

**LTHT Infection Prevention and Control Policies  
Policy No. 9**

**Source Isolation**

**Source isolation is the physical separation of one patient from another, in order to prevent spread of infection. Standard Infection Control Precautions must be observed at all times with all patients, including those in isolation.**

**Scope of policy**

This policy applies to :

- All healthcare staff and students working in LTHT.
- All patients at LTHT.

**Aims**

- To prevent and control the spread of infection within LTHT
- Provide a safe environment for all patients within LTHT

**Key points**

- Decision to isolate a patient should be based on a risk assessment.
- Regular assessment and evaluation of the situation must occur to ensure appropriate use of isolation facilities.
- The patient must be nursed in a single room with a wash basin and preferably an en-suite toilet. If an en-suite toilet is not available, a commode for sole use of the isolated patient should be kept in the isolation room for the duration of the patient's stay.
- When airborne infection risk is present, ensure the isolation room door is closed at all times apart from necessary entrances and exits,
- Limit the number of staff entering the isolation room. Reducing the number of staff who come into contact with the patient will further reduce the risk of spreading the infection.
- If isolation is for a childhood diseases (i.e. infections such as measles, mumps, rubella, for which routine vaccination occurs, or chicken pox), it is preferable that

only staff who are immune to the disease attend to the patient (see specific guidelines, or if necessary, discuss with the Infection Prevention Team and /or Occupational Health Department).

- Psychological support and reassurance must be given to the patient whilst in isolation
- Ensure a source isolation notice is displayed on the door.
- Ensure all staff are aware of the necessary precautions.
- Ensure thorough cleaning of the room/bed space and patient care equipment with Chlor-clean (follow Source Isolation Cleaning Policy)

## **1. How do you decide when isolation is needed?**

The decision to isolate a patient should be based on the infection risk to other patients identified by the staff looking after the patient.

The factors that need to be taken into account when assessing the risk of transferring infection to other patients include

- The site or specimen from which the infection has been isolated (e.g. wound swab, sputum etc).  
Remember, that leaking wounds, drains in situ, exfoliating skin problems and coughing and expectorating patients carry a higher risk of transmission to others due to the nature in which it can be spread, for example a coughing patient will cough out large numbers of micro-organisms which will become airborne, a patient with exfoliating skin problems will shed skin scales in and around the environment which will come into contact with others, similarly a patient with a leaking wound that is striking through a dressing frequently would introduce high levels of infectious exudate into the environment. Patients with infective diarrhoea and/or vomiting can also pass the infection to other patients via their own hands/skin, the hands of healthcare workers and environmental contamination
- Whether the patient has clinical evidence of an infection ( i.e. has associated symptoms) or is colonised (i.e. is asymptomatic)
- The patient has unexplained symptoms of diarrhoea and/or vomiting
- The environment in which the patient is being managed ( i.e. the susceptibility of other patients to the infection)

- The organism that is causing the infection  
Please refer to the specific organism policy.

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The Infection Prevention Team is available to discuss, and assist with risk assessment

- A risk analysis approach should be carried out. For example, patients who wander or have poor hygiene are more likely to cause cross-infection.
- Isolated patients may experience more anxiety and depression. Isolation may hamper rehabilitation. To reduce these risks, preparatory information should be given wherever possible. Staff should explain of the nature of disease or organism, symptoms and treatment to the patient. Control methods and their rationale with advice for patients regarding their responsibility and their adoption of correct measures must also be clearly described.
- Regular assessment and evaluation of the situation, in conjunction with the Infection Prevention Team is necessary to decide if isolation of the patient remains the most appropriate form of care.

## **2. How to prepare the room.**

- Make sure that all unnecessary equipment and furniture are removed from the room, this will facilitate cleaning and limit the items, which may become contaminated.
- It is important that the equipment in the room is dedicated to the isolated patient.
- Do not overstock the room, as equipment that cannot be cleaned will need to be disposed of.
- All personal belongings and equipment should be washable, cleanable or disposable.

