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## Ebola Guidance for Airlines

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### Interim Guidance about Ebola Infection for Airline Crews, Cleaning Personnel, and Cargo Personnel

Updated October 15, 2014

CDC requests airline crews to ask sick travelers if they were in Guinea, Liberia, or Sierra Leone in the last 21 days.

1. If YES, AND they have any of these Ebola symptoms—fever, severe headache, muscle pain, vomiting, diarrhea, stomach pain, or unexplained bruising or bleeding—report immediately to CDC.
2. If NO, follow routine procedures.

Purpose: To give information to airlines on stopping ill travelers from boarding, managing and reporting onboard sick travelers, protecting crew and passengers from infection, and cleaning the plane and disinfecting contaminated areas.

### Key Points

#### Ebola video: What Airline Crew and Staff Need to Know

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- A U.S. Department of Transportation rule permits airlines to deny boarding to air travelers with serious contagious diseases that could spread during flight, including travelers with possible Ebola symptoms. This rule applies to all flights of U.S. airlines, and to direct flights (no change of planes) to or from the United States by foreign airlines. [Watch on YouTube \(https://www.youtube.com/watch?v=DgOsEFtLDIU\)](https://www.youtube.com/watch?v=DgOsEFtLDIU)
- Cabin crew should follow routine infection control precautions for onboard sick travelers. If in-flight cleaning is needed, cabin crew should follow routine airline procedures using personal protective equipment available in the Universal Precautions Kit. If a traveler is confirmed to have had infectious

Ebola on a flight, CDC will conduct an investigation to assess risk and inform passengers and crew of possible exposure.

- Hand hygiene (<http://www.cdc.gov/handwashing/>) and other routine infection control measures should be followed.
- Treat all body fluids as though they are infectious.

Updates: Guidance for airline cleaning personnel Updated September 5, 2014

## Stopping ill travelers from boarding aircraft

A U.S. Department of Transportation rule permits airlines to deny boarding to air travelers with serious contagious diseases that could spread during flight, including travelers with possible Ebola symptoms. This rule applies to all flights of U.S. airlines, and to direct flights (no change of planes) to or from the United States by foreign airlines. (See Department of Transportation Title 14 Code of Federal Regulations (<http://airconsumer.ost.dot.gov/rules/Part%20382-2008.pdf>), Part 382.)

## General infection control precautions

Personnel should always follow basic infection control precautions to protect against any type of infectious disease.

## Managing ill people on aircraft if Ebola is suspected

It is important to assess the risk of Ebola by getting more information. Ask sick travelers whether they were in a country with an Ebola outbreak. Look for or ask about Ebola symptoms: fever (gives a history of feeling feverish or having chills), severe headache, muscle pain, vomiting, diarrhea (several trips to the lavatory), stomach pain, or unexplained bleeding or bruising.

The risk of spreading Ebola to passengers or crew on an aircraft is low because Ebola spreads by direct contact with infected body fluids. Ebola does NOT spread through the air like flu.

Even if the person has been in a country with Ebola, cabin crew won't know for certain what type of illness a sick traveler has. Therefore, cabin crew should follow routine infection control precautions for all travelers who become sick during flight, including managing travelers with respiratory illness to reduce the number of droplets released into the air. If in-flight cleaning is needed, cabin crew should follow routine airline procedures using personal protective equipment available in the Universal Precautions Kit.

See CDC's Infection Control Guidelines for Cabin Crew Members on Commercial Aircraft for more information on practical measures cabin crew members can take to protect themselves, passengers, and others.

## Follow these routine precautions

- Keep the sick person separated from others as much as possible.
- Wear waterproof disposable gloves before directly touching the sick person, blood, or other body fluids ([https://www.osha.gov/OshDoc/data\\_BloodborneFacts/bbfact01.pdf](https://www.osha.gov/OshDoc/data_BloodborneFacts/bbfact01.pdf)).
- When providing direct care to a sick traveler who came from a country with an Ebola outbreak, also wear surgical mask (to protect from splashes or sprays), face shield or goggles, and protective apron or

gown (see below: Universal Precaution Kit).

- Do NOT give a surgical mask for someone who is nauseated or vomiting. Wearing a mask could harm a traveler who is vomiting. Give an air sickness bag if traveler is vomiting or reports feeling nauseated.
  - Give a plastic bag for disposing used tissues or soiled air sickness bag.
- Give a surgical mask if a sick traveler is coughing or sneezing, if the sick person can tolerate wearing one. If a mask cannot be tolerated, provide tissues and ask the person to cover mouth and nose when coughing or sneezing.

