Infection Prevention and Control for Phlebotomy

POLICY STATEMENT:

It is Sunnybrook’s Policy to prevent the spread of infection within the health care institution from patient to patient, patient to staff, staff to patient by:

a) providing a system that emphasizes the use of barrier precautions when contact with body substances is anticipated with all patients;

b) ensuring that staff are complying with the Healthy Workplace Policy;

c) using aseptic technique as indicated.

DEFINITION (S):

Triage for Ambulatory Care:

Assessment of every patient for any respiratory symptoms, fevers of unknown origin, and/or vomiting and diarrhoea should be made as soon as each patient enters the area and appropriate precautions instituted as the assessment indicates.

Body Substance Precautions (BSP)

BSP is a system that involves the use of wearing barrier precautions appropriately with all patients to reduce the risk of disease transmission between patients and staff when exposed to body substances. BSP emphasizes the need for individual assessment of the degree of exposure anticipated and informed judgement in the use of specific barrier techniques.

Body Substances

Include blood, body fluids, oral secretions, sputum, emesis, urine, faeces, wound drainage, tissue, and any other moist body substances, but not tears or perspiration.
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PROCEDURE:

A. Triage:

If patient answers yes to the triage questions for respiratory symptoms, fever of unknown origin, and/or vomiting and diarrhoea, they are to be segregated in a separate area and droplet precautions are to be used when caring for the patient.

B. BASIC PRINCIPLES OF BODY SUBSTANCE PRECAUTIONS

These principles apply to the management of all patients and all laboratory specimens.

1. Effective hand hygiene is indicated after any type of direct patient contact. [See Section C, General Patient Care Practices, Hand Hygiene & Handwashing]
2. Gloves are worn for all contact with blood, secretions, excretions, drainage of body fluids, mucous membranes, non-intact skin (including rashes) and moist body substances. Gloves are also worn if there are any open areas on hands of health care providers.
   - Gloves are changed after each patient and/or procedure.
   - Hand hygiene is performed before gloves are put on and after gloves are removed.
   - Gloves are not necessary for contact with the intact skin of any patient.
3. Gowns and/or plastic aprons are worn when body substances are likely to soil clothing or skin.
4. Masks and protective eyewear are worn when:
   - Body substances are likely to splash skin or mucous membrane
   - For performing droplet/aerosol generating procedures
5. Patients with diagnosed or suspected infections transmitted by the respiratory route (droplet or airborne), should be in a single room. Masks are to be worn according to hospital policy.

   a. In-patients: when providing care for an in-patient follow the directions on the “Stop Sign” that indicates the required protective barriers that must be worn:
      - Airborne infections: Negative pressure room is required. Door to be kept closed. If masks required, an N95 mask is to be used (e.g. TB). For some infections only immune staff may enter and masks are not required (e.g. chicken pox).
      - Droplet infections: Single room preferred. High efficiency mask, protective eyewear, gloves and gown are required.
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b. In an ambulatory care setting:
   - the phlebotomist is to use droplet precautions when patients have active respiratory symptoms, fever of unknown origin or has vomiting or diarrhoea.
   - Place a surgical mask on the patient and segregate them from other people a minimum of 3 feet apart.
   - Staff must follow droplet precautions; high efficiency mask, protective eyewear, gloves and gown are required.
   - Single room preferred for the patient. If this is not possible, the patient should be three feet away from another person.

6. Recapping, bending, or breaking needles is not recommended. Where recapping is unavoidable, only safety-approved methods are employed. Syringes, needles, sharps and disposable instruments are discarded in designated puncture resistant containers.
7. Vacutainer holder and tourniquet are single use and must be discarded after each patient.
8. All specimens from all patients are managed using Body Substance Precautions; hence no biohazard labels are used on specimens transported within the institution.
9. Soiled Reusable Articles, Linen, and Garbage should be contained securely enough to prevent leakage. Double bagging is not necessary unless the outside of the bag is visibly soiled.
10. Outbreak Management
    In the event of an outbreak, additional precautions will be employed on the advice of the Infection Prevention and Control.
C. MANAGEMENT OF DIAGNOSED INFECTION

Follow directions on the STOP sign. For more details refer to specific policies on the Sunnybrook intranet Infection Prevention and Control Policy and Procedure section. Consistent use of Body Substance Precautions eliminates the need for additional precautions (isolation precautions) except for infections with a stop sign on the door indicating what precautions should be used.