- Discourage the patient from keeping unnecessary belongings in the room, but remember the need for psychological care of the patient whilst he/she is in isolation.
- Place isolation sign on the door (see appendix). The sign is designed to inform anyone intending to enter the room of the situation, but not label the patient as being infectious.
- Set up a trolley/table/shelf outside the room with single use gloves and aprons, ensure these are well stocked at all times. Ensure that alcohol hand rub/gel is available within the constraints of COSHH.
- Keep charts and kardex **OUTSIDE** the room to reduce the risk of contamination.
- Make sure the hand wash basin is stocked with appropriate hand hygiene product (discuss with the Infection Prevention Team if necessary) and paper towels.
- Place orange clinical waste bag, sharps bin, water soluble alginate bag for infected linen in the room.

### **3. How to care for the patient**

- Standard Infection Control Precautions must be used at all times.(please see LTHT Standard Infection Control Precaution policy)

#### **Hand hygiene**

- Strict and thorough hand washing is mandatory after any direct contact with the patient or his/her immediate environment e.g. bed making, moving the patient, cleaning etc. Don't forget to cleanse hands after removing gloves.
- Soap and running water is adequate for hand hygiene or use Alcohol based hand rubs before and after patient contact. Alcohol based hand rubs are an alternative to hand washing on visibly clean skin or a supplement to hand washing to achieve a higher level of disinfection. (See Hand Hygiene Policy)
- Encourage the patient to cleanse their hands before eating and after going to the toilet.

#### **Protective clothing**

- Wear single use gloves for direct patient contact, contact with body fluids, potentially infectious material or when touching items in the environment which may be contaminated.

- Wear single use plastic yellow apron for close patient contact (e.g. bed bathing, moving patient), when in close contact with potentially infected material (e.g. bed making), and any other situation when contamination of clothing may occur.
- Remove apron, then gloves and discard promptly into orange clinical waste bag. Wash and dry hands thoroughly after having removed protective clothing and before leaving the isolation room. Use the alcohol hand rub/gel outside the room.
- There is little evidence that the routine use of masks contributes to preventing cross infection, except in certain circumstances  
Refer to TB policy. If in doubt, discuss with the Infection Prevention Team.
- Protection of eyes, nose and mouth may be necessary if blood/body fluid sprays or splashes are possible, refer to Standard Infection Control Precautions. The following options are available: safety spectacles, goggles, masks and visors. Visors usually offer the best protection.

### **Disposal of body fluids, waste and linen**

- Dispose of all excreta promptly, preferably by discarding it directly into the bedpan washer/macerator or the patient's own toilet.
- Use protective cover for bedpans/urinals/vomit bowls when transporting to the sluice room.
- Protective clothing used within the isolation room may be worn to the sluice room, but discarded immediately into orange clinical waste bag after disposal of excreta.
- Ensure thorough and frequent cleaning of the commode/toilet using Chlorclean solution of 1000ppm.
- Deal with any blood/body fluid spillage immediately, wearing appropriate protective clothing and disinfecting the spillage with 10,000 ppm chlorine releasing solution. (using the Biohazard Spill Kit)
- Place waste contaminated with blood/body fluids directly into the orange clinical waste bag in the isolation room. As soon as these bags are 2/3 full the bags must be tied in a swan neck and a tag attached indicating place of origin. The bags must be removed from the room to the waste storage area and a new orange clinical waste bag placed in the isolation room.
- All linen within the isolation room must be placed into water soluble alginate bags. This includes unused linen when the room is no longer required for isolation purposes. The alginate bags must then be placed into the red plastic laundry bags.

- Double bagging of clinical waste and linen is unnecessary, as studies have shown that the outer surface of the bags does not become significantly contaminated.
- Place all disposable sharps in the sharps bin immediately after use.

### **Crockery/cutlery**

- All crockery/cutlery must be decontaminated in a dishwasher with a final rinse temperature of 80°C.
- Washing by hand is inadequate without a final rinse for one minute at 80°C.
- There is no requirement for disposable crockery and cutlery to be used.

