Take Charge:

A guide to infection prevention and control in homeless shelters
Revised June 2011

This manual was produced by Peel Public Health. Sections of this manual were produced all or in part, with permission, from Toronto Public Health’s *Breaking the Chain Infection Control Manual, March 2006.*
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Introduction

Infection prevention and control programs were first developed in hospitals as a means of reducing the spread of communicable disease in acute care settings. Similar programs have since been developed in long term care facilities, schools and some child care centres, using the same basic infection control principles, applied to specific populations and settings. Whenever infection prevention and control measures have been introduced, their effectiveness in reducing the spread of communicable disease has been demonstrated.

Community facility programs such as shelters and group homes also need infection control guidelines. These settings have common characteristics that can include shared living space, communal food preparation, child care and transient resident populations with potential health issues. The staff in community facility programs generally does not have health care backgrounds. However, whether staff, volunteer, visitor or client/resident, the actions of people impact on the number and types of communicable infections in the facility.

Preventing and controlling infections starts with information. These guidelines are intended to provide staff and clients/residents of community shelters and group homes with practical information on infection prevention and control. The information in this manual can be used by facility staff to develop site specific policies and procedures. It is a tool to provide you with the information you need in order to stay healthy and reduce the risk of infection for everyone.

The manual includes:
- Practical tools such as fact sheets and posters that may be copied and handed out to clients/residents
- Guidelines for environmental safety and workplace health
- Guidelines for Safe food Handling
- Outbreak management resources including checklists
- Information on specific infectious diseases

The manual is available in on-line format. It will be updated as new infection prevention and control information and guidelines become available.

More information
For more information on infection prevention and control call Peel Public Health at 905-799-7700 or check our web site at www.peelregion.ca/health/
Chapter 1

General Knowledge

• Homelessness and health
• Glossary of terms
• Health system roles and responsibilities
• Privacy and confidentiality
• Public health emergencies
Homelessness and health

Many people in the Region of Peel become homeless or live in very poor housing due to circumstances of poverty, unemployment and/or a lack of affordable housing. Often, other factors such as mental illness, drug dependency and/or abusive home environments can contribute to homelessness.

People who are homeless or living in poor housing, may find it difficult to maintain proper hygiene, stay healthy, fight disease and infection. It may be difficult for them to get healthcare services and follow-up, nutritious food, adequate sleep and exercise. These are all important in keeping our bodies healthy and in helping to prevent disease.

In shelters and other homeless service programs large numbers of transient people may live and/or socialize together. They often share eating, sleeping and bathroom facilities and thus are in close contact with others who may have an infection.

One of the best defences against acquiring an infection is to maintain a strong and healthy body. Those who provide services to people who are homeless or poorly housed should constantly be striving to help them maintain and improve their overall health as a way to prevent infection, as well as promoting healthy practices such as hand hygiene in an effort to prevent the spread of infections.
## Glossary of terms

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Airborne transmission</strong></td>
<td>Small droplets containing infectious organisms (germs) can survive in the air for long periods of time and travel considerable distances and may be inhaled by others. For example, TB, chickenpox, measles are spread this way.</td>
</tr>
<tr>
<td><strong>Bacterium/Bacteria (plural)</strong></td>
<td>Bacteria are specific types of organisms/germs that can be found almost anywhere. For example, on your hands and in your food, etc.. Some bacteria are “good” and can assist in the digestion of food, and many other important processes. Other bacteria are “bad” and are able to infect living organisms and cause infections which can lead to disease.</td>
</tr>
<tr>
<td><strong>Blood-borne disease</strong></td>
<td>A disease spread through direct blood-to-blood contact. For example, HIV &amp; Hepatitis B.</td>
</tr>
<tr>
<td><strong>Case</strong></td>
<td>A person identified as having a particular disease.</td>
</tr>
<tr>
<td><strong>Cleaning</strong></td>
<td>Removing visible debris such as dirt from a surface, usually done with water, detergent and friction.</td>
</tr>
<tr>
<td><strong>Cluster</strong></td>
<td>A number of people closely grouped in time or place, such as a family, community group, who all have, or are suspected of having common symptoms, disease or infection.</td>
</tr>
<tr>
<td><strong>Cohorting</strong></td>
<td>Assignment of a room or client/resident care area to two or more clients/residents with the same infection to prevent further transmission.</td>
</tr>
<tr>
<td><strong>Common vehicle transmission</strong></td>
<td>Spread of an infectious organism (germ) through a common source such as contaminated food or medication, to more than one individual.</td>
</tr>
<tr>
<td><strong>Contact time</strong></td>
<td>Refers to disinfecting and sanitizing with chemicals. The amount of time the chemical must be in contact with the surface to achieve the level of disinfection or sanitization described by the manufacturer.</td>
</tr>
<tr>
<td><strong>Contagious/communicable</strong></td>
<td>Capable of being spread or transmitted from one individual to another.</td>
</tr>
<tr>
<td><strong>Direct contact transmission</strong></td>
<td>Occurs through touching e.g. an individual may spread germs to others through touching another person with contaminated hands or gloves.</td>
</tr>
<tr>
<td><strong>Disease</strong></td>
<td>Illness or sickness often characterized by typical patient problems (symptoms) and physical findings (signs).</td>
</tr>
<tr>
<td><strong>Disinfection</strong></td>
<td>A process/product that kills or destroys most disease causing organisms/germs. Disinfection can only be achieved if the surface has been cleaned prior to applying the disinfectant and the disinfectant is used according to the manufacturers directions (contact time, etc.).</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
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</tr>
<tr>
<td>Droplet transmission</td>
<td>Infectious organisms (germs) from an infected person are expelled as droplets when a cough or sneeze is not covered and can travel up to 2 metres where they may enter another person's eyes, nose or mouth, or may fall onto surfaces. Influenza is spread by droplet transmission.</td>
</tr>
<tr>
<td>Drug resistance</td>
<td>The ability of an organism (germ) to withstand a drug that once would have killed it or slowed its growth. For example, antibiotic resistance.</td>
</tr>
<tr>
<td>Epidemic</td>
<td>A greater than expected number of people within a specific region (e.g., community, province or country) during a given time period, with a specific illness.</td>
</tr>
<tr>
<td>Epidemic curve</td>
<td>Graph with the number of sick people on the vertical axis (y-axis) and time/date on the horizontal axis (x-axis).</td>
</tr>
<tr>
<td>Fungus/fungi (plural)</td>
<td>A fungus is a plant-like organism that invades or grows on other organisms and gets its food from that organism. Some fungi can grow either on or inside people.</td>
</tr>
<tr>
<td>Germ/Infectious agent/organism</td>
<td>Germ is a common term used to describe bacteria, viruses, parasites or fungi capable of causing a disease in a person or animal.</td>
</tr>
<tr>
<td>Indirect contact transmission</td>
<td>Spread of infectious organisms (germs) by touching a contaminated object such as a doorknob or toy and then bringing the germ into your body by touching eyes, nose or mouth.</td>
</tr>
<tr>
<td>Isolation</td>
<td>Separating infected people from healthy people to prevent or reduce the spread of an infection (Isolation is different from quarantine.)</td>
</tr>
<tr>
<td>Mantoux Testing</td>
<td>A tuberculosis (TB) skin test to find out if a person has TB infection or was exposed to it in the past. This test is also called a Tuberculin Skin Test.</td>
</tr>
<tr>
<td>Microbiology</td>
<td>A science which studies microscopic (tiny) organisms (germs), some of which can be infectious.</td>
</tr>
<tr>
<td>Outbreak</td>
<td>A local (e.g., household, school) increase in the number of people with a particular disease or infection.</td>
</tr>
<tr>
<td>Pandemic</td>
<td>Pandemic occurs when a disease spreads easily and rapidly throughout the world.</td>
</tr>
<tr>
<td>Parasite</td>
<td>An organism that lives on or in and takes its nourishment from another organism. Sometimes parasites can cause symptoms and disease.</td>
</tr>
<tr>
<td>Personal Protective Equipment (PPE)</td>
<td>Equipment used to help protect a person from catching an infectious organism. Personal protective equipment can include such things as face protection (masks, eye goggles, shields), gowns and gloves.</td>
</tr>
<tr>
<td>Reportable disease</td>
<td>Specific diseases that must be reported by physicians and laboratories to Public Health under Provincial law.</td>
</tr>
</tbody>
</table>
**Routine Practices** | Preventive actions that must be taken whenever there is a risk of contact with, or exposure to any person's bodily secretions. e.g. use of PPE, hand hygiene
---|---
**Sanitize** | A process that reduces the number of germs on a surface to a safe levels. A surface must be cleaned prior to the sanitization process.
**Sexual contact transmission** | Spread of infectious organisms (germs) from an infected person to another person through sexual contact (e.g., vaginal, oral or anal sex)
**Sputum test** | A test of mucous coughed up from the lungs for certain diseases such as tuberculosis disease
**Sterilization** | A process by which all germs and/or organisms on a surface are destroyed or eliminated. This is usually done in specific settings such as health care.
**Surveillance** | Continuously monitoring populations for infection and/or disease
**Vector-borne transmission** | Occurs when an individual is bitten by an animal or insect, carrying infectious organisms (germs). Examples are rabies from infected animals and West Nile virus from infected mosquitoes.
**Ventilation** | Air flow or movement
**Virus** | Smallest and simplest infectious organism (germ). Like bacteria, some viruses are able to enter living organisms and to infect them, which can result in disease. Influenza is caused by a virus.
Health system roles and responsibilities

The health system is made up of a diverse group of people and agencies who work to promote health and treat sickness. This section is designed to give you an idea of the wide scope of services and people working to promote health in this community.

