

Isolation Precautions

<i>INFECTION</i>	<i>Isolate</i>	<i>Site</i>	<i>Mask</i>	<i>Gown</i>	<i>Gloves</i>	<i>Infective material</i>	<i>Length of isolation</i>	<i>Precautions</i>
Actinomycosis	No	NM	No	No	No			
AIDS / HIV positive immunocompetent #	No*	SR / IW	No	Only if soiling is likely	Handling infective material	Blood & Body fluids	Duration of illness	Body Fluid
AIDS - immunocompromised #	Yes	IR / IW	Yes ~	Yes	Handling infective material	Blood & Body fluids	Duration of illness	Body Fluid
Amoebiasis #	Yes	IW	No	Only if soiling is likely	Handling infective material	Faeces	Duration of illness	Enteric
Anthrax - cutaneous #	Yes	IW	No	No	Handling infective material	Pus	Duration of illness	Strict
Anthrax - pulmonary #	Yes	IW	No	Only if soiling is likely	Handling infective material	Sputum	Duration of illness	Strict
Aspergillosis #	No	NM	No	No	No			
Bronchiolitis - infants	Yes	SR	No	Only if soiling is likely	No	Respiratory secretions	Duration of illness	Respiratory
Brucellosis #	No	NM	No	No	No			
Campylobacter enteritis #	Yes	SR / IW	No	Only if soiling is likely	Handling infective material	Faeces	Duration of illness	Enteric
Chicken pox #	Yes	IW	Yes	Yes	Yes	Respiratory / lesion secretion	Until lesions are crusted	Respiratory / Contact

(Infection) # - Notifiable Infectious Disease; *(Isolate) No** - Isolation not necessary in cooperative patients.
(Mask) Yes ~ - Masks only required for close contact with an anticipated duration of more than 15 minutes.
(Site) NM - Normal Room; *SR* - Single Room without ante-room; *IR* - Single room with ante-room; *IW* - Isolation Ward.

Principles of care

- Isolation becomes necessary when a person poses an infection risk to others so SOURCE ISOLATION.
- When the community at large pose a threat to an individual whose immune system may be severely compromised or deficient the PROTECTIVE ISOLATION may be recommended.

Isolations Precautions - Points to consider

- The Nurse must know all Possible Routes of Transmission of the infectious Disease concerned.
- Knowledge of the Epidemiology of the Pathogen. This will allow modification to clinical practices without the risk of spread of infection.
- Consider the Psychology Effects of Isolation on the patient even before making the decision to isolate.
- Make sure that all Hospital Staff (maids, student nurses, nursing aids, physiotherapist etc) follow the isolation Policy before entering or leaving the room.
- Patient should be Aware of all isolation Procedures.
- Patient is encouraged To Express his/her feelings on how isolation measures are effecting him/her.
- Visitors are told to attend the nurses station before entering the patient's room.
- The cost of providing Isolation facilities, Protective equipment, gloves, mask.
- To inform the Infection Prevention and Control Unit for notification and any possible queries.

Isolation nursing and -Patient Care

- Planning and implementing isolation precautions should be seen as an integral part of meeting the needs of the patient.
- Effectively, this means *ISOLATING THE ORGANISM AND NOT THE PATIENT*.
- The precautions adopted must be compatible with the safety of others and balanced with the individuals own emotions psychological and physical needs.
- In the interest of good communication and safe practice, the precautions adopted should be clearly documented in the patients care plans and in the nursing notes.

Types of Isolation Precautions

- Contact i.e. MRSA
- Strict i.e. Protective isolation
- Enteric i.e. Food poisoning, CD.
- Respiratory i.e. Chicken Pox
- Blood i.e. HIV, Hepatitis B

Isolation Precautions

- Single Room; Single Room with Ante –Room; Isolation Ward.
- Visitors must report to nurse in charge.
- Patient should not leave the room to attend to other departments without prior arrangements.
- An isolation Sign on the door.
- Door closed at all times.
- Gloves Only when handling infectious material (Wash hands before and after using gloves)
- Aprons and Gowns must be worn when handling infectious material.
- Mask or Visors for close contact or long duration only.
- Use of personal sharp containers.
- Use of water soluble bags.
- Chlorine Granules for Spillages.
- Garbage Bags : Yellow.
- Use proper Disinfectant for Terminal Cleaning.
- Inform Infection Control Unit for any queries