### **Bathing**

- To reduce the risk of cross-infection, patients with infections must be bathed last.
- Always clean the bath with chlorclean (1000ppm) after the isolated patient has used it, this method of disinfection is fine after infected patients.
- Showers may be used and the same criteria as above used.

### **Dressings**

- All wounds should be dressed in the isolation room using aseptic technique.

### **Cleaning**

- Follow the Source Isolation Cleaning Guidelines using Chlor-clean to thoroughly clean the room/bed space and patient care equipment.
- The nurse in charge must inform the locality supervisor of the need for isolation cleaning.
- The vacated bed, bed frame and mattress must be thoroughly cleaned with Chlor-clean before it can be reoccupied (See Terminal Cleaning Protocol).

- Isolation rooms should be cleaned last; after other rooms, bays and general areas on the ward
- Single use gloves and yellow aprons must be worn when cleaning the isolation rooms and hands washed before leaving the room.
- Special attention must be given to all horizontal surfaces and frequently touched surfaces, such as door handles/door push plates, nurse call system, toilet areas and sink taps.
- Following discharge or transfer of the patient from the isolation room, the room must be thoroughly cleaned (see Terminal Cleaning Protocol). Curtains and walls need only be washed if visibly soiled.

### **Investigations/visits to other departments**

- Ideally, investigations should be performed in the isolation room.
- If visits to other departments/wards are unavoidable; please contact the receiving department to ensure that adequate precautions are taken. If there are any problems please contact the Infection Prevention team.
- In principle the patient from the isolation room should be last on the list to minimise contact with other patients. The same precautions taken on the ward should be carried out in the department.

### **Transfers to other wards/health care institutions**

- These should only take place if unavoidable; please discuss with the Infection Prevention Team.
- The receiving ward must be informed and a single room arranged.
- The Infection Prevention Team will inform the relevant Infection Prevention Nurse about the transfer to other institutions
- The patient's health should take priority over the infection problem and will require medical clarification; e.g. if the patient is required to be transferred to ITU or CCU.

## **In the case of death**

- In order to protect the mortuary staff; follow the LTHT policy for handling deceased patients with known infection.

### **4. What about visitors/parents/carers?**

- Explain the reason for isolation, maintaining confidentiality at all times, ( if available, give information leaflet on specific infection)
- Advise on hand hygiene and/or other precautions. Encourage visitors not to have contact with other patients on the ward.
- **Visitors need only wear protective clothing if they are going to have close contact with the patient, eg. helping with patient's physical care, or if otherwise advised.**
- Discuss with the Infection Prevention Team, or see specific disease policy to ascertain if visitors should be excluded from visiting due to particular susceptibility.

### **5. When can isolation precautions be stopped?**

- When the patient is no longer at risk of spreading infection to others.
- Frequent assessment and evaluation of the patient's situation is therefore important (see risk assessment - page 2)
- Some specific disease policies give criteria on when isolation precautions can be stopped.
- If in doubt, discuss with the Infection Prevention Team.
- Make sure the vacated room is thoroughly cleaned (see Terminal Cleaning Protocol). Use the same solutions and equipment that have been used for isolation cleaning. All equipment and belongings must be cleaned before being brought out of the room or used again. Any unused disposable items, which may be contaminated and cannot be cleaned, must be disposed of.

## References and further reading

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## **Glossary of terms**

### **Host**

A living organism (in this case man) which another organism can live and be sustained on or within.

### **Carriage / or carrier**

Can be defined as a person that harbours a specific disease in the absence of signs and symptoms of infection and is therefore potentially infectious to others. The carrier state may exist in the individual as unknown (healthy, asymptomatic carrier) or during a period of convalescence. In either case the carrier state may be of a short duration (transient carrier) or long term duration (chronic carrier)

### **Cleanable**

The ability to be cleaned easily or without damage.

### **Colonisation:**

Can be described as when bacteria that are able to cause infection are found in a non-infected site. (Therefore have not initiated a host response), e.g. *Staphylococcus aureus* carriage in the nose.

### **Disposable**

Designed to be discarded after single use.