Regulated healthcare professionals
Regulated healthcare professionals include those people who fall under the Provincial Regulated Health Professions Act. These professionals are allowed to perform certain procedures and/or assessments on patients, have certain reporting obligations in the law and are responsible for their practice. They are also licensed and monitored by their professional college, which sets standards and can take enforcement action if necessary. There are 22 regulated health professions in Ontario* and they include (but are not limited to):

- Physicians and Surgeons
- Registered Nurses, Registered Practical Nurses and Nurse Practitioners
- Chiropractors
- Dentists
- Midwives
- Occupational Therapists
- Pharmacists
- Psychologists

Other health workers/professionals
There are many individuals who have specific training and/or experience, which allows them to deliver a wide range of health-related services to people. The services provided by health workers/professionals include health promotion, health inspection, personal support and even advanced emergency medical care provided by licensed paramedics.

Community Care Access Centres (CCACs)
Community Care Access Centres (CCACs) provide one-stop access to health and personal support services to help people to live independently in the community or assist them in making the transition to a long-term care facility. They also provide information about, or link individuals to, services available in the community. Anyone can make a referral to a CCAC.

Hospitals and Community Health Clinics (CHCs)
The health system is also made up of hospitals and Community Health Clinics (CHCs). Community health clinics and centres offer many primary health and promotion services to people within a specific community. Some community health centres receive specific funding to work with homeless people and families. Hospitals offer a wider range of services than can be found in the community and tend to focus on providing acute or complex illness care to those
in need. Hospitals can range from smaller community-based centres, to larger institutions that can offer more specialities, teaching and research services.

**Peel Public Health**

In Peel Region, public health is the responsibility of the Regional Municipality of Peel, with Regional Council as the governing body. Peel Public Health is part of the Health Services Department. Funding is provided by the Government of Ontario and the Region of Peel. Peel Public Health is the local public health unit for the cities of Brampton, Caledon and Mississauga.

Much of the work of Peel Public Health is carried out in partnership with the voluntary sector, school boards, business, labour, governments at all levels and other health care agencies and professionals. Our aim is to improve and maintain the health of the population; reduce disparities in health across the population; prepare for, and respond to, emergencies and outbreaks of disease; and enhance the sustainability of the health care system.

Divisions of Peel Public Health include:

- Office of the Medical Officer of Health
- Environmental Health (includes food safety, drinking water quality, recreational water quality, enteric disease investigation, rabies control, personal services settings, health hazard investigation)
- Chronic Disease and Injury Prevention (includes smoking cessation, health education)
- Sexual Health and Communicable Disease Control (includes tuberculosis, sexually transmitted infections, vaccine preventable infectious diseases, immunization, disease surveillance, infection control)
- Family Health (preconception, reproductive health, breastfeeding, healthy babies, healthy children and healthy parenting)

Peel Public Health professionals investigate health hazards in the community, enforce public health legislation, educate and promote healthy behaviour. Public health staff will investigate reports from healthcare professionals, hospitals, laboratories and community members of confirmed or suspected cases of reportable diseases and community health hazards.
Other government agencies/ministries

**Ontario Ministry of Health and Long-Term Care**
The Ministry funds healthcare and provides services to the Ontario public through such programs as health insurance, drug benefits, assistive devices, care for the mentally ill, long-term care, home care, community and public health, health promotion and disease prevention. It also regulates hospitals and nursing homes, operates psychiatric hospitals and medical laboratories and coordinates emergency health services.

**Public Health Agency of Canada (PHAC)**
This agency assists in coordinating national efforts to prevent chronic diseases, like cancer and heart disease, prevent injuries and respond to public health emergencies and infectious disease outbreaks. The Public Health Agency of Canada works closely with provinces and territories to keep Canadians healthy.

**Ontario Agency for Health Protection and Promotion (OAHPP)**
This agency provides scientific and technical support and advice to Government, public health units and health care providers and institutions. OAHPP, at the direction of Ontario’s Chief Medical Officer of Health, will also provide support in responding to health related emergencies and outbreaks, such as SARS and H1N1 influenza.

**Health Canada**
Health Canada is the federal government department responsible for helping Canadians maintain and improve their health. Health Canada conducts research and regulates products, issues advisories and product recalls.

**Canadian Food Inspection Agency (CFIA)**
The CFIA is responsible for food safety, animal health and plant health at the federal level. The CFIA ensures imported food products; plants and animals do not pose a hazard to Canadians. The CFIA issues advisories and food recalls.
More information

- Peel Public Health
  www.peelregion.ca/health/

- Ontario Ministry of Health and Long-Term Care

- Public Health Agency of Canada
  www.phac-aspc.gc.ca/about_apropos/index.html

- Canadian Food Inspection Agency

- Health Canada
  http://www.hc-sc.gc.ca/index-eng.php

- Ontario Agency for Health Promotion and Protection
  http://www.oahpp.ca

- Central West Community Care Access Centre
  http://peel.cioc.ca/record/CWL0017

- Mississauga Halton Community Care Access Centre
  http://peel.cioc.ca/record/MHL0129
Privacy and confidentiality

Your agency should have a policy on privacy and the release of information. When dealing with matters of health it is important to remember that everyone has a right to privacy. In fact, this is a requirement of the law. All institutions that deal with the public have policies in place to make sure client/resident privacy and confidentiality are respected. But respecting privacy ultimately depends on you. It is essential that we always remember to respect a resident/client’s privacy as a matter of trust. Some exceptions do apply such as when a person indicates they will harm themselves or others. Even in these circumstances, only the information that is absolutely necessary to assist the person should be released and only to a health professional. It is very important to understand that betraying this trust will not only reflect badly upon you as an individual, but it will also affect your organization’s ability to effectively serve the public. Refer to the Personal Health Information and Protection of Privacy Act, 2004.

Out of sight?
When dealing with client/resident files, lists, names, etc. make sure they are out of sight of the general public. Remember to close files, be discreet with appointment lists and keep written materials away from the front or public desk. When not in use, client/resident files should be stored in a secure area and locked.

Within earshot?
If you must discuss a resident/client’s health issues with a colleague or a private matter with a client/resident, make sure you do so in a private space. People have a right to have their personal details kept private. As well, clients/residents may not be open with you if they feel others might be listening.

Who needs to know?
Think carefully about who needs to be involved in discussing a resident/client’s health issues and what exactly they need to know. Never give information about a client/resident to a resident/client’s family member, friend or to an outside agency without the permission of the client/resident. Again, some exceptions do apply.

In order to build trusting relationships, privacy is EVERYONE’S responsibility!

Confidentiality and public health
There are occasions when public health agencies (government agencies) will legally require the name and personal information of people with certain infectious diseases or symptoms and/or their contacts. These diseases are called “reportable diseases” in the Health Protection and Promotion Act. The information gathered is needed to prevent further spread of a serious infection to others. Personal information can only be gathered and used in a restricted way.
and the identity of the client(s) will not be released to staff or other individuals at a shelter.

**Privacy Legislation**

- Municipal Freedom of Information and Protection of Privacy Act
- Personal Health Information Protection Act (PHIPA) 2004

*Some exceptions do apply. Consult with your agency’s privacy policy on release of information.*

**Public health emergencies and outbreaks**

In terms of infectious disease emergencies and outbreaks such as SARS and pandemic influenza, homeless populations are a unique challenge. One must take into consideration that groups of people may be living together and sharing kitchen or washroom facilities and that it may not be easy to provide isolation or quarantine, to track contacts and to watch staff and clients/residents for signs of illness. These are the types of challenges to think of when planning for public health emergencies and outbreaks.

Peel Public health planning is ongoing and preparations are made in cooperation with such agencies as police, fire services, emergency medical services, hospitals, shelters, community agencies, etc. As well, the cities of Brampton, Caledon and Mississauga work very closely with both federal and provincial governments to make sure everyone is prepared to respond.

**More information:**

- Peel Region Emergency Programs (PREP)  
  [http://www.peelregion.ca/prep/](http://www.peelregion.ca/prep/)

- The Government of Ontario  
  [www.mpss.jus.gov.on.ca/english/pub_security/emo/about_emo.html](http://www.mpss.jus.gov.on.ca/english/pub_security/emo/about_emo.html)

- Government of Canada  
  [getprepared.ca](http://getprepared.ca)

- The Canadian Red Cross  
  [www.redcross.ca](http://www.redcross.ca)
Chapter 2
Infection Prevention and Control

• What is infection prevention and control (IPAC)?
• What is an infection?
• Chain of Transmission
• Routine practices
  1. Risk assessment
  2. Hand hygiene
  3. Personal protective equipment/barriers
  4. Environmental control
  5. Personal health management
  6. Blood & body fluid exposure
• Disinfecting solutions and blood/body fluid clean-ups
• Needle Exchange Program (NEP) and harm reduction
• Sexually transmitted infections
• Prevention of respiratory infections
• Gastrointestinal symptoms
• Resources and supplies
What is infection prevention and control (IPAC)?

Infection prevention and control involves the education, preparation and actions that are taken by all individuals to prevent or reduce the spread of infectious organisms within a community or group of people. The use of infection prevention and control practices in a shelter/group home setting should address the infection risks among clients/residents, between clients/residents, staff and volunteers and between the home and the community. The program should strive to reduce the risk of infection while maintaining the quality of life for the clients/residents of the home. By addressing these risks and applying IPAC practices you may:

- Decrease the spread of communicable diseases between clients/residents/staff/volunteers
- Reduce the risk of spreading communicable disease to visitors and the public
- Protect the facility from outbreaks of communicable disease
- Improve the overall well being of clients/residents

What is an infection?

Understanding what causes infection and disease is the first step in being able to prevent and control it.

An infection occurs when an organism (germ) enters the body and starts to multiply, often causing signs and symptoms of infection. Such signs and symptoms can include redness, swelling, heat, coughing, nasal discharge, eye discharge, diarrhoea, etc.