Airborne

Airborne transmission refers to the dissemination of microorganisms, contained in droplet nuclei or dust particles, by aerosolization. These particles are so small that they can remain suspended in the air for long periods of time and may be inhaled by susceptible hosts.

The following are examples of organisms spread by airborne transmission:

- Tuberculosis (laryngeal or pulmonary)
- Varicella (Chickenpox)
- Measles
- Smallpox
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**Droplet**
Droplet transmission refers to large droplets, which are generated when the patient coughs or sneezes or during procedures that can induce a cough (e.g. suctioning, bronchoscopy). The droplets travel a short distance and may be deposited on the nasal or oral mucosa of an individual and cause infection. Droplets do not remain suspended in air, but do settle on objects in the environment where some respiratory viruses may survive for long periods of time. These can then be picked up on the hands of healthcare personnel and transmitted to the health care worker and/or other patients.

The following are examples of organisms spread by droplet transmission:
- *Haemophilus influenzae*, type b
- *Neisseria meningitidis*
- *Bordetella pertussis*
- Respiratory syncytial virus (RSV)
- Influenza virus

Patients admitted with known or suspected illnesses spread by droplet transmission should ideally be placed in a private room. Masks, protective eyewear, gloves and gown are to be worn to enter the room. Place “STOP SIGN” on the door.

**NOTE:** In addition, patients admitted with pneumonia, COPD/asthma with probable infection, CHF with a fever, or fever of unknown origin are to be placed on droplet precautions.
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PROTECTIVE ENVIRONMENT (PE)/REVERSE ISOLATION

1. The principle of this form of protection is to restrict the number of people to whom the patient is exposed; therefore neutropenic patients should ideally be placed in a single room. Immunocompromised patients should not be rooming with patients who are acutely infected.

2. To protect immunocompromised patients the key principles are
   • thorough hand hygiene on entry to the patient’s room.
   • anyone entering the patient’s room must be free of acute infections (e.g. respiratory, gastrointestinal).

3. Minimize the length of time that immunocompromised patients in PE are outside their rooms for diagnostic procedures and other activities.

D. DISCONTINUING ADDITIONAL PRECAUTIONS:

Only Infection Prevention and Control may discontinue additional precautions.

References:


# Infection Prevention and Control for Phlebotomy

**Precautions to be Used in Addition to BSP and Hand Hygiene**

**FOR ALL CARE OTHER THAN AEROSOL GENERATING PROCEDURES**

<table>
<thead>
<tr>
<th>Immune Staff/Visitors Only</th>
<th>Mask</th>
<th>Protective Eyewear</th>
<th>Gown</th>
<th>Gloves</th>
<th>Single Room</th>
<th>Door Closed</th>
<th>Negative Pressure Room</th>
<th>Dedicated Equipment</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chickenpox</td>
<td>YES</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>No</td>
<td>Open one door at a time. Bathroom door must remain open when not in use to allow for air exchanges in room.</td>
</tr>
<tr>
<td>Clostridium difficile</td>
<td>N/A</td>
<td>No</td>
<td>No</td>
<td>YES</td>
<td>YES</td>
<td>NO</td>
<td>YES</td>
<td>No</td>
<td>Special cleaning protocols. Clean environment thoroughly before discontinuing precautions.</td>
</tr>
<tr>
<td>Diarrhea III. (NYD)</td>
<td>N/A</td>
<td>NO</td>
<td>YES</td>
<td>YES</td>
<td>YES with toilet</td>
<td>NO</td>
<td>No</td>
<td>Yes</td>
<td>Notify IP&amp;C</td>
</tr>
<tr>
<td>MRSA</td>
<td>N/A</td>
<td>YES</td>
<td>No</td>
<td>YES</td>
<td>YES</td>
<td>NO</td>
<td>No</td>
<td>Yes</td>
<td>Mask needed to prevent self inoculation by touching nose.</td>
</tr>
<tr>
<td>New or undiagnosed fever or respiratory symptoms</td>
<td>N/A</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>No</td>
<td>YES</td>
<td>IP&amp;C to assess precautions daily until etiology determined.</td>
</tr>
<tr>
<td>IV. SARS</td>
<td>N/A</td>
<td>YES N95 or equivalent</td>
<td>YES</td>
<td>YES</td>
<td>YES with toilet</td>
<td>YES</td>
<td>Preferred</td>
<td>YES</td>
<td>Notify IP&amp;C</td>
</tr>
<tr>
<td>Shingles - Localized</td>
<td>YES</td>
<td>Chickenpox</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>YES</td>
<td>No</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Shingles - Disseminated</td>
<td>YES</td>
<td>Chickenpox</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>YES</td>
<td>YES</td>
<td>No</td>
<td>Disseminated - extends beyond contiguous dermatomes and/or extends to dermatomes across the midline.</td>
</tr>
<tr>
<td>TB - Pulmonary</td>
<td>N/A</td>
<td>YES N95</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>YES</td>
<td>YES</td>
<td>No</td>
<td>Open one door at a time. Bathroom door must remain open when not in use to allow for air exchanges in room.</td>
</tr>
<tr>
<td>TB - Laryngeal</td>
<td>N/A</td>
<td>YES N95</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>YES</td>
<td>YES</td>
<td>No</td>
<td></td>
</tr>
</tbody>
</table>