### **Infection**

Can be described as a host reaction to microbes lodging and multiplying in the tissues, e.g. abscesses, wound infections or chest infections. (The host would exhibit symptoms of infection for example fever of >38 deg C, and associated symptoms at/in the site of infection.

### **Washable**

Capable of being washed without shrinking, fading or the like

## Consultation

Infection Control Steering Group

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## **Appendix 1**

### **ISOLATION PRECAUTIONS - PLANNING GUIDE**

These guidelines have been devised to assist ward staff in the prevention of transmission of infection within the hospital environment. They outline the recommended Infection Control precautions and the need for patient isolation dependent on infection.

Standard Precautions are the foundation of all Infection Control procedures and are applicable to all patients.

For further advice and guidance please contact Infection Prevention on 22691

## **Routes and Modes of Transmission**

### **Direct and Indirect Contact :**

Transfer from body surface to body surface or between an infected or colonised person and susceptible host (DIRECT). Contact with contaminated objects or surfaces in the environment (INDIRECT).

### **Droplet:**

Micro-organisms transmitted through the air within droplets, mainly saliva.

### **Airborne:**

Micro-organisms carried in droplet nuclei or by dust particles (SKIN SCALES or CLOTHING FIBRES).

### **Ingestion:**

Ingested into the body with food or water causing gastrointestinal infections and excreted in the faeces.

### **Vector:**

Transmission via insects or rodents.

<b>Infection</b>	<b>Side Room Required</b>	<b>Mode of Transmission and Route of Spread</b>	<b>Duration</b>	<b>Precautions Required</b>
Campylobacter	Yes; especially if patient confused	Direct and Indirect Contact  Faeces	Until 48 hrs symptom free	Standard
Chicken Pox	Yes	Direct and Indirect Contact  Airborne/Respiratory Secretions	Until active symptoms resolve; and all lesions have erupted and crusted over. Chickenpox is infectious 4 days prior to development of rash.	Standard
CJD and vCJD (see LTHT policy for TSE for further guidance).	No	Direct and Indirect Contact	Throughout Admission	Standard
Clostridium Difficile (see LTHT policy Clostridium Difficile Infection)	Yes; Strict environmental cleaning.	Direct and Indirect Contact  Faeces	Until 48 hrs symptom free	Standard

<b>Infection</b>	<b>Side Room Required</b>	<b>Mode of Transmission and Route of Spread</b>	<b>Duration</b>	<b>Precautions Required</b>
Diarrhoea +/- Vomiting	Yes	Direct and Indirect Contact	Until 48 hrs symptom free	Standard
E Coli 0157	Yes	Direct and Indirect Contact  Faeces	Until 48 hrs symptom free	Standard
Hepatitis A, E	Yes	Direct and Indirect Contact  Faeces	Two weeks from onset of Jaundice.	Standard

<b>Infection</b>	<b>Side Room Required</b>	<b>Mode of Transmission and Route of Spread</b>	<b>Duration</b>	<b>Precautions Required</b>
Hepatitis B, C, D	No; unless actively bleeding	Direct and Indirect Contact  Blood and Bodily Fluids	Only if actively bleeding	Standard; extra precautions may be necessary. To risk assess
Human Immuno-Deficiency Virus	No; unless actively bleeding, significant opportunistic infections or if indicated by CD4 count.	Direct and Indirect Contact  Blood and bodily fluids	No; unless actively bleeding	Standard  To risk assess dependant on task
Influenza	Yes	Direct and Indirect Contact Airborne  Respiratory Secretions	For Duration of illness	Standard

<b>Infection</b>	<b>Side Room Required</b>	<b>Mode of Transmission and Route of Spread</b>	<b>Duration</b>	<b>Precautions Required</b>
Leptospirosis	No	Direct and Indirect Contact  Urine and blood	Dependant on severity of illness.	Standard
Measles	Yes	Direct and Indirect Contact  Airborne	1 week from onset of rash. Measles is infectious for 4 days prior to rash development.	Standard