Chain of transmission

In order for infections to occur, a series of events must happen. This is called the chain of transmission. There are six links in the chain of infection and each link must connect for an infection to occur. Our goal is to break the chain and stop the infection from occurring. To do this, it is essential to understand each link and how they connect.
1. **Organism (germ)** – virus, bacteria, parasite or fungi that may produce an infection and is capable of causing disease. Some germs can survive for hours or even days in the environment e.g. the influenza virus can survive five minutes on unwashed hands and up to 48 hours on a smooth surface such as a countertop.

2. **Reservoir** – place where the organism (germ) can live and reproduce e.g. person, animal, soil

3. **Portal of exit** – the way the organism leaves the person, animal etc – These include blood, respiratory tract (cough, sneeze), gastrointestinal tract (stool, vomit), genitourinary tract, skin and mucous membranes, placenta.
4. **Mode of Transmission** – how an infectious organism (germ) is spread. These include contact, droplet and airborne:

   i) **Contact**
   
   Contact may be direct contact or indirect contact. **Direct contact** occurs through touching, e.g. an individual may spread germs to others through touching another person with contaminated hands or gloves or through sexual contact. **Indirect contact** is the spread of infectious organisms (germs) by touching a contaminated object such as a doorknob or toy and then bringing the germ into your body. This can happen by touching the eyes, nose or mouth with contaminated hands.

   ii) **Droplet**
   
   Infectious organisms (germs) from an infected person are expelled as droplets when a cough or sneeze is not covered. Germs from an uncovered cough or sneeze can travel up to 2 metres where they may enter another person’s eyes, nose or mouth, or may fall onto surfaces that people touch with their hands.

   iii) **Airborne**
   
   Small droplets containing infectious organisms (germs) can survive in the air for long periods of time and travel considerable distances and may be inhaled by others. For example, TB, chickenpox and measles are spread this way.

   iv) **Vector borne**
   
   Occurs when an individual is bitten by an animal or insect, carrying infectious organisms (germs). Examples of vector borne diseases are West Nile Virus which is transmitted from the bite of an infected mosquito and rabies which is transmitted from the bite of an infected warm blooded animal such as a dog, cat or bat.

5. **Portal of Entry** – how the organism (germ) enters a susceptible individual. For example, inhaling virus particles, eating contaminated food.

6. **Susceptible host** – a person lacking resistance to particular organism (germ). For example, the very young, elderly, non-immunized and depressed immune system such as cancer patients, transplant patients, diabetics and alcoholics.
Routine practices

Overview
Routine practices (formerly known as “universal precautions” or “blood-borne precautions”) are universally recognized strategies to prevent and control infections. They are based on the principle that **any person** may be carrying an infection and that their blood and body fluids potentially contain illness-causing organisms. Simply put, if we treat everyone as if they have an infection, and protect ourselves, then the chances that we will be accidentally exposed to an organism are smaller. Consequently, specific actions must be taken whenever there is a risk of contact with, or exposure to any person’s bodily secretions.

Practicing proper hand hygiene, covering a cough or sneeze, using personal protective equipment (PPE), such as gloves, and cleaning and disinfecting environmental surfaces are all basic routine practices. Routine practices include:

- Risk assessment
- Hand hygiene
- Personal protective equipment/barriers
- Environmental controls (cleaning and sanitizing)
- Personal hygiene and other specific activities

Health care professionals and frontline care providers have adopted this principle around the world. It is a simple idea, but when used regularly and properly, the results are impressive.

1. **Routine Practices - risk assessment**

   Before each interaction with a client/resident or their environment, it is important to assess the risk for potential exposure to blood, body fluids, mucous membranes, non intact skin or contaminated equipment or surfaces. Consideration should be given to the following factors:

   - The type of interaction e.g. is physical care such as foot care being provided
   - The characteristic of the client/resident e.g. cooperative, physically assertive
   - The immune status of client/resident (if known) and staff members. For example, are staff member vaccinations up to date
   - Observation of any symptoms that may indicate a communicable illness such as cough, sneezing, diarrhea

2. **Routine Practices - hand hygiene**

   Hand hygiene includes washing hands at a sink with soap and running water or the use of alcohol based hand rub.

   Regular hand hygiene is considered one of the most effective ways to reduce the spread of infection.
The “When” of hand hygiene

Staff members should wash their hands upon entering the shelter. Hands should be washed thoroughly for 15 seconds.

Staff members should wash their hands frequently throughout the day for at least 15 seconds with soap and clean running water, with attention to the following situations:

- After having physical contact with a person, their bodily fluids or belongings
- Before and after having contact with food (including breastfeeding)
- Before eating
- Before and after wearing gloves
- When your hands are obviously dirty
- After using the toilet
- After sneezing, coughing or blowing your nose
- Before and after smoking cigarettes
- After changing a diaper
- After handling soiled items or equipment e.g. after cleaning rooms or handling soiled linen
- After leaving the shelter; at least upon arrival at home

Staff members should encourage shelter clients/residents to also wash their hands upon entering the shelter and at key times to help prevent infections in the shelter.
The “How” of hand hygiene

Washing with soap and water

<table>
<thead>
<tr>
<th>Step</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Turn on taps and adjust to a comfortable temperature</td>
<td>Water that is too hot or too cold will damage skin</td>
</tr>
<tr>
<td>Wet hands with warm water</td>
<td>If applied to dry hands, soap will dry the skin</td>
</tr>
<tr>
<td>Apply soap to palm of hand</td>
<td>Use pump style soap. Bar soap quickly becomes contaminated and can spread organisms. One squirt of soap should provide enough to wash your hands.</td>
</tr>
<tr>
<td>Lather soap and rub palm to palm, in between and around fingers paying attention to backs of hands, fingertips, thumbs and wrists for 10-15 seconds.</td>
<td>Soap and friction are needed to remove organisms. It is important that all surfaces have contact with the soap.</td>
</tr>
<tr>
<td>Rinse thoroughly under running water</td>
<td>If hands are not rinsed thoroughly, any residual soap left on the hands will dry the skin</td>
</tr>
<tr>
<td>Pat hands dry with paper towel</td>
<td>Rubbing hands with paper towel will abrade the skin and result in chapped skin.</td>
</tr>
<tr>
<td>Turn off taps with paper towel</td>
<td>Using paper towel to turn off taps prevents your clean hands from becoming contaminated. If paper towel is not available, turn taps off by using elbows if possible.</td>
</tr>
</tbody>
</table>

- See www.peelregion.ca/health for a hand washing poster

Consider posting hand hygiene reminder signage near all sinks.
Using alcohol based hand rub:

<table>
<thead>
<tr>
<th>Step</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inspect hands to ensure that no visible dirt is present</td>
<td>Visible dirt will interfere with the ability of the alcohol in the waterless hand sanitizer to clean hands</td>
</tr>
<tr>
<td>▪ Apply 1 to 2 pumps of alcohol based hand rub to palms of dry hands</td>
<td>Sufficient hand rub is needed to cover all surfaces. If hands are dry in less than 15 seconds, then not enough hand rub was dispensed.</td>
</tr>
<tr>
<td>▪ Rub hands together palm to palm</td>
<td>It is important that all surfaces come into contact with the sanitizer to ensure that any germs have been destroyed.</td>
</tr>
<tr>
<td>▪ Rub in between and around fingers</td>
<td></td>
</tr>
<tr>
<td>▪ Rub back of each hand with palm of other hand</td>
<td></td>
</tr>
<tr>
<td>▪ Rub fingertips of each hand in opposite palm</td>
<td></td>
</tr>
<tr>
<td>▪ Rub each thumb clasped in opposite hand</td>
<td></td>
</tr>
<tr>
<td>▪ Rub hands until product is dry. Do not use paper towels</td>
<td>Hands should not be wiped dry with paper towel. This will reduce the effectiveness of the sanitizer.</td>
</tr>
</tbody>
</table>

See the Peel Health Hand hygiene signage: [Clean Your Hands](#)

Although widely used, alcohol based products range in alcohol concentration from 60% to 90%. Recent studies suggest that norovirus and other viruses are inactivated by alcohol concentrations of 70% to 90%. Therefore, it is preferable that a minimum concentration of 70% alcohol be chosen for use. (OAHPP, 2008). Products may be in the form of gels, foam, liquid or lotion and contain emollients to prevent skin from drying.

Be aware – alcohol-based hand rubs are poisonous if ingested and are flammable. Consider offering the hand rub from a wall mounted or other type of controlled dispenser to avoid misuse of the product.

**Hand hygiene should be encouraged with your clients/residents using the above “when” and “how” principles.**
Questions and answers

What kind of soap is the right kind of soap?

Use pump style soap. Bar soap quickly becomes contaminated and can spread organisms. Antibacterial soaps are not recommended for routine use.

What about alcohol based hand rubs?

Alcohol based hand rubs are very effective in killing most germs and can be handy when soap and water are not available. However, if there is dirt/debris on the hands, it must be washed off with soap and water. If you are not able to access running water and soap such as when doing outreach, “clean” your hands with a moist disposable wipe.

More information
Region of Peel Health – Hand hygiene

3. Routine Practices - personal protective equipment/barriers

One way to reduce the spread of infection is through the use of barriers. By physically blocking the germ from getting to you or others, the risk of infection is avoided. Some examples of barriers include gloves and masks.