Notify cleaning crew: Cabin crew should notify the airline's ground and cleaning crews about any ill traveler on board an aircraft so that preparations can be made to clean the aircraft after passengers have disembarked.

Universal Precaution Kits: Airplanes traveling to countries affected with Ebola should carry Universal Precaution Kits, as recommended by the [International Civil Aviation Organization](http://www.icao.int/MID/Documents/2013/capsca-mid3/ICAOHealthRelatedSARPsandguidelines.pdf) (ICAO), for managing ill travelers.

## Reporting ill travelers

The pilot of an international flight bound for the United States is required by law to report any onboard deaths or ill travelers who have certain symptoms to the Centers for Disease Control and Prevention (CDC) before arrival. This is consistent with mandatory reporting standards of ICAO (ICAO document 4444 and Annex 9, Ch. 8, of the Chicago Convention).

CDC staff can be consulted to assist in evaluating an ill traveler, provide recommendations, and answer questions about reporting requirements. Reporting to CDC does not replace usual company procedures for in-flight medical consultation or getting medical assistance.

When necessary, CDC routinely conducts contact investigations to alert passengers and crew of their exposure to ill travelers with certain diseases who were possibly contagious on their flight.

## What to do if you think you have been exposed

If a traveler is confirmed to have had infectious Ebola on a flight, CDC will conduct an investigation to assess risk and inform passengers and crew of possible exposure. Any airline crew, cleaning, or cargo personnel who think they were exposed to Ebola either through travel, assisting an ill traveler, handling a contaminated object, or cleaning a contaminated aircraft should take the following precautions:

- Notify your employer immediately.
- Monitor your health for 21 days. Watch for symptoms of Ebola: fever (temperature of 100.4°F/38°C± or higher), severe headaches, muscle pain, diarrhea, vomiting, stomach pain, unexplained bleeding or bruising.

## When to see a health care provider

- If you develop symptoms after possible exposure to Ebola, get medical attention right away.
  - Before visiting a health care provider, alert the clinic or emergency room in advance about your

possible exposure to Ebola so that arrangements can be made to prevent transmission to health care staff or other patients.

- When traveling to get medical care, limit your contact with other people. This includes avoiding public transportation. Avoid all other travel until you have been medically evaluated.
- If you are not in the United States, contact your employer for help with locating a health care provider. The U.S. embassy or consulate in the country where you are located can also provide names and addresses of local physicians (<http://travel.state.gov/content/passports/english/go/health.html>).

## Guidance for airline cleaning personnel

Ebola spreads through direct contact by touching the blood or other body fluids (like feces, saliva, urine, vomit, and semen) of a person who is sick with Ebola. Infected blood or other body fluids can spread Ebola through breaks in your skin or if they get into your eyes, nose, or mouth.

Treat any body fluid as though it is infectious. Hand hygiene is the most important infection control measure.

When cleaning aircraft and any contaminated areas after a flight with a sick traveler who may have Ebola, CDC recommends that personnel:

Use disposable protective equipment while cleaning the passenger cabin and lavatories. If working with reusable equipment, properly clean and disinfect it after use.

- Waterproof gloves
  - Change gloves if they become dirty or damaged during cleaning.
  - Consider double-gloving if cleaning large amounts of blood or other body fluids.
  - Throw away used gloves according to your company's recommended infection control precautions.
  - Clean hands with soap and water immediately after gloves are removed or when changing gloves. (When soap is not available, use waterless alcohol-based hand sanitizer with at least 60% alcohol.)  
Use only soap and water if hands are visibly dirty.
- Surgical mask
- Eye protection: goggles or face shield
- Long-sleeved, waterproof gown
- Closed-toe shoes and shoe covers. If increased risk of splashing or area appears highly contaminated with body fluids, wear rubber boots or shoe covers. Wear gloves to carefully remove shoe covers to avoid contamination of hands.

## Safe removal and hygiene

- Carefully remove protective equipment to avoid contaminating yourself or your clothes.
- After removing protective equipment, clean your hands. Use only soap and water if hands are visibly dirty.

## Clean affected areas

Use an Environmental Protection Agency (EPA)-registered cleaner/disinfectant that has been tested and approved for use by the airplane manufacturers.

