:**
 - visibly soiled soft materials (e.g., seat cushion)
 - hard surfaces like arm rests and tray tables
 - lavatory used by ill traveler(s)
- **Remind cleaning crew that this may require additional personal protective equipment and that they should follow company policy for such situations**

Note: *If ill traveler(s) changed seats, ensure that both areas are adequately cleaned.*

- **When to see a health care provider after exposure to ill travelers**

Cabin crew members who have been exposed to travelers with known or suspected contagious infections should consult their health care providers shortly after the flight in question if they develop symptoms that concern them (such as fever, rash, persistent cough, vomiting, or diarrhea). Risk of infection depends on many factors, including the type of disease, flight duration, level of exposure, and level of immunity.

To avoid exposing others, crew members who are ill with a contagious infection should not report to work until they have recovered. Crew members who develop symptoms consistent with a contagious infection during flight should discontinue their work duties as soon as it is safe to do so and follow procedures as outlined for ill passengers. Crew members with gastrointestinal symptoms should not prepare or serve food or beverages