Gloves

- Use gloves whenever physical contact is expected with any bodily fluid such as saliva, blood, mucous, feces or non intact skin
- Wear gloves only once and discard after each client/resident. Do not re-use gloves, do not wash & re-use gloves.
- Wash hands before and after using protective gloves. Gloves alone are not a substitute for hand hygiene.
- Make sure you receive training on the proper way to remove gloves that have been in contact with body fluids. See Poster
- Do not handle equipment or objects with contaminated gloves
- Never double glove

Masks

- Use an “N95” mask when giving direct support to someone who may have TB. N95 masks have to be fit-tested ahead of time specifically for the person who will be wearing them.
• Have clients/residents wear a surgical mask if they are coughing, until they can be assessed by a medical professional. This will help prevent infectious droplets from getting into the air.
• Wear mask and eye protection (goggles or face shield) if there is a possibility of splashing or spraying of blood or body fluids
• Change mask according to the manufacturer’s direction and if it becomes wet. Wash hands after removal.

More information

- Peel Public Health’s hand hygiene brochure
  www.region.peel.on.ca/health/pandemic/downloads/handbrochure.pdf
- Ontario Ministry of Health and Long-Term Care

4. Routine Practices - environmental control

Maintaining a high standard of cleanliness is important in reducing the spread of infection in any place. This is very important within a shelter or drop-in. It is often challenging for homeless people to maintain good personal hygiene, and it is important that the facility be cleaned thoroughly and regularly.

Some guidelines for environmental cleaning include:
- Cleaning products should be:
  o selected on the basis of effectiveness, safety and cost
  o used according to manufacturer’s instructions
  o stored in a safe manner
  o appropriate to the task
- Cleaning should proceed from least to most soiled areas e.g. bathrooms last
- Areas/objects that are touched frequently by a lot of people including door knobs/handles, window latches, taps in bathroom sinks, light switches, telephones and handles on toilets should be thoroughly cleaned and
disinfected. These areas should be cleaned more frequently during outbreaks or peak periods for infections such as influenza season.

- Spills involving blood or body wastes should be cleaned up immediately with disposable towels and placed in a plastic bag for disposal in regular garbage. The area should be cleaned and disinfected.
- Medical gloves should never be used when handling cleaning chemicals. For environmental cleaning and disinfecting, general purpose reusable rubber gloves are appropriate.
- Cleaning schedules should be established to ensure appropriate cleaning and disinfecting.
- A vacuum should be used regularly on cloth fabric furniture and rugs/carpets.
- Specific attention should be given to how individual pieces of furniture will be cleaned. Ideally, shared surfaces such as bathtubs should be cleaned with a diluted bleach solution. While this is not possible with most cloth or fabric, it is recommended that contaminated upholstered furniture be cleaned thoroughly to remove as much debris as possible and then shampooed afterwards. Mattresses should be completely enclosed in plastic covers, as should pillowcases. Furniture such as tables and chairs used for eating should be cleaned with a diluted bleach solution after every meal.
- Housekeeping staff should be educated on additional cleaning required during outbreaks.

**Garbage disposal**
Discard all contaminated disposable material (e.g., paper towels) in a sealable plastic bag. Make sure when disposing of garbage that you do not reach into the bag or step on it with your feet. Empty waste containers frequently. Bags should never be too full (three-quarters) but if a bag is overflowing, use a tool (e.g., tongs) to empty excess garbage into a second bag. Never use your hands! Be sure to wash/clean your hands after handling garbage.

Local municipal regulations on waste handling must be followed. For example, recycling, hazardous waste disposal and sharps disposal.

**Sharps disposal**
Used syringes, needles and razors must be carefully thrown-out in a designated sharps disposal container made of puncture resistant, unbreakable material. Most shelters should have contracts with sharps disposal companies. If not, consult waste disposal companies listed in the Yellow Pages under waste management, the Region of Peel Waste Management Department or check with a local pharmacy.
Laundry

Some guidelines for laundry services include:

- Donated clothing should be laundered before use/distribution.
- Personal protective equipment such as disposable gloves should be available for use in sorting/handling laundry soiled with blood or body fluid.
- Appliances should be cleaned when visibly soiled.
- Laundry should be collected in a manner that prevents contamination of the environment. Use baskets/hampers lined with a disposable or washable liner.
- Laundry soiled with blood or body fluid should be washed as soon as possible.
- Sorting should be done in a way that prevents the contamination of clean laundry.
- Usual cycles of household washing machines are adequate.
- Clothes should be dried in an automatic dryer.
- Clean laundry should be stored in a way that prevents contamination.

5. Routine Practices - personal health management

Personal hygiene
Shelter staff should encourage clients/residents to maintain good personal hygiene. Make sure there is an adequate supply of personal hygiene products on site at all times:

- soap
- toilet paper
- alcohol based hand rub
- paper towels
- tissues (i.e. Kleenex, Scotties)
- shaving equipment
- feminine napkins/tampons
- toothbrushes and toothpaste

Education of clients/residents
Topics to cover with clients/residents:

- correct hand hygiene
- basic hygiene practices such as respiratory etiquette
- not sharing personal items e.g. wash cloths, toothbrushes and razors
Respiratory etiquette
Personal practices should be promoted to all clients/residents, visitors, volunteers and staff including:

a) not visiting the people in the facility when ill
b) cough and sneeze into your sleeve or use a tissue, then wash your hands with soap and water or an alcohol-based rub. In a shelter, it is especially important that clients/residents be reminded to do this by frontline staff and through the use of posted signs.
c) maintaining a space of an arm’s length from people who are coughing or sneezing
d) avoid face to face contact - turn your head away from others when coughing or sneezing

Immunization
One of the most effective preventive measures to protect clients/residents and staff from acquiring communicable diseases is immunization. Promote appropriate immunizations such as the annual seasonal influenza vaccine and encourage others to keep immunizations up to date.

For more information:


Questions and answers

Why is it necessary to wash my hands before using gloves?

Gloves are an effective barrier but accidents can happen. It is important that hands be clean to prevent contamination should the gloves tear. Also, some germs grow extremely well inside gloves. By washing your hands before gloves are put on and after they are taken off, the number of germs is reduced to safer levels to protect both you and your client/resident.
6. Blood/body fluid exposures (including needle-stick injuries)

There may be a number of situations where frontline workers might come in contact with body fluids. Some people may throw up, others may accidentally cut themselves. It is important to know how to respond if this happens.

Should you be pricked by a dirty needle or splashed with body fluids in your eyes, nose or mouth, or through an open cut on your skin, here are some steps to follow:

**Needle-stick injuries (accidentally being stabbed with a hypodermic needle)**

1. Let the wound bleed.
2. Flush the area with water or wash with soap and water. If the skin has been broken, apply a topical antiseptic solution such as 70% isopropyl alcohol or iodine, if available. However, there is no evidence that antiseptic use reduces risk of organism/germ transmission. Do not apply disinfectants to the eyes, nose or mouth.
3. Bandage the wound.
4. Report the incident to a supervisor.
5. Seek immediate medical attention at the hospital emergency department.

**Injuries with blood/body-fluid exposures (exposure with broken skin)**

1. Flush the area with water or wash with soap and water.
2. If there is excessive bleeding, apply pressure to stop the bleeding.
3. Apply a topical antiseptic solution (e.g., isopropyl alcohol, iodine) if available. However, there is no evidence that antiseptic use reduces risk of organism/germ transmission. Do not apply disinfectants to the eyes, nose or mouth.
4. Bandage the wound.
5. Report the incident to a supervisor.
6. Seek immediate medical attention at the emergency department.

**Body fluid exposures to the eyes, nose or mouth**

1. Flush the area with large amounts of water.
2. Report the incident to a supervisor.
3. Seek follow up medical care or emergency care if necessary.

**Coming into contact with body fluids (intact skin)**

1. Thoroughly wash hands and exposed skin following the same procedures for hand washing.
Disinfecting solutions and blood/body fluid clean-ups

Bleach disinfecting solutions

For cleaning-up surfaces where there are bodily fluids or other contamination (not skin)

- Mix nine equal parts of water with one part bleach (50 ml or ¼ cup of bleach to 450 ml or 2 ¼ cups of water or 0.5% or 5,000 ppm)
- Be careful not to spill the bleach solution on your skin
- Prepare a fresh solution of bleach and water for each incident

For general disinfecting of surfaces (not skin)

- Mix 99 equal parts of water with one part bleach. This is about one teaspoon (5 ml) of bleach to two cups (500 ml) of water i.e. 0.05% or 500 ppm.
- Be careful not to spill the bleach solution on your skin
- Put in a labelled spray bottle for ease of use
- The solution must be prepared fresh each day as the bleach weakens quickly

Procedure for cleaning up of body fluids

1) Make sure that the area where the body fluid spill has occurred is blocked off.
2) Wash hands for 15 seconds.
3) Put on disposable rubber gloves specific for cleaning. Latex gloves should not be worn as they are not designed for withstanding cleaning solutions.
4) Place disposable paper towels over top the area so it is completely covered. Use additional disposable paper towel as necessary to wipe up the spill. Place paper towels in a garbage bag. The objective is to clean the material with minimal disturbance to avoid any germs entering the air.
5) Any needles or sharps should be picked up using tongs and placed into a sharps container.
6) Clean the surface first with soapy water, rinse with clean water. Wipe the surface with the bleach disinfecting solution: one part bleach (50 ml or ¼ cup of bleach to 450 ml or 2 ¼ cups of water or 0.5% or 5,000 ppm). Be careful not to spill the bleach solution on your skin or clothing.
7) Use enough bleach and water solution so the area stays wet for at least 10 minutes. This gives the bleach time to kill the germs. Note: if a non bleach disinfectant is used, allow it to stand for the amount of time recommended by the manufacturer.
8) Any mops or non-disposable materials should be soaked in the bleach solution and air dried. Try to avoid using a mop.
9) Dispose of used paper towels in the garbage bin, remove gloves and wash your hands.