- Lavatory surfaces: door handle, lock, faucet, sink, walls, counter, and toilet seat.
- Sick traveler's seat and the seats around it, seat backs, armrests, tray tables, video monitor, light and air controls, and adjacent walls and windows
  - If a seat cover or carpet is obviously dirty from blood or body fluids, it should be removed and discarded by the methods used for biohazardous material.
- If surfaces are contaminated with large amounts of body fluids (such as blood, vomit, feces), clean off the material before applying disinfectant.

## Special considerations

- Special cleaning of upholstery, carpets, or storage compartments is not indicated unless they are obviously dirty from blood or other body fluids.
- Special vacuuming equipment or procedures are not necessary.
- Do NOT use compressed air, pressurized water or similar procedures, which might create droplets of infectious materials.

## Guidance for air cargo personnel

Packages or luggage should not pose a risk. Ebola virus is spread through direct contact with blood or body fluids (like feces, saliva, urine, vomit, and semen) from an infected person.

- Don't handle packages visibly dirty from blood or body fluids.
- Wash your hands (<http://www.cdc.gov/handwashing/>) often to prevent other infectious diseases.

## Additional information

### From CDC

- [CDC infection control on aircraft for cabin crew](#)
- [CDC Ebola updates \(http://www.cdc.gov/vhf/ebola/index.html\)](http://www.cdc.gov/vhf/ebola/index.html)
- [Ebola Outbreak: Communication Resources for Use by International Partners \(http://wwwnc.cdc.gov/travel/page/ebola-outbreak-communication-resources\)](http://wwwnc.cdc.gov/travel/page/ebola-outbreak-communication-resources)
- [CDC Travelers' Health \(http://www.cdc.gov/travel\)](http://www.cdc.gov/travel) recommendations and updates
- CDC Death and Disease Reporting Tools: [Airlines](#), [Pilots](#), [Cabin Crew](#)

### From other sources

- [International Civil Aviation Association](http://www.icao.int/MID/Documents/2013/capsca-mid3/ICAOHealthRelatedSARPsandguidelines.pdf) (<http://www.icao.int/MID/Documents/2013/capsca-mid3/ICAOHealthRelatedSARPsandguidelines.pdf>) (ICAO): Annex 6–Operation of Aircraft. Part I—International Commercial Air Transport–Aeroplanes; Annex 9 – Facilitation; Procedures for Air Navigation Services – Air Traffic Management (PANS-ATM)(ICAO Document 4444)
- [IATA Guidelines for Cleaning Crew](http://www.iata.org/whatwedo/safety/health/Documents/health-guidelines-cleaning-crew.pdf) (<http://www.iata.org/whatwedo/safety/health/Documents/health-guidelines-cleaning-crew.pdf>): Suspected Communicable Diseases

- Occupational Safety and Health Administration: Flight Attendant/Cabin Crewmembers Health and Safety (<https://www.osha.gov/faa/index.html>) and Bloodborne Pathogens Standard ([https://www.osha.gov/OshDoc/data\\_BloodborneFacts/bbfact01.pdf](https://www.osha.gov/OshDoc/data_BloodborneFacts/bbfact01.pdf)) Fact Sheet
- World Health Organization: Global Alert and Response (<http://www.who.int/csr/disease/ebola/en/>) and Frequently Asked Questions (<http://www.who.int/csr/disease/ebola/faq-ebola/en/>)
- How to find a doctor while abroad (<http://wwwnc.cdc.gov/travel/page/getting-health-care-abroad>)

†Fever temperatures are rounded off as 100°F/38°C in U.S. regulations

(<http://www.gpo.gov/fdsys/pkg/CFR-2013-title42-vol1/xml/CFR-2013-title42-vol1-part71.xml>) and international guidance [PDF - 30 pages] (<http://www.icao.int/MID/Documents/2013/capsca-mid3/ICAOHealthRelatedSARPsandguidelines.pdf>) for reporting purposes.

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### File Formats Help:

How do I view different file formats (PDF, DOC, PPT, MPEG) on this site?

(<http://www.cdc.gov/Other/plugins/>)

(<http://www.cdc.gov/Other/plugins/#pdf>)

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Content source: Centers for Disease Control and Prevention (<http://www.cdc.gov/>)

National Center for Emerging and Zoonotic Infectious Diseases (NCEZID) (</ncezid/index.html>)

Division of Global Migration and Quarantine (DGMQ) (</ncezid/dgmq/index.html>)