*Uncontrolled when printed from Internet and Intranet*
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Precautions to be Used in Addition to BSP and Hand Hygiene (cont’d)

### For All Care Other Than Aerosol Generating Procedures

<table>
<thead>
<tr>
<th>Immune Staff/Visitors only</th>
<th>Mask</th>
<th>Protective Eyewear</th>
<th>Gown</th>
<th>Gloves</th>
<th>Single Room</th>
<th>Door Closed</th>
<th>Negative Pressure Room</th>
<th>Dedicated Equipment</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vomiting OR Vomiting &amp; Diarrhea (NYD)</td>
<td>N/A</td>
<td>YES</td>
<td>No</td>
<td>YES</td>
<td>YES with toilet</td>
<td>No</td>
<td>No</td>
<td>YES</td>
<td>Notify IP&amp;C</td>
</tr>
<tr>
<td>VRE</td>
<td>N/A</td>
<td>No</td>
<td>No</td>
<td>YES</td>
<td>YES</td>
<td>No</td>
<td>No</td>
<td>YES</td>
<td>Notify IP&amp;C</td>
</tr>
</tbody>
</table>

Special cleaning protocols
Environmental cultures to be taken after patient discharge and room cleaned

### Aerosol Generating Procedures

<table>
<thead>
<tr>
<th>Immune Staff/Visitors only</th>
<th>Mask</th>
<th>Protective Eyewear</th>
<th>Gown</th>
<th>Gloves</th>
<th>Single Room</th>
<th>Door Closed</th>
<th>Negative Pressure Room</th>
<th>Dedicated Equipment</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>All patients (except those listed below)</td>
<td>N/A</td>
<td>YES</td>
<td>V. YES</td>
<td>YES</td>
<td>YES</td>
<td>No</td>
<td>YES</td>
<td>No</td>
<td>Pull curtains around bed.</td>
</tr>
<tr>
<td>New or undiagnosed Fever or Respiratory symptoms</td>
<td>N/A</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>No</td>
<td>YES</td>
<td>Notify IP&amp;C to assess patient</td>
</tr>
<tr>
<td><em>SARS</em></td>
<td>N/A</td>
<td>YES</td>
<td>N95 or equivalent</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>Notify IP&amp;C to assess patient</td>
</tr>
</tbody>
</table>

Examples of Aerosol Generating Procedures:
- Intubation/Extubation
- Bronchoscopy
- Suctioning
- Chest tube insertion
- *BIPAP* (avoid on SARS pts if possible)
- *HFO* (avoid on SARS pts if possible)
- *Jet Ventilation* (avoid on SARS pts if possible)
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BODY SUBSTANCE PRECAUTIONS IS FOR ALL PATIENT CARE
Body substances include oral secretions, blood, urine and feces, wound or other drainage.

- Wash hands.
- Wear gloves when likely to touch body substances, mucous membranes or nonintact skin.
- Wear plastic apron/gown when clothing/skin is likely to be soiled.
- Wear mask/eye protection when likely to be splashed.
- Do not recap, bend or break needles. Discard in puncture-resistant container provided.
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Check with Nurse before entering

STOP

In addition to BSP

- ✓ Hand hygiene (15 seconds) before entering and exiting room
- □ Immune persons only
- □ Mask: N95____ PCM 2000____
- □ Protective eyewear (eyeglasses not adequate)
- □ Gown
- □ Gloves
- □ Door closed
- □ Negative pressure room
- □ Dedicated equipment