For more information

Check the Peel Public Health web site: http://www.peelregion.ca/health/infectioncontrol/routine-practices.htm#enviro

**Needle Exchange Program (NEP) and harm reduction**

Peel Public Health’s Needle Exchange Program (NEP):

- Offers new needles* and other services to reduce the spread of blood-borne diseases among people who use needles for the purpose of injecting drugs, including steroids
- Protects the public by reducing the number of used needles discarded in public places like playgrounds and washrooms
- Follows a “Harm Reduction” philosophy

Harm Reduction recognizes that a certain percentage of the population will use drugs and the goal is to reduce the harm that might result from drug use. Harm reduction is decreasing the adverse health, social and economic consequences of substance abuse, for the user and the community, without requiring abstinence. It is important to reduce the risk of infectious diseases, such as HIV and hepatitis C, by making drug use as safe as possible.

**Peel Works NEP:**

- Provides new needles and equipment
- Provides containers for the safe disposal of used needles and equipment
- Will pick up and safely dispose of used needles from needle exchange clients/residents
- Provides piercing kits which includes information about after care
- Provides information about safer drug use
- Provides presentations on Harm Reduction, safer piercing, program services
- Provides information about safer sex as well as free condoms and lube
Offers referrals to:

- Peel’s Healthy Sexuality clinics for:
  - Anonymous HIV/AIDS testing
  - Hepatitis B and C testing
  - Hepatitis B vaccinations
  - Sexually transmitted infection testing and treatment

- Other agencies for support and treatment

All of Peel’s NEP services are free and confidential.

To access needle exchange services in Peel:

- Call our cell phone at 647-225-1623

More information on hours and locations, visit:

Peel Public Health Needle Exchange Program
http://www.peelregion.ca/health/needle-exchange/#services
Sexually transmitted infections

There are many infections such as gonorrhoea, herpes and syphilis that can be transmitted from one person to another through sexual contact. Some of these infections can be transmitted through exchanging bodily fluids such as semen, saliva and vaginal secretions. This can happen through anal, oral or vaginal sex.

Other infections can be spread through direct bodily contact such as skin to skin contact with an infected area. Some sexually transmitted infections have very obvious signs and symptoms while others may have no symptoms at all. As well, some sexually transmitted infections can be very serious, sometimes life threatening.

It is important to remember that people are sexual and to provide education and resources so that sex can be a healthy part of life. Make sure your clients/residents have access to resources for safer sex. These resources can include:

- Condoms
- Educational pamphlets
- Access to sexual healthcare providers and testing centres
- Access to sexual health information centres/numbers

A number of fact sheets are available on specific sexually transmitted infections. Also, Peel Public Health can assist you in providing some resources to your clients/residents through the Healthy Sexuality Program.

More information

- Peel Public Health - Customer Contact Centre: 905-799-7700 or visit the healthy sexuality web site [http://www.peelregion.ca/health/sexuality/contact.htm](http://www.peelregion.ca/health/sexuality/contact.htm)

- For the location of Peel Public Health healthy sexuality clinics visit [http://www.peelregion.ca/health/sexuality/clinics/cli-locations.htm](http://www.peelregion.ca/health/sexuality/clinics/cli-locations.htm)
Prevention of respiratory infections

To prevent the spread of respiratory infections in shelters, efforts should be made to identify ill persons and implement appropriate infection control measures as soon as possible. Be alert for, and ask clients/residents to report the following:

- Fever
- Coughing
- Sneezing
- Runny nose
- Wheezing
- Shortness of breath
- Difficulty breathing
- Night sweats
- Weight loss

First steps

- An ambulance should always be called for any VERY sick person!

- Clients/residents who are ill should be separated from other clients/residents as much as possible. If a separate room or area is not possible, encourage persons with respiratory illness to stay at least 2 metres (6 feet) away from others.

- Encourage hand washing/sanitizing and the use of tissues or their sleeve to cover the mouth and nose when people sneeze or cough

- Staff who are showing signs of sickness should not be working or should be away from clients/residents

- Record information on the Daily Report of Infections Screening Log (see Appendix)

- Provide barriers, as is necessary and appropriate to staff that are to be in contact with sick clients/residents

- Sick clients/residents who cannot be separated from the rest of the population should be provided with surgical masks, if tolerated. This is especially important if respiratory hygiene compliance is poor.
Second steps

- If your facility has healthcare professionals available, they should be contacted to assess any sick clients/residents.
- If your facility does not have health care professionals available, encourage clients/residents to seek medical attention. For those who are not seriously ill, try to arrange for them to see a community healthcare professional or go to a walk-in clinic.

Third step

- It is important that a healthcare professional assess any sickness. If they have any concerns about a client/resident, tests will be ordered to determine a diagnosis. The healthcare professional will report any diseases/outbreaks which are classified as “reportable” to Peel Public Health.

Fourth step

- If an outbreak is declared, refer to the sections on outbreaks for more information.

For a list of reportable diseases:

Peel Public Health
http://www.peelregion.ca/health/pdfs/reportable-diseases.pdf
Gastrointestinal symptoms

To prevent the spread of gastrointestinal infections in shelters, efforts should be made to identify ill persons and implement appropriate infection control measures as soon as possible. Be alert for, and ask clients/residents to report the following:

- Diarrhoea - abnormally frequent semi-solid to fluid stool (poop)
- Vomiting
- Cramping
- Blood in the stool
- Fever

First steps

- An ambulance should always be called for any VERY sick person!
- Encourage regular hand hygiene with soap and running water or alcohol based hand rub
- Staff who are showing signs of sickness should not be working
- Clients/residents who are ill should be separated from other clients/residents as much as possible
- **Record information on the Daily Report of Infections Screening Log** (See Appendix)

Second steps

- If your facility has healthcare professionals available, they should be contacted to assess any ill clients/residents
- If your facility does not have healthcare professionals available, encourage clients/residents to seek medical attention. For those who are not seriously ill, try to arrange for them to see a community healthcare professional or to go to a walk-in clinic.
- Babies who are sick need to be seen by physician and monitored as appropriate
- Encourage the sick person to drink water to replace lost fluids

Third steps

- Whenever an increase in the number of people with symptoms of illness is seen, contact Peel Public Health for guidance at 905-799-7700. It may be an outbreak. Peel Health will help to determine the cause of the increase in illness. Make this call as soon as you become aware of the increase in illness in your facility. **Do not wait** to see what happens.
- Begin enhanced cleaning and disinfection with special attention to your bathroom facilities
Resources and supplies
The following is a list of recommended supplies related to infection prevention, that every shelter or hostel should have on hand.

First aid supplies
Well maintained first aid kits are important for many reasons. To begin with, they are an important safety measure for both staff and clients/residents. Secondly, having the right supplies at the right time is an important step in preventing the spread of infection. It is recommended that a first aid kit be kept in an easily accessible and well known location. In larger facilities, it is a good idea to have more than one first aid kit, such as one per floor. The following is a list of required contents for most standard emergency first aid kits:

- Scissors (1)
- Blunt nose tweezers (1)
- 5 cm x 5 cm (2 inches x 2 inches) sterile gauze dressings (10)
- 10 cm x 10 cm (4 inches x 4 inches) sterile gauze dressings (5)
- 10 cm x 10 cm (4 inches x 4 inches) sterile non-adherent dressings (5)
- Regular size plastic bandages (10)
- Children’s size plastic bandages (10)
- Slings or triangular bandages (10)
- 8 cm (3 inches) gauze roll (1)
- Roll of non-allergenic adhesive tape (1)
- 8 cm (3 inches) elastic tensor bandage (1)
- Safety pins (5)
- Small bottle of skin antiseptic/individually wrapped antiseptic wipes
- Pocket first aid reference book (1)
- Pairs of disposable gloves (2)
- Incident records (1 set)
- Instant cold compress (1)
- Alcohol based hand rub
- One resuscitation pocket mask

Outbreak response kit
It is suggested a separate box of supplies labelled specifically for outbreak response be maintained. In the event of a suspected or actual outbreak of an infectious disease, these basic supplies will be available for immediate use. These supplies should be readily accessible to staff. The employer is responsible for arranging to get staff fit-tested for N95 masks.
While the quantity will vary from site to site, it is important that facilities have enough of the following supplies to last at least 72 hours:

- Box (es) of surgical masks/N95 masks*
- Box of eye protection (face shields or goggles)
- Box (es) of disposable rubber gloves in varying sizes
- At least one box of non-latex gloves
- Package of disposable gowns
- Digital or disposable thermometers (digital with probe covers)
- Extra bottles of alcohol based hand rub
- **Record information on the Daily Report of Infections Screening Log**
  (See Appendix)

*N95 masks have to be fit-tested specifically for the person who will be wearing them. If you do not have an occupational health service available to you for advice on how to get this done, ask your supplier (pharmacies will not be able to arrange fit testing).
Chapter 3
Food Safety

- Purchasing and receiving food
- Food storage
- Food preparation
- Cooking and food service
- Catered food
- Leftovers
- Facility maintenance and construction
- Equipment and utensils
- Dishwashing
- Personal hygiene
- Food handler training
Purchasing and receiving food

- Only purchase or accept food from reliable sources
- Take care not to allow frozen or perishable foods to be left unrefrigerated.
- Refrigerate foods as soon as possible
- Do not use cans which are dented, swollen, or badly rusted
- Do not use unpasteurized milk or ungraded eggs
- Donations should be screened and not accepted if there is any doubt. Get the name and telephone number of persons donating food.

Food storage

- Maintain all refrigerators at 4°C (40°F) or colder
- Maintain all freezers at -18°C (0°F) or colder
- Keep a refrigerator thermometer inside the refrigerator and a freezer thermometer inside the freezer. Monitor temperatures to ensure they are in the safe range.
- If repackaging foods, date and label them before putting them away.
- Always rotate stock (first in, first out)
- Label bulk food products with the date and product name
- Avoid using products that are beyond the “best before” date
- Do not use any products beyond the “expiry date”
- Store raw meats or poultry on a plate, or in a container, below the other items in refrigerator so that blood and juices cannot drip onto anything else
- Store food separately from cleaning products so they cannot be accidentally mistaken
- Always refrigerate foods such as meat, dairy products, shelled eggs, etc. If left unrefrigerated, these foods allow bacteria to grow rapidly.