Meningococcal Meningitis and Septicaemia	Yes; until 24 hrs appropriate antibiotics to eradicate bacteria from mouth and throat	Direct and Indirect Contact Airborne  Respiratory Secretions	At least 24 hrs	Standard
Meningitis (Pneumococcal, Haemophilus, Viral and other Causes)	No  Haemophilus; close contact requires prophylaxis	Direct and Indirect Contact  Respiratory Secretions	N/A	Standard

<b>Infection</b>	<b>Side Room Required</b>	<b>Mode of Transmission and Route of Spread</b>	<b>Duration</b>	<b>Precautions Required</b>
MRSA	Yes; if unable to isolate contact ICT.	Direct and Indirect Contact	Whilst in hospital and remains positive.	Standard
Mumps	Yes	Direct and Indirect Contact Airborne  Respiratory Secretions	Infectious until 9 days after onset of parotid swelling	Standard
Multi Resistant Organisms  (VRE, ESBL's and Gentamicin Resistant Coliforms)	Yes; seek advice from ICT if unable to isolate	Direct and Indirect Contact  Wound exudate and bodily fluids	Duration; dependant of severity of infection	Standard
Rotavirus	Yes	Direct and Indirect Contact Airborne	Until 48 hrs symptom free	Standard

<b>Infection</b>	<b>Side Room Required</b>	<b>Mode and Route of Transmission</b>	<b>Duration</b>	<b>Precautions Required</b>
Respiratory Syncytial Virus (RSV)	Yes	Direct and Indirect Contact Airborne  Respiratory Secretions	Duration	Standard; appropriate masks to be used by staff entering the room whilst RSV nebuliser treatment being administered.
Rubella	Yes	Direct and Indirect Contact Airborne  Nasopharyngeal Secretions	Infectious from approximately 5 days of onset of rash	Standard
Salmonella	Yes	Direct and Indirect Contact  Faeces, blood and urine	Until 48 hr symptom free	Standard
Scabies	No, will vary on patient. Contact ICT for further advice	Direct Contact, less likely indirect skin contact	Until treated	Standard

<b>Infection</b>	<b>Side Room Required</b>	<b>Mode and Route of Transmission</b>	<b>Duration</b>	<b>Precautions Required</b>
Streptococcal Infection- Haemolytic Streptococcus Group A(Scarlet fever, Impetigo and Erysipelas)	Yes; dependant on severity of infection. Discuss with ICT for further advice	Direct and Indirect Contact Airborne  Exudate from lesions Respiratory Secretions	Until 24 hrs of completed treatment and or signs of clinical improvement.	Standard
Pulmonary Tuberculosis	Yes	Airborne and Droplet  Sputum and Respiratory Secretions	Until patient has been compliant with treatment for two weeks. After which time risk assessment will be required alongside clinical judgement and assessment of patient.	Standard; although patient may be required to wear mask if attending other departments/ and been on treatment for less than 2 weeks
Multi Drug Resistant Tuberculosis	Yes, patients require negative pressure room	Airborne and Droplet  Sputum and Respiratory Secretions  Bone tissue and exudate	Throughout Admission	Standard; always wear a mask (type FFP 33 Hepafilter). Single use only and discard

<b>Infection</b>	<b>Side Room Required</b>	<b>Mode and Route of Transmission</b>	<b>Duration</b>	<b>Precautions Required</b>
Tuberculosis Meningitis	Yes	Direct and Indirect Contact  Airborne and Droplet  Oropharyngeal secretions and sputum	Throughout Admission/ variable to severity of disorder	Standard
Tuberculosis (Non Infectious)	Not always required; seek advice from ICT.	Direct and Indirect Contact  Various sites of infection	Dependant on clinical symptoms	Standard
Viral Haemorrhagic Fever	Yes; always discuss with ICT.	Direct and Indirect Contact  Airborne  Blood and Bodily Fluids	Throughout admission	Standard; seek urgent advice first from ICT for further necessary precautions

**Please report to nurse in charge  
before entering.**

**Wash your hands before leaving the  
room.**

Infection Prevention Team

*Thank you*

**Please wash your hands  
before leaving.**

Infection Prevention Team

*Thank you*