

Infection control Guideline

1. Standard infection control precautions for all health-care facilities

Standard precautions include:

a) Hand hygiene:

- Before and after any patient contact.
- After removing gloves or any other PPE item.
- Routine hand hygiene is performed either by using an alcohol-based hand rub (preferably) or by washing hands with soap and water and using a single-use towel for drying hands.
- If hands are visibly dirty or soiled with blood or other body fluids or if broken skin might have been exposed to potentially infectious material, hands should be washed thoroughly with soap and water. Hands should also be washed after using the lavatory.

b) PPE based on risk assessment and to avoid contact with blood, body fluids, excretions, and secretions.

c) Appropriate handling of patient-care equipment and soiled linen.

d) Prevention of needle stick/sharp injuries.

e) Appropriate environmental cleaning and spills-management.

f) Appropriate handling of waste.

Respiratory hygiene/cough etiquette for all health-care facilities

a) Persons with respiratory infection should be educated to:

- cover their mouth and nose with a tissue when coughing and dispose of used tissue in waste containers;
- use a mask if coughing, when a mask is available and can be tolerated
- perform hand hygiene (use an alcohol-based hand rub or wash hands with soap and water) after contact with respiratory secretions; and
- stand or sit at least 1 meter (3 feet) from other persons, if possible
- The distance between beds should be at least 1 meter. Increasing spatial distance between patients may theoretically be helpful in preventing transmission of droplet transmitted diseases
- All HCWs providing care for patients with acute febrile respiratory illness or suspected or confirmed AI infection should use PPE

Family member/visitor recommendations

Visitors should be strictly limited to those necessary for the patient's well-being and care. They should be advised about the possible risk of AI transmission.

- Visitors should be provided with PPE should be instructed in its use and in hand hygiene practices prior to entry into the patient isolation room/area.
- Parents/legal guardians of pediatric patients should be strongly supported to accompany the patient throughout the hospitalization.
- Parents/relatives/legal guardians may assist in providing care to AI-infected patients in special situations (e.g. lack of resources, pediatric patients, etc.) if adequate training and supervision of PPE use and hand hygiene is ensured.

- Because family members may have been exposed to AI via the patient or similar environmental exposures, all family members and visitors should be screened for symptoms of respiratory illness at entry to the facility.
- Family members and visitors with symptoms should be considered as possible AI cases and should be evaluated for AI infection.

Patient transport within health-care facilities

- The movement and transport of patients out of the isolation room/area should be for essential purposes only. The receiving area should be informed as soon as possible prior to the patient's arrival of the patient's diagnosis and of the precautions that are indicated.
- Surgical and procedure masks are appropriate for use by AI-infected patients to contain respiratory droplets and should be worn by suspected or confirmed AI-infected patients during transport or when care is necessary outside of the isolation room/area.
- Patients should perform hand hygiene after contact with respiratory secretions.
- If a mask cannot be tolerated (e.g. due to the patient's age or deteriorating respiratory status) instruct patient to cover nose/mouth with tissue during coughing/sneezing or use the most practical alternative to contain respiratory
- Secretions followed by hand hygiene after respiratory hygiene.
- If there is patient contact with surfaces, these surfaces should be cleaned and disinfected afterwards.
- HCWs transporting masked AI-infected patients should use a gown and gloves, followed by hand hygiene.

Waste disposal

- All waste generated in the isolation room/area should be removed from the room/area in suitable containers or bags that do not allow for spillage or leakage of contents.
- One layer of packing is adequate providing the used equipment and soiled linen and waste can be placed in the bag without contaminating the outside of the bag. Double bagging is unnecessary..
- When transporting waste outside the isolation room/area, use gloves followed by hand hygiene.
- Although the risk of transmission of AI infection via human faeces is unknown, faeces of AI-infected patients should be handled with caution and possible aerosolization of should be avoided.
- Liquid waste such as urine or faeces can be flushed. Close toilet cover when flushing faeces.

Dishes and eating utensils

Use standard precautions for handling dishes and eating utensils used by suspected or confirmed AI-infected patients outside of the isolation room/area.

- When possible, wash reusable items in a dishwasher with detergent at the recommended water temperature. If dishwashers are not available, detergent and

water should be used to wash items. Rubber gloves should be used if washing items by hand.

- Disposable items should be discarded with other general waste

Linen and laundry

The use of standard precautions is recommended for handling linen and other laundry that may be contaminated with blood, body fluids, secretions, or excretions from suspected or confirmed AI-infected patients.