Food preparation

- *Perform hand hygiene often* and always before handling food, after handling raw foods or soiled utensils, equipment or garbage, before eating
- Avoid cross-contamination by remembering to wash and sanitize cutting boards, counter tops and utensils after each use, especially after raw meat and poultry
- Use clean utensils and wash hands well when handling ready-to-eat foods
- Do not use the same plate or utensils for raw meat and cooked meats or other ready-to-eat items (tomatoes, cheese, lettuce, etc.)
- Wipe up spills immediately. Bacteria grow and spread very quickly.
- Defrost frozen foods in the refrigerator, microwave or under cold running water
• Do not thaw and then refreeze meats

**Cooking and food service**

• Keep hot foods hot at 60°C (140°F) or hotter
• Keep cold foods cold at 4°C (40°F) or colder
• Use a food probe thermometer to ensure meat, poultry, fish and food mixtures are cooked to the required internal temperature to kill bacteria

**Cooking Temperature Chart**

<table>
<thead>
<tr>
<th>Food Description</th>
<th>Internal Temperature</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roast beef, lamb or goat</td>
<td>60°C (140°F)</td>
</tr>
<tr>
<td>Ground meat (pork, beef, excluding poultry)</td>
<td>71°C (160°F)</td>
</tr>
<tr>
<td>Pork and pork products</td>
<td>71°C (160°F)</td>
</tr>
<tr>
<td>Chicken/turkey pieces (including ground poultry)</td>
<td>74°C (165°F)</td>
</tr>
<tr>
<td>Food mixture containing poultry, eggs, fish</td>
<td>74°C (165°F)</td>
</tr>
<tr>
<td>Whole chicken/turkey</td>
<td>82°C (180°F)</td>
</tr>
<tr>
<td>Stuffing</td>
<td>74°C (165°F)</td>
</tr>
<tr>
<td>Fish</td>
<td>70°C (158°F)</td>
</tr>
</tbody>
</table>

• Ensure all ground meat and poultry are thoroughly cooked. Checking the internal temperature with a probe thermometer is the only way to know for sure the food is cooked.
• Prepare and cook foods as close to the meal time as possible
• Avoid using raw eggs in ready-to-eat products such as Caesar salad and eggnog
Catered food

- Ensure hot foods are delivered hot at 60° C (140° F) or hotter
- Ensure cold foods are delivered cold at 4° C (40° F) or colder
- Temperature sensitive foods should be delivered in insulated containers or electric units designed for keeping food hot during transport
- All food should be protected from contamination during transport in sealed or covered containers
- For hot food, pre-heat steam tables, chafing dishes and ovens well before the food arrives
- Use a large bowl or tray of ice to help keep cold foods cold during service
- Each food item must have its own serving utensil
- Protect food as much as possible while out for service. This may be done by the use of covers, lids or wraps.

Leftovers

- Perform hand hygiene before handling leftovers
- Ensure all utensils and surfaces are clean
- Wrap leftovers and refrigerate immediately. Do not leave leftovers on the counter to cool.
- Divide large quantities of leftovers into small containers so they cool more quickly
- Date leftovers before placing them in the refrigerator or freezer. Use refrigerated leftovers within 2-3 days; frozen leftovers will keep for 1-2 months.
- Re-heat leftovers quickly to an internal temperature of 74° C(165° F) or hotter where applicable

Remember: if in doubt, throw it out!

Facility maintenance and construction

- Establish a cleaning schedule. Assign staff cleaning tasks and outline the frequency of the cleaning required, such as, once a day, three times per day, etc. A check list of areas to be cleaned with a sign-off sheet may help ensure the tasks are completed.
- Each food preparation area must have a separate hand washing basin with hot and cold running water, liquid soap in a pump dispenser and paper towels for hand drying. This sink is to be used only for hand washing and must be accessible at all times.
- Floors, walls and ceilings should be non-absorbent, smooth, easily cleanable and maintained in good condition
• Kitchen facilities should be cleaned and sanitized daily to remove all visible dirt and debris and reduce the number of bacteria on surfaces
• Walls, grease vents over cooking equipment and other equipment should be kept clean and well maintained
• Be alert for mice or insect infestations and take immediate action if evidence exists. It is best to have regular inspections from a licensed pest control specialist to avoid problems. Once an infestation starts, it is very difficult to get rid of insects and rodents.
• If the kitchen sink has a grease trap, ensure it is physically cleaned out as needed. The frequency of cleaning will depend upon the amount of grease going down the drain.

Equipment and utensils

• Utensils such as cutlery, plates, cups, glasses, serving spoons, etc., must be washed, rinsed and sanitized after each use
• Counter tops and cutting boards must be washed, rinsed and sanitized after each use
• Refrigerators should be an adequate size for the volume of food stored inside and must be monitored with a thermometer
• Throw out worn or chipped cups, plates and utensils
• Do not re-use single-service utensils such as plastic spoons and forks
• Garbage containers should be durable, easily cleanable and rodent-proof. They should be covered at all times when not in use.

Dishwashing

Dishwashing may be done using a 3-compartment sink, a 2-compartment sink or commercial dishwashing machine.

A 3-compartment sink can be used for washing cutlery, plates, glasses, cups, pots and pans, etc. When using a 3-compartment sink, use the sinks as follows:
• Step 1: Pre-rinse/scrape dishes
• Step 2: First sink – washing – use dishwashing soap and clean warm water, change the soapy water when it gets dirty
• Step 3: Second sink – rinsing – clean hot water
• Step 4: Third sink – sanitizing – bleach and warm water. Immerse the dishes in the sanitizing solution for 45 seconds
• Step 5: Air dry
A **2-compartment sink** can be used **only** for washing pots, pans, serving utensils and other items used only in the process of preparing food. A 2-compartment sink **cannot** be used to wash anything a person has used to eat with such as utensils, cups, plates, glasses. When using a 2-compartment sink, use the sinks as follows:

- **Step 1: Pre-rinse/scrape dishes**
- **Step 2 and Step 3: First sink** – **washing and rinsing** using dishwashing soap and clean warm water. Rinse the item under running tap water, allowing the water to run into the first sink containing the dirty dishes.
- **Step 4: Second sink** – **sanitizing** – bleach and warm water. Immerse the dishes in the sanitizing solution for 45 seconds.
- **Step 5: Air dry**

There are two basic types of **commercial dishwashing machines**. One uses high temperature (hot water) to sanitize the dishes. The other type of dishwasher uses a lower water temperature with chemicals (chlorine) to sanitize the dishes.

All mechanical dishwashing machines must have **temperature gauges** on the outside of the machine in order to determine the wash and rinse temperatures.

For all dishwashing machines, the **wash water temperature** must be 60°C to 71°C (140°F to 160°F).

A dishwashing machine that uses a **hot water sanitization rinse** must rinse at a water temperature of 82°C (180°F) or hotter for a minimum of 10 seconds.

Dishwashing machines that use **chemicals** must rinse at a water temperature no lower than 24°C (75°F) for a minimum of 45 seconds. Acceptable chemicals are chlorine (100 ppm), quaternary ammonium compounds (200 ppm) and iodine (25 ppm).
Whether dishes are washed by hand or with a dishwashing machine, a sanitizer test kit is required to ensure the correct concentration of sanitizer chemical is reached. Test kits are available from sanitizer sales companies. Ask your Public Health Inspector for more information at 905-799-7700.

**Personnel hygiene**

- Do not prepare food if you have sores or cuts on your hands, have a respiratory illness or gastrointestinal illness (nausea, vomiting or diarrhoea)
- Wear clean clothes and preferably wear a hair restraint such as a hair net, cap and a hair tieback
- Avoid touching your mouth or nose or wiping your hands on dish towels or aprons
- Perform hand hygiene:
  - Before and after eating
  - Before switching types of foods being handled, such as changed from raw chicken to lettuce for a salad
  - After handling any raw food, including vegetables
  - After using the toilet or wiping nose
  - After contact with blood or body fluids/waste

**Food handler training**

Peel Public Health offers a Food handler certification course in classroom and home-study formats. For more information call Health Line Peel at 905-799-7700.
Chapter 4
Outbreaks

- What is an outbreak?
- Preparing for an outbreak
- Identifying an outbreak
- Outbreak identification process
- Managing and controlling an outbreak – 11 steps
- Outbreak control measures
- Outbreak management checklist
What is an outbreak?

The word “outbreak” is used whenever there is a local increase in the number of people with a particular disease or infection above what would normally be expected. Outbreaks can happen in homes, schools, communities, workplaces, shelters or an entire city; wherever people interact, work or live.

Outbreaks of communicable diseases are of particular concern in residential settings. Unlike healthcare facilities, residential settings may not have the physical capability of isolating symptomatic (sick) clients/residents in separate rooms from asymptomatic (well) clients/residents. In addition, staff may have only minimal training in healthcare.

There are four important ways in which frontline workers can work together with Peel Public Health to prevent illness due to outbreaks. These are:

1. Preventing outbreaks from happening
2. Preparing for an outbreak
3. Identifying outbreaks as quickly as possible
4. Managing and controlling outbreaks

Preventing outbreaks

One of the most important jobs of Peel Public Health is to prevent the spread of infections in the community. This is done by educating people about infection control practices thus maintaining a safe environment which helps prevent the spread of disease. By following the guidelines in this manual, you will reduce the chances of infections spreading in your shelter and reduce the chances of an outbreak.
Preparing for an outbreak

Preparation will help make sure that an outbreak is dealt with in the best possible way. Good preparation involves ensuring that the facility is prepared and that staff know what to do in case of an outbreak. For a large institution, this might mean having an emergency or outbreak plan. All homeless shelters should also have an emergency or outbreak plan. At a minimum, facilities should make sure they have adequate supplies for cleaning and hygiene.

Infection Control Team
Communication between individuals responsible for various jobs within the facility as well as between the facility and Peel Public Health is essential in managing an outbreak.

Many facilities have a Health and Safety Committee that ensures the workplace is a healthy and safe place to work. Agencies might want to consider organizing an Infection Control Team as a part of the Health and Safety Committee.

You should consider having representatives from the following areas (where possible) on your Infection Control Team:

- Housekeeping
- Food services
- Administration
- Personal support staff/activities co-ordination
- Security

Establishment of an Infection Control Team/committee well in advance of an outbreak is helpful in that it maintains an up to date list of those individuals who become members of the Outbreak Management Team should an outbreak occur. This team is then ready to be convened and will coordinate the management of the outbreak, follow Peel Public Health’s advice and gather information from different areas of the facility.
In order to make sure that the outbreak investigation is well coordinated, it is recommended that your agency have an individual designated as an **Outbreak Coordinator** to oversee the management of the outbreak and be the contact for communication between facility staff and Peel Public Health.

The **Outbreak Coordinator** would:

- Act as the lead for this infection control manual in the agency
- Be part of the infection control team and make sure the team meets regularly
- Be responsible for liaising with Peel Public Health on infection control issues
- Be responsible for implementing your agency’s specific emergency plans for outbreaks

As with the Infection Control Team you may wish to **appoint an Outbreak Coordinator prior to any outbreak happening** so that the person can receive training and start planning.
Identifying outbreaks

The first step in successful management of an outbreak is prompt identification. An ongoing surveillance system of communicable diseases will assist staff in quickly identifying situations that may place staff and clients/residents at risk.

Surveillance and reporting
Surveillance is the ongoing regular collection and analysis of health information. Peel Public Heath does surveillance for infectious diseases in the community by collecting reports of disease from healthcare professionals and laboratories. Shelters should be doing their own disease surveillance within the shelter on a continuous basis.

There are certain diseases that are “reportable” to Peel Public Health. This means healthcare professionals, hospitals and laboratories are required, by provincial law, to report these diseases to the local Public Health Unit.

The key to managing potential spread of communicable disease in a shelter is maintaining a high degree of awareness for illness in the client/resident population and the consistent use of Routine Practices at all time for infection prevention.

Clients/residents should be encouraged to report any new signs and symptoms of infection (i.e. nausea, vomiting, fever, diarrhoea, cough, skin rash) to staff on a daily basis. Staff should document this information on the Daily Report of Infections Screening Log (see Appendix 2).

The record should be reviewed daily by the supervisor for evidence of increased or unexpected amount of illness in the facility. Even though shelter workers are not required to report diseases, you may want to call Peel Public Health if you notice an increase in the number of ill clients/residents or an increase in the severity of illness. Peel Public Health will review the cases with the facility staff and provide advice on further investigation and management.

Further investigation might include simple questions about what you have noticed:

- Who is sick?
- What are the signs and symptoms?
- Have they seen a healthcare provider? If so, what was the diagnosis or cause of the illness?
- How many people are sick?
- How sick are they?
- Are they being treated?
- What infection prevention and control measures have been implemented?
Peel Public Health may advise you about further steps to take which may include sending the client/resident for medical care and possible laboratory testing. You should also be aware that testing for infections is voluntary and cannot be forced, except in rare conditions specifically ordered by the Medical Officer of Health or designate.

**Outbreak identification process**

All staff and volunteers should be aware of the possibility of an outbreak when a number of clients/residents, workers or volunteers report an illness with similar symptoms. If a change in health patterns (e.g., more than the expected number of clients/residents, staff or volunteers with diarrhoea, coughs, rashes, etc.) is noticed, a healthcare professional should be consulted for guidance.

**Follow this process if you suspect a communicable disease outbreak in your facility:**

**Situation:** An increase in the number of clients/residents, staff or volunteers with similar health complaints, such as vomiting, diarrhoea, rashes, coughing, etc. has been documented on the *Daily Report of Infections Screening Log*.

1. **STEP #1**
   - Arrange for sick clients/residents, staff or volunteers to seek medical attention. Directly inform the healthcare professional doing assessments that there are a number of people with similar symptoms in the same facility. Speak with the person do not leave a message. *(Note: the facility should help clients/residents to access medical attention)*

2. **Are there an increased number of people with similar symptoms/complaints of sickness? (more than you would normally expect for your facility)*

   **YES**
   - **STEP #2**
     - Contact Peel Public Health for guidance: 905-799-7700

   **NO**
   - **STEP #2**
     - Wait for diagnosis and direction from a health care professional. Continue to monitor clients/residents, staff and volunteers for anything out of the ordinary. If concerned, contact Peel Public Health for guidance: 905-799-7700

*Note: All outbreaks of vomiting and diarrhoea should be reported to Peel Public Health to assess for a possible food source.*
Managing and controlling an outbreak - 11 Steps

The following are some of the most important steps in managing an outbreak. Peel Public Health will assist your facility with most of these tasks. It will be up to your facility to manage and control the outbreak by following directions from Peel Public Health. Cooperation from your facility is critical.

1. Declaring an outbreak
   The Medical Officer of Health or designate, in collaboration with facility staff, will declare an outbreak based on the evidence that has been gathered from the facility, hospitals, laboratories and doctors.

2. Instituting environmental control measures
   Peel Public Health will advise your institution on control measures to help stop the spread of infection. Some measures may include recommendations for increased environmental cleaning, isolation of symptomatic clients/residents and promotion of hand hygiene.

3. Establishing a case definition
   Peel Public Health, in collaboration with facility staff, will use the information it has gathered to develop a specific definition, which will determine who is a “case” and needs to be included in the outbreak investigation.

4. Setting up a monitoring and surveillance system
   Peel Public Health may need your help in making sure that any ill clients/residents who might be at risk are identified and treated appropriately. This may involve screening your clients/residents by asking simple health questions or regularly watching for symptoms in clients/residents. Peel Public Health will give you specific instructions in order to do surveillance if necessary.

5. Setting up Outbreak Management Team meetings and appointing an Outbreak Coordinator
   It is important that there is effective and timely communication between all staff, volunteers and clients/residents of your facility and between your organization and Peel Public Health.

   Peel Public Health may help you set up an Outbreak Management Team (consisting of the facility director, supervisor, front line staff and Peel Health representative) and may attend meetings of this team. Peel Public Health will be in regular communication with your facility. Having an Outbreak Coordinator for your facility will help make sure this communication is smooth and rapid. Each organization, including Peel Public Health, will designate a spokesperson to deal with media inquiries as appropriate. Peel Public Health will not speak on behalf of your facility.
6. Identifying cases of disease and ensuring appropriate diagnosis and treatment
Peel Public Health will give you information and instructions about how to manage cases of infection which your staff identify. This may involve sending clients/residents to a healthcare professional or hospital. Peel Public Health may also ask that you isolate or cohort sick individuals from well clients/residents and will discuss the details of how you would do this at your facility.

7. Identifying contacts and people at risk
As part of its investigation, Peel Public Health will need to assess people who may have been exposed to the infection (contacts) and other people who might be at risk of becoming ill. Peel Public Health may need your help in finding out who these people are and how to contact them as they may need to speak with them to provide information and instructions. These instructions may include medication, immunization, and cohorting of contacts or, more rarely, quarantine.

8. Taking further action to control the spread of an infection
Peel Public Health may need to take other actions in order to prevent further infection or disease. This may involve providing educational materials for your clients/residents, providing certain vaccinations or medications or regularly testing clients/residents for disease. Peel Public Health will discuss these options with your institution in order to efficiently implement these activities.

9. Further investigation by Peel Public Health
The investigation may continue over a long period of time. Peel Public Health may ask your facility for more information or action at any time during this investigation.

10. Declaring the outbreak over
The criteria for declaring an outbreak over can be very different for each type of disease. An outbreak may last for several days, several weeks or even years. The Medical Officer of Health or designate will declare the outbreak over when the threat to the health of the public has been minimized and there is no evidence that the infection is still being spread.

11. Communicating the findings and instituting future prevention measures
There is much to be learned from each outbreak experience. When an outbreak is over or sometimes even before it is over, Peel Public Health may have specific recommendations in order to prevent future outbreaks. Peel Public Health may communicate its findings and recommendations in writing and may work with your facility to implement the appropriate changes.
Outbreak control measures

During an outbreak, it is sometimes necessary for Peel Public Health to take additional steps to stop the spread of infection. This will involve the separation of healthy, sick and potentially exposed people.

Cohorting
This is one way that sick people can be separated from healthy people. If Peel Public Health feels this is necessary, it will suggest that all people who are ill with the same infection be housed together within the same area and/or be monitored/managed by the same staff.

Isolation
Similar to cohorting, isolation is a more drastic step. This involves the strict separation of sick people from healthy people and the use of special rooms, equipment, etc. to make sure that infectious organisms are not spread. Isolation is a technique that is usually used in hospital settings.

Quarantine
Quarantine is a rare step taken by Public Health authorities which requires healthy people who may have been exposed to a serious infection to remain separated from everyone else.

There will be challenges in using any of these techniques within homeless service settings and with homeless clients/residents. Each situation will be evaluated on a case-by-case basis to determine what steps are the most appropriate.

The shelter Infection Control Committee should plan ahead for possible cohorting or isolation of clients/residents. Things to consider include:
When and who should be isolated
Where can clients/residents be isolated
What additional equipment is needed
Questions and answers

What about clients/residents who are refusing assessment and/or treatment and might be infecting other people?

Peel Public Health will work with your staff to assess situations and assist you with resolving potential problems. The Medical Officer of Health or designate has certain legal powers which may be used if necessary in very specific circumstances that pose a threat to the health of the public.

What if isolation, cohorting or quarantine is not possible in my facility?

Public Health officials will work closely with the Outbreak Management Team for your facility to identify what steps are possible. Special accommodations will be arranged in certain circumstances if necessary. On occasion, Public Health may request or direct a shelter to stop or restrict admissions to their facility.

What about transporting sick client/residents to healthcare professionals?

An ambulance should be called for any clients/residents who are very sick and when other means of transportation are not possible. If a taxi is transporting a client/resident, care should be taken to make sure that the infection is not spread (i.e. hand washing before getting into the car, use of tissues). If possible, a staff person should accompany the sick individual being transported. For clients/residents with respiratory symptoms, staff should read the section on personal protective equipment/barrier protection. Remember, if in doubt, call 911 for emergency assistance.
Outbreak management checklist

☐ Immediately call Peel Public Health to report an increase in the number of clients/residents with the same symptoms. Call 905-799-7700. The operator will refer you to the appropriate health professional for assistance.

☐ A list of those affected (line listing), including symptoms and onset date should be developed, updated daily and forwarded to the Peel Public Health designate. This must be done on a daily basis until the outbreak is declared over.

☐ Make sure all ill clients/residents, staff or volunteers receive medical attention

☐ Initiate control measures and make sure that they are enforced (i.e. hand hygiene, enhanced environmental cleaning and disinfection in high traffic areas, bathrooms, handrails, tables, door knobs)

☐ Reinforce routine precautions (e.g., hand hygiene, appropriate personal protective equipment/barriers, alcohol-based hand rub)

☐ Establish Outbreak Management Team and set time for first meeting

☐ Appoint an Outbreak Coordinator

☐ Communicate information to staff and other institutions

☐ Increase surveillance for illness among clients/residents and staff

Declaring the outbreak over

Once the Outbreak Management Team, in consultation with the Medical Officer of Health or designate, has declared the outbreak to be over, a final report should be prepared summarizing the outbreak. The report should include the number of cases identified, action taken and an epidemic curve of the outbreak. Recommendations to prevent further outbreaks should be included.
Chapter 5
Environmental Health

- Sleeping space recommendations
- Heating, ventilation and air conditioning (HVAC)
- Cleaning and disinfection
- Principles of cleaning
- Products for cleaning and sanitizing
- Cleaning schedules
- Toys
- Personal belongings
- Diaper tables
- Examination tables, treatment chairs and counters
- Multi-use tubs/showers
- Baby bath tubs
- Outreach health
Sleeping space recommendations

To decrease the potential spread of illness, it is important to provide a minimum space per person in sleeping areas. Health Canada has established the following two standards for use in all emergency shelter facilities.

- The minimum required for a person’s sleeping space, as per Shelter Standards, should be no less than: 3.5 square metres (37.7 square feet/person)
- The minimum distance between beds, as per Shelter Standards, should be no less than: 75 centimetres (2.5 feet/person)

Additionally, it is recommended that beds be arranged so that clients/residents sleep in a foot-to-head fashion so as to further distance people from one another.

Heating, ventilation and air conditioning systems (HVAC)

In order to improve air quality and have a supply of fresh (e.g., non-contaminated) air, rooms in a shelter should be well ventilated. Some shelters may have HVAC (Heating, Ventilation, and Air Conditioning) systems.

Air handling systems (HVAC) supply, filter, condition, and exhaust air by a variety of methods. These may include central HVACs or individual units. Each of these may be associated with infection control risks, and facilities should have specific policies and procedures in place to minimize these risks including, but not limited to the following:

a) A process to ensure HVAC systems are monitored in accordance with engineers’ and manufacturers’ recommendations
b) A maintenance schedule for air changes per hour (ACH)
c) A maintenance schedule for inspection of filters and air intakes

Special attention should be paid to the HVAC system when renovation and construction projects are planned to minimize the risk of transmission of infections to the clients/residents.

Smaller facilities without an HVAC system may be able to improve ventilation by opening windows (weather permitting) on both sides of a room to get a cross-draft. Portable fans can also be used to help create a more forceful draft as long as there is both a way for fresh air to enter and stale air to leave.
Cleaning and disinfection

Cleaning and maintenance prevent the build-up of soil, dust or other foreign material than can support the growth of organisms (germs) which may cause illness.

Cleaning is accomplished with water, detergents and mechanical action. The aim of cleaning is to achieve a clean environment with regular general housekeeping.

Principles of cleaning

- Cleaning products should:
  - be selected on the basis of effectiveness, acceptability, safety and cost
  - be appropriate to the task
  - used according to manufacturer’s instructions
  - be stored in a safe manner and
  - not be mixed inappropriately, for example do not mix chlorine bleach and soap, as a toxic gas will form

- Surfaces must not show any visible soil before they are disinfected

- Cleaning equipment should be maintained in a clean, dry state after use. Cloths, mop heads, etc. should be changed when soiled after use.

- Personal protective equipment, such as disposable gloves, should be available and used appropriately

- Garbage should be contained and disposed of by usual methods. Sharp objects, such as needles, should be placed in approved, puncture-resistant containers to prevent puncture injuries or cuts to the skin.

Products for cleaning and sanitizing

- Cleaning with detergent and water is generally acceptable

- Commercial household products are acceptable to disinfect environmental surfaces and should be used according to manufacturer’s instructions

- Cleaning should proceed from least to most soiled. Cleaning solutions should be changed when they appear dirty and/or after a spill cleanup.

- Cleaning primarily involves horizontal surfaces, such as countertops, table tops, floors, and surfaces that are frequently handled such as door knobs, telephones and bathroom fixtures. Walls may require spot cleaning.
• Spills involving blood or body wastes should be cleaned up with disposable towels/cloths, which should be placed in a plastic bag for disposal in the regular garbage. The area involved should be cleaned with detergent and water and then sanitized with an appropriate product. Reusable rubber gloves should be worn. Do not wear latex gloves; the cleaning chemicals can penetrate the glove making it ineffective.

* See section 2 Routine Practices– “Disinfecting Solutions and Blood/body Fluid Clean-up”

Cleaning schedules

Cleaning schedules should be established according to the type of surface to be cleaned and the type of soiling that occurs. For example:

• Spills – clean immediately
• Surfaces used for food preparation or diapering – clean after each use
• Kitchen, bathrooms, playroom – clean daily and as necessary
• Resident rooms, living rooms, offices, appliances – clean weekly and as necessary
• Mattresses, pillows, bed frames, bedroom furniture – clean between occupants, check for bed bugs. Mattresses and pillows should be encased in plastic (plastic mattress/pillow covers) to prevent bed bugs.
• Household furniture, walls, carpets, etc – follow a rotating schedule. Vacuum at least weekly. Do more deep cleaning at least once or twice a year or more often as necessary.
• During outbreaks, it will be necessary to increase cleaning and disinfection throughout the facility.

Toys

- Mouth toys such as harmonicas, flutes and whistles should not be available for common use due to the challenges of properly cleaning these items
- Items used by younger children (who have a tendency to put things in their mouth) should be made of washable material. These may be wiped with a safe disinfectant or cleaned in a dishwasher if the toy can tolerate the high heat. Alternatively, use a sink to clean washable toys after use by a child. If using a dishwashing machine, do not place any dishes in the machine while toys are being washed.
- Non washable toys (puzzles, puppets) may be used by older children who should be instructed to wash their hands before and after using toys
- For other toys, activity counters and toy shelves, clean and disinfect at least weekly, more often in an outbreak
- Soft cuddly toys should be washable. These should be washed weekly or as necessary.
Dress up clothes should be laundered weekly. These items should be laundered and put away during an outbreak of head lice or scabies, until the outbreak has stopped.

**Personal belongings**

Many insect infestations such as scabies and bedbugs can travel on the belongings of individuals. One way to prevent the spread of such organisms is through the plastic bagging of personal belongings. Also discourage as much as possible, the sharing of personal items such as hats, scarves, coats, combs and brushes.

**Diaper tables**

Separate designated tables should be provided for diaper changes of babies and young children. These tables should ONLY be used for this function and should be cleaned with a disinfecting solution after every use. Provide a lined step can for disposal of diapers. Encourage hand hygiene of caregiver and child following diaper change.

**Examination tables, treatment chairs and counters**

If facility has a nurse’s room, first aid room or any area where clients/residents are examined or given medical treatment, surfaces must be cleaned and disinfected regularly or immediately when visibly soiled. Uncovered examination tables must be cleaned and disinfected between clients/residents. Table covers, linen, paper, plastic etc should be changed between clients/residents. If there is a body fluid spill, clean and disinfect the table after removing the cover (see Procedure for cleaning up of body fluids – Chapter 2-15). Other “high touch” surfaces and areas, such as treatment chairs, counters, door knobs etc should be cleaned and disinfected daily or when soiled.

**Multi use tubs/showers**

Multi use tubs and showers should be cleaned and disinfected between client/resident uses. Tub interiors, shower floors and walls including soap dish, faucets and shower heads should be scrubbed as required to remove soap scum. Soap should be rinsed off and disinfectant applied to surfaces, ensuring sufficient contact time (as per manufacturer’s instructions – usually about 10 minutes) before rinsing. Showers curtains should be inspected and replaced monthly and as required. Areas such as grout should be inspected for mould and cracks/damages regularly.

**Additional notes:**
- Surfaces such as light switches, chrome wall attachments, door handles and frames are considered “high touch” surfaces and should be wiped down often
- Soap dispensers, paper towel and toilet paper holders should be checked regularly and replenished
- Garbage receptacles should be emptied