

## Public Health Bureau

### **H1N1 Flu Virus (Human Swine Flu) : Recommended Cleaning and Disinfection Procedures for Cruise Lines**

These recommendations are being provided by Health Canada in response to the ongoing outbreak of H1N1 Flu Virus (Human Swine Flu). They have been developed to assist cruise lines in determining appropriate cleaning and disinfection procedures to be used on cruise ships if suspected cases of H1N1 Flu Virus (Human Swine Flu) are identified on board.

Influenza viruses can persist on nonporous surfaces for 24 - 48 hours, but quantities of the virus sufficient for human infection are likely to persist for shorter periods. Although the relative importance of virus transfer from inanimate objects to humans in spreading influenza is not known, hand transfer of the virus to the mucous membranes of the eyes, nose, and mouth resulting in infection is likely to occur. Hand and respiratory hygiene are the principal means of interrupting this transmission. Routine cleaning and disinfection practices also play a role in minimizing the spread of influenza.

*These recommendations are based on current available scientific information about this emerging disease, and are subject to review and change as new information becomes available.*

#### **Equipment to be used for Enhanced Routine Sanitation and Disinfection**

Equipment used for enhanced routine sanitation and disinfection should be kept and stored together as part of a kit which can be easily accessed and transported to the area where it will be used.

- ▶ Personal protective equipment (disposable gloves, eye protection if splashing is expected)
- ▶ Disposable cloths
- ▶ Cleaning detergents and disinfectants
- ▶ Test strips for verification of disinfectant concentrations
- ▶ Bio-hazard waste disposal bags, labels and tape
- ▶ Hand soap and alcohol based hand sanitizer (60 - 90% ethanol concentration)

#### **Enhanced Routine Sanitation**

The following cleaning and disinfection procedures should be used until further notice, in addition to activities normally carried out as part of existing routine sanitation programs.

- ▶ Target the following areas for enhanced routine sanitation activities, using a disinfectant (100 ppm chlorine solution or 1000 ppm accelerated hydrogen

peroxide solution with a minimum contact time of 5 minutes or other disinfectant approved as effective against the influenza virus):

- ▶ Public washrooms
- ▶ Fitness centres and games rooms
- ▶ Corridors, stairwells and elevators
- ▶ Any other common use areas (eg. play areas)
- ▶ Focus sanitation activities on surfaces which are frequently touched by hands such as seats, chairs, arm rests, table tops, counter surfaces, faucet handles, door handles, buttons, switches, hand rails, pay telephones, keyboards etc.
- ▶ Clean heavily soiled surfaces with a detergent and warm water prior to disinfection.
- ▶ Apply the disinfectant to the surface and allow the surface to air dry for a minimum of 5 minutes or as per manufacturers instructions.
- ▶ Frequently replace cleaning and disinfection cloths used, especially when moving from one area to another.
- ▶ Handle and dispose of soiled cleaning cloths, disinfection cloths and disposable gloves properly using waste disposal bags.

### **Disinfection in Response to a Suspected Case of H1N1 Flu Virus**

It is recommended that disinfection be performed in response to a suspected case of H1N1 flu virus onboard a cruise ship, either a passenger or crew member.

### **Disinfection Procedures**

In addition to the Enhanced Routine Sanitation procedures above, use a higher concentration of disinfectant (500 ppm chlorine solution or 5000 ppm accelerated hydrogen peroxide solution with a minimum contact time of 5 minutes or other disinfectant effective against influenza virus with recommended contact time):

- ▶ Identify the affected areas which need to be cleaned and disinfected. These will include areas identified above that may have been occupied by the suspected case.
- ▶ Restrict access to the affected area until cleaning and disinfection activities are completed.
- ▶ Minimize the possibility of cross contamination by bringing all supplies needed to complete the enhanced sanitation activities to the affected area at the beginning of the process.
- ▶ Empty waste disposal containers in the affected area prior to starting surface cleaning and disinfection. Waste disposal containers located in affected areas should be emptied by workers wearing personal protective equipment (gloves).
- ▶ Properly handle and dispose of the waste using waste disposal bags.
- ▶ Start at one end of the affected area and move in one direction until all surfaces have been cleaned and disinfected.
- ▶ Clean heavily soiled surfaces with a detergent and warm water prior to disinfection.

- ▶ Apply the disinfectant to the surface and allow the surface to air dry for a minimum of 5 minutes or as per manufacturers instructions.
- ▶ Clean and disinfect equipment that will be reused prior to putting it back into clean storage.

For further information please refer to the Public Health Agency of Canada website at <http://www.phac-aspc.gc.ca> or contact [phb\\_bsp@hc-sc.gc.ca](mailto:phb_bsp@hc-sc.gc.ca)