

3. Droplet Precautions

Droplet Precautions are recommended in addition to Standard Precautions for resident with infectious agents transmitted by large droplets. Droplet transmission occurs when large droplets from the respiratory tract of an infected individual are transferred directly on to a mucosal surface or conjunctivae (e.g. eyes, nose, mouth) of another individual. Respiratory droplets are expelled when a person is coughing, sneezing or talking, they may also be expelled during certain healthcare aerosol generating procedures such as intubation. Transmission from large particle droplets requires relatively close contact (approximately 3 feet) between the infected individual and another person.

Examples of infections spread by droplets are influenza, meningococcal disease (for the first 24 hours of antimicrobial treatment), group A streptococcal (for the first 24 hours of antimicrobial treatment) and mumps.

Standard Precautions must always be used in addition to Transmission Based Precautions.

Please discuss individual cases with Infection Prevention and Control for further advice.

Key Elements of Droplet Precautions

Resident Placement

Appropriate resident placement is assessed in conjunction with infection prevention and control or, where relevant the Department of Public Health. A risk assessment will include the suspected/confirmed infection and the infection risk to other resident in the vicinity to determine resident placement.

- A single room with staff hand hygiene and en-suite toilet facilities is the preferred option. The door of the room should remain closed.

A notice should be placed on the room door/area advising visitors and other HCW's to report to staff-in-charge before entering. Signage indicating only the precautions that are required and not information regarding the residents condition to maintain their privacy. Refer to appendix 6.1 for Droplet Precautions signs.

Resident should be educated

- regarding the reason/indication for Droplet Precautions,
- on respiratory hygiene and cough etiquette,
- on how and when to perform hand hygiene. Resident who are unable to perform hand hygiene should be given assistance and

Residents should be requested not to leave the room unless absolutely necessary.

Hand Hygiene

Hand hygiene is the single most important measure in preventing and reducing the spread of infection. In accordance with The WHO Moments for Hand Hygiene, clean hands

1. Before touching a resident.
2. Before aseptic or clean procedures.
3. After blood or body fluid exposure risk.

4. After touching a resident.
5. After touching resident surroundings/environment.

Personal Protective Equipment (PPE)

In addition to the PPE advised for Standard Precautions the following measures apply to resident being cared for using Droplet Precautions:

PPE is

- applied before entering the resident's room.
- put on and removed as outlined in Appendix 6.3 "Donning and Removal of PPE"

Clean hands before leaving the resident room.

Surgical face masks

- A fluid repellent surgical face mask should be worn by all HCW's when undertaking care activities and within 3 feet/1 metre of a resident.
- Masks should be changed when heavily contaminated e.g. wet with breath moisture or if torn or damaged.
- Masks are a single use items.
- Respirator mask (FFP2/3) mask may be required for specific suspected or confirmed infections during aerosol generating procedures such as intubation/manual ventilation of a resident with influenza.

Gloves and Plastic Apron

Gloves and a disposable plastic apron should be worn for all activities that involve direct contact with the residents' skin or surfaces and equipment in close proximity to the client.

During care gloves should be changed and hand hygiene carried out in accordance with the WHO 5 Moments for Hand Hygiene

Resident Transport

The movement and transport of resident should be limited to essential purposes only.

If movement/transport of a resident is necessary

- Inform transport personnel and the receiving department/healthcare facility of the need for Droplet Precautions.
- If tolerated, the resident should be instructed to wear a surgical facemask, and instructed on respiratory hygiene and cough etiquette when moving outside their room.
- Healthcare workers should wear a surgical face mask where a resident is unwilling or unable to wear a surgical face mask.
- Remove and dispose of contaminated aprons and gloves and perform hand hygiene prior to transporting resident on Droplet Precautions.
- Don PPE prior to contact with the resident at the transport destination.
- Transport equipment (stretcher, bed, wheelchair) used for the transfer must be cleaned and disinfected after use.

Care Equipment

In addition to the Standard Precautions the following measures apply to resident on Droplet Precautions:

- Only take essential equipment and supplies into the room. Do not overstock the room as unused stock will have to be discarded on cessation of Droplet Precautions.
- Resident charts/records should not be taken into the room.
- Medical devices (e.g. thermometers, stethoscopes) and resident care equipment (e.g. commode) should be dedicated for individual resident use for the duration of Droplet Precautions. Where possible use single use items.
- If communal equipment is used, such equipment must be cleaned and disinfected in accordance with the manufacturers instructions, immediately after use. For majority of items use
 - a general purpose neutral detergent in a solution of warm water followed by a disinfection solution of 1,000 parts per million (ppm) available chlorine **or**
 - a combined detergent/disinfectant solution at a dilution of 1,000 ppm available chlorine.

Environmental Cleaning

In addition to Standard Precautions the following applies to residents/client being cared for using Droplet Precautions.

- Clean and disinfect the environment using either
 - a neutral detergent and disinfect a general purpose neutral detergent in a solution of warm water followed by a disinfection solution of 1,000 parts per million (ppm) available chlorine **or**
 - a combined detergent/disinfectant solution at a dilution of 1,000 ppm available chlorine.
- The frequency of cleaning and disinfection may need to be increased if resident are producing copious amounts of respiratory secretions.
- Items or surfaces likely to be contaminated with blood or body fluids/excretions/secretions should be cleaned and disinfected immediately.
- Personal protective equipment as recommended above should be worn for environmental cleaning/disinfection due to Droplet Precautions.

Deep cleaning of the environment following transfer/discharge/death of resident who was on Droplet Precautions

Prior to initiating environmental cleaning and disinfection:

- All privacy and window curtains must be removed and sent for laundering.
- All disposable items including paper towels and toilet paper must be discarded.
- All sterile and non-sterile supplies in the resident environment which cannot be reprocessed must be discarded on transfer/discharge.
- Clean and disinfect the environment using either
 - a neutral detergent and disinfect a general purpose neutral detergent in a solution of warm water followed by a disinfection solution of 1,000 parts per million (ppm) available chlorine **or**
 - a combined detergent/disinfectant solution at a dilution of 1,000 ppm available chlorine.

Management of Laundry

All linen from a resident being cared for with Droplet Precautions should be placed in an alginate/water soluble bag for laundering and then placed in the appropriate laundry stream as per local policy.

Occupational Health

In addition to Standard Precautions, staff should be aware of their immune status for infectious pathogens known to be transmissible via droplet route (e.g. mumps). Non-immune staff should avoid direct contact with infected resident. If a staff member is unsure of his/her immune status for a particular pathogen, it is advisable to clarify with Occupational Health Dept.

Visitors

- Visitors should be limited and visitors who are non-immune to the infection should avoid contact until the resident is deemed to be no longer infectious to others.
- Where visiting is essential and visitors are non-immune, visitors should be educated on the precautions needed before and after visiting including
 1. how to put on a surgical mask prior to entering the resident room
 2. how to remove a surgical mask, dispose of it safely and clean their hands and
 3. requested not to visit other resident in the facility.

Duration of Droplet Precautions

Infection Prevention and Control advice should be sought. Droplet Precautions should be continued

- while the resident remain symptomatic
- and/or considered infectious or
- until the completion of effective treatment