



## National Ambulance Service

### Infection prevention and control guidance for aircraft personnel-Emergency Aeromedical Service, Irish Air Corps, Irish Coast Guard

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#### Background

Concerns about 'super-bugs'/'antibiotic resistant bacteria' (e.g. MRSA, CRE) have been raised by aircraft crew following air ambulance flights. This short guide provides information to aircraft crew on basic hygiene measures they can take to protect themselves against all infections during all flights including those used for aeromedical transport.

#### What are super-bugs / antibiotic resistant bacteria?

'Super bugs' is a term used by the media and others to describe germs that are resistant to commonly used antibiotics. MRSA (meticillin resistant staphylococcus aureus), VRE (vancomycin resistant enterococci) and CRE (carbapenem resistant enterobacteriaceae) are examples of antibiotic resistant germs. These germs can be present harmlessly on the skin or in bowel (this is called 'colonisation'), however, as patients receiving healthcare are more vulnerable to infection, precautions are taken to prevent these germs spreading from one patient to another. These germs spread either directly from patient to patient or indirectly via contaminated staff hands or contaminated environment.

#### Are super-bugs// antibiotic resistant bacteria a risk for aircraft crew?

The risk to healthy people is extremely small. These germs do not cause harm to people unless they gain entry to the body (e.g. via a break in the skin when they may cause infection).

### **What infection control measures should be taken by aircraft crew?**

The following measures provide the most effective protection against acquiring or spreading an infection:

1. Hand hygiene is the single most important infection control measure to protect yourself and your patients.
  - a. Wash hands with soap and water for at least 20 seconds before preparing food, eating or after using the bathroom
  - b. An alcohol-based hand cleaner is an alternative to hand-washing but will not be effective if hands are visibly soiled
2. Cover all cuts with a waterproof dressing
3. Cover your mouth when coughing or sneezing, dispose of tissue immediately and wash your hands or use an alcohol-based hand cleaner
4. Treat any body fluid as infectious. This means that disposable gloves should be worn if contact with body fluids is possible.
5. Avoid touching your mouth, eyes, and nose with unwashed hands
6. Ensure your vaccinations are up-to-date

### **Healthcare workers frequently wear gloves and aprons when caring for patients during transport, should aircraft crew wear this equipment also?**

Healthcare workers wear personal protective equipment (PPE), e.g. gloves, aprons and masks, for two reasons:

1. To protect themselves from the patient's body fluids
2. To prevent germs that may be on the patient's clothes, stretcher or medical equipment contaminating their uniform or clothes. This is important as healthcare workers may deliver care to another patient who is particularly vulnerable to infection (e.g. open wounds) immediately after the air transport

Aircraft crew generally do not need to wear PPE during a medical transport as they will not be touching the patient or their equipment. However, disposable gloves should be worn if contact with body fluids (e. used tissues, blood, vomit, diarrhoea) or a potentially contaminated surface (e.g. toilets) is anticipated.

If gloves are worn:

- Remove carefully to prevent contaminating clothes
- Wash hands or use an alcohol-based hand cleaner immediately after removing gloves.

**This is very important to stop your hands becoming re-contaminated from the gloves.**

PPE should be always removed after a procedure and hands washed after removal.

### **How to clean a spillage of body fluid\***

- Gloves and a plastic apron should be worn
- Hard (nonporous) surfaces that are visibly soiled: remove visible contamination, then clean with a detergent and disinfectant agent approved by the aircraft manufacturer
- 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 carefully place it inside a yellow bag and tie or tape the bag shut securely to avoid leaking
- Dispose of used cleaning materials in a yellow bag immediately after use
- Remove gloves and apron and dispose in waste bin
- Wash hands or use an alcohol-based hand cleaner

### **How should the aircraft be cleaned after a medical evacuation?**

- Properly dispose of contaminated items
- Place all items that have been used by the patient (eg plastic cup, emesis bag) in a plastic bag and tie it securely
- Note areas that have been contaminated (visibly soiled soft materials) which may need more than routine cleaning
- Personnel cleaning the aircraft should wear PPE whilst doing so.

### **Source material**

Centre for Disease Prevention and Control. Infection Control Guidelines for Cabin Crew Members on Commercial Aircraft. April 2012 <http://wwwnc.cdc.gov/travel/page/infection-control-guidelines-cabin-crew.htm>

### **Further information can be sourced from:**

[www.hpsc.ie](http://www.hpsc.ie)

<http://www.hse.ie/eng/services/healthpromotion/healthcareassinfection/welcometohcai.html>