Terminal Disinfection

After the room has been vacated, the following should be performed:

- Phenolics (e.g. 2% hycolin) for bacterial infections.
- Place all remaining linen in Water soluble bags and seal the bag.
- Decontaminate all nursing equipment according to the Disinfection Policy
- Remove bed curtains and put in water soluble bags.
- Wall and ceilings Disinfection is sometimes required (e.g. MRSA, chicken Pox, Pul. Tuberculosis)
- Fogging and Fumigation do not form part the terminal cleaning.
- Advise on the type of decontamination can be obtained from the Infection Control Unit.

Modes of Transmission

1) Direct Contact

Patient to Patient
Nurse to Patient

Contact with the skin (hands and face) or personal items (bed cloths) of the diseased person or carrier.

⇒ Pathogen: Cold, Influenza, TB, Staphylococci and Streptococci infection.

2) Direct Contact

Mucus to Mucus

Contact by kissing and sexual intercourse

⇒ Pathogen: Sexually transmitted Disease – Syphilis, HIV, Herpes and Gonorrhoea

3) Indirect Contact

Patient to Nurse
Equipment to Patient

Contamination of equipment from faeces & Urine or from Skin and wound exudate.

⇒ Pathogen: Enterobacterial diarrhoea, Pseudomonas aeruginosa sepsis

4) Blood Contamination

Direct---Needle Stick Injuries, Blood Transfusion

Pathogen: Hiv, Hep B, Hep C

Indirect---By Vector---Rodents and Lice

Pathogen: Malaria, Plague

5) Food Contamination

Indirect contamination of food and water by faecal material, dead or live animals, soil and other sources.

Pathogen: salmonella, Shingelosis

6) Airborne Spread

- Small Particles (c.5 μ m)--Long range (Room to Room)----Mouth.
- Droplet; Short duration (<2 min)
- \Rightarrow Pathogen: Measles, smallpox, Tuberculosis, mumps, pneumonia.

7) Airborne Spread

- Small Particles (c.5 μ m)--Long range (Room to Room)----Mouth.
- Dry particulate ; Long duration (hours and days)
- \Rightarrow Pathogen: Tuberculosis

8) Airborne Spread

- Medium size Particles (c.15-25 μ m)--intermediate range (Same Room)----Nose, skin exudate and infected lesions.
- Droplet; Long duration (hours and days)
- \Rightarrow Pathogen: Staphylococcal and Streptococcal sepsis.

9) Airborne Spread

- Large Particles (c.100 μ m)--Short range (< 3m)----Mouth.
- Droplet; Short duration (< 2 min)
- \Rightarrow Pathogen: Meningococcal, Haemophilus Influenza.

Source of Exit	Route of Transmission	Risk of Transmission
Skin	Skin Scales → Air → Respiratory Tract	Chicken Pox, Measles, Rubella, Staph & Strep Infections.
	Skin to Skin	Impetigo, Scabies, Syphilis, Herpes, Viral Conjunctivitis
Mouth	Ingestion (Food)	Dysentery, Botulism
	Ingestion (Water)	Typhoid, Hep. A.
	Ingestion (Milk)	Brucellosis, T.B.
	Kissing (Saliva)	Herpes, Infective Mononucleosis, HIV ?.
	Sucking, Licking Object	Strep. Throat.
	Sputum	Tuberculosis, Pneumonia
Respiratory	Aerosol Droplet.	Colds, Influenza, Pneumonia,
	Nose or Mouth →	Diphtheria, Mumps,
	Hand or Object →	Chicken Pox,
	Nose or Mouth	Tuberculosis.
Blood Stream	Transfusion, Needle Stick Injuries	HIV, Hepatitis B, Hepatitis C,
Genital Secretions	Urethral or Cervical Secretions, Semen	Gonorrhoea, HIV, Syphilis, Herpes, Cytomegalavirus.
Placenta	Transplacental	Congenital Rubella, Toxoplasmosis, HIV.
Zoonotic	Insect Bites, Animal Bites, Contact with Carcasses	Yellow Fever, Anthrax, Rabies, Lyme Disease, Plague.