# Infection Control Guidelines for Cabin Crew Members on Commercial Aircraft

# **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 postflight 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 provides information on general infection control measures, as well as specific measures according to three infection categories: **respiratory**, **gastrointestinal**, **and blood-borne**.

#### **ILLNESS CATEGORIES**

## Respiratory infections:

**Symptoms:** Viruses or bacteria in the respiratory system (such as measles, tuberculosis, influenza, whooping cough, or some pneumonia) 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 infectious agents. Depending on what is causing the infection, germs may be spread when another person inhales them from droplets or aerosols expelled into the air by a cough or sneeze.

Another way of spreading these germs is by 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. Infection may also be spread through contaminated food or liquids, for example, 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 (Ebola), 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, in the case of hemorrhagic fevers, unexplained bleeding of the skin, eyes, or gums. A person with some of these diseases may not have any symptoms at all, yet still be contagious. Ebola patients, however, are generally not contagious until symptoms present.

**How infection spreads:** Some of these infections can be spread 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 bodily fluids.

## **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.
- o Avoid touching your mouth, eyes, and nose with unwashed or gloved hands.

# • Disposable gloves (gloves do not replace proper hand hygiene)

- o 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
- o Remove gloves carefully to avoid contaminating yourself or your clothing.
- o 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 PERSONS

• 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.
- o Provide tissues, if necessary.
- o 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.
- o 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 the above respiratory illness infection control measures if the ill traveler has a fever and rash

# Gastrointestinal infections

- o Seat the ill traveler(s) close to a lavatory, if possible.
- o If possible, restrict the use of that lavatory to only the ill traveler(s).
- o If traveler is vomiting, provide air-sickness bags.
- o 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).
- o Follow the instructions in "Targeted Clean-Up" below as necessary.

#### • Blood-borne infections

- o 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.
- o Provide a plastic bag for disposing soiled tissues or towels.
- o 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 biohazard bag or plastic bag with a manually applied biohazard label and tie or tape the bag shut securely to avoid leaking.

Dispose of used cleaning materials in a biohazard bag or plastic bag with a manually
applied biohazard label, immediately after use.\*Note: actions should be consistent with
company policy.

# **POST-FLIGHT MEASURES**

- Properly dispose of contaminated items
  - O Place all receptacles that have been used by the ill traveler, as well as all bags containing materials used to clean up, in a biohazard bag or plastic bag with a manually applied biohazard label and tie it securely.
- 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:
  - o visibly soiled soft materials (e.g., seat cushion)
  - o hard surfaces like arm rests and tray tables
  - o 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.

# **REFERENCES:**

Centers for Disease Control and Prevention <a href="http://www.cdc.gov/quarantine/air/managing-sick-travelers/commercial-aircraft/infection-control-cabin-crew.html">http://www.cdc.gov/quarantine/air/managing-sick-travelers/commercial-aircraft/infection-control-cabin-crew.html</a>