- Place soiled linen directly into a laundry bag in the isolation room/area.
- Contain linen in a manner that prevents the linen bag from opening or bursting during transport and while in the soiled linen holding area.
- Heavily soiled linen should be rolled or folded to contain the heaviest soil in the centre of the bundle. Large amounts of solid material (e.g. faeces) should be removed from linen with a gloved hand and toilet tissue and then placed into a toilet for disposal (close toilet lid when flushing), before linen is placed into the laundry bag.
- When transporting soiled linen and laundry outside the isolation room/area, use gloves followed by hand hygiene.
- Soiled linen and laundry should not be shaken or otherwise handled in a manner that might create an opportunity for contamination of the environment or aerosolization of virus.
- Laundry personnel should use standard precautions and perform hand hygiene after removing PPE that has been in contact with soiled linen and laundry.
- Wash and dry linen according to routine facility standards and procedures

Environmental cleaning and disinfection

- Cleaning MUST precede disinfection.
- AI virus is inactivated by a range of disinfectants including:
 - phenolic disinfectants
 - quaternary ammonia compounds
 - peroxygen compounds
 - sodium hypochlorite (household bleach)
 - alcohol
 - other germicides with a tuberculocidal claim on the label
- Follow the manufacturers' recommendations for use/dilution, contact time, and handling of disinfectants.
- Patient rooms/areas should be cleaned at least daily and terminally at discharge. In addition to daily cleaning of floors and other horizontal surfaces, special attention should be given to cleaning and disinfecting frequently touched surfaces
- To avoid possible aerosolization of AI virus; damp, rather than dry dusting or sweeping should be performed whenever possible; dust horizontal surfaces by moistening a cloth with a small amount of disinfectant.
- During wet cleaning, cleaning solutions and equipment soon become contaminated; clean less heavily contaminated areas first and change cleaning solutions, cleaning cloths, and mop heads frequently.
- The double bucket method (i.e. one bucket for cleaning solution, one for rinsing) is recommended.

- Equipment used for cleaning and disinfection must be cleaned and dried after each use.
- Mop heads should be laundered daily and dried thoroughly before storage or reuse.
- Carpeted areas should not be designated for AI infected patients
- Keep areas around the patient free of unnecessary supplies and equipment to facilitate daily cleaning.
- Do not spray (i.e. fog) occupied or unoccupied rooms with disinfectant. This is a potentially dangerous practice that has no proven disease control benefit.

Preparation of the isolation room:

Recommendation for hospital health care worker

- All suspected and confirmed cases should be isolated
- Isolation room/Area should be identified in advance
- Areas/rooms for isolation should be clearly segregated from other wards.
- The isolation room should be adequately ventilated
- Single isolation room is preferred; if single isolation room is not available then multi-bed rooms can be used
- The Beds should be at least 3 meter apart, no carpets should be allowed
- Doors to these isolation rooms should always be kept closed.
- Isolation rooms should have their own hand-washing sink, toilet, and bath facilities
- Infection control precautions should be indicated through appropriate signage on the door.
- Linen and PPE as needed should be stocked just outside the isolation room.
- Soap and alcohol-based hand rubs should be available in the wash area
- Biomedical waste disposal bags and touch-free bin should be placed in the isolation rooms.
- Sharp disposal container should be available inside the isolation room.
- Daily cleaning and disinfection of the isolation room/area is recommended.
- The isolation room should have an adequate stock of oseltamivir and other essential drugs.
- Non-critical patient-care equipment (e.g. stethoscope, thermometer, and sphygmomanometer) should be dedicated to the patient in the isolation room.
- Any patient-care equipment that is required for use by other patients should be thoroughly cleaned and disinfected prior to use.
- Basic life support equipment, ventilator, pulse oximeters, suction unit and portable X-ray equipment should be available in the isolation room/cohort areas.
- A checklist may be useful to ensure that all equipment is available.
- Isolation at the community level in the existing facilities for managing uncomplicated suspect/ probable cases of AI is recommended. This practice will avoid the need to shift patients over long distances

Removal of the body from the isolation room/area

- PPE should be used by the HCWs.
- The body should be fully sealed in an impermeable body bag prior to removal from the isolation room/area on prior to transfer to pathology or to the mortuary.
- No leaking of body fluids should occur and the outside bag should be kept clean.
- After removing PPE, do hand washing.
- If the family of the patient wishes to touch the body, they may be allowed to do so. But if the patient died in the infectious period, the family should wear gloves and gowns and follow with hand hygiene.
- Transfer to pathology or to mortuary should occur as soon as possible after death.
- Cultural sensitivity should be practiced when an AI patient dies.

Safe handling of dead body

- Mortuary staff should be informed in advance that the deceased had AI.
- If mortuary staff is handling an AI infected patient who died at home, full barrier PPE should be used while at home.
- In the mortuary, mortuary staff and the burial team should use standard precautions when caring for the body. This includes appropriate use of PPE and performance of hand hygiene to avoid unprotected contact with blood, body fluids, secretions, or excretions.
- The body in the body bag can be safely removed for storage in the mortuary, sent to the crematorium, or placed in a coffin for burial.
- If autopsy is being considered, the body may be held under refrigeration in the mortuary.
- Standard infection control precautions should be followed; there is no further risk of airborne or droplet spread of AI.
- If the family wants only to view the body and the face of the deceased, but not touch it, they may be allowed to do so. If the patient died in the infectious period, the family should wear gloves and gowns and perform hand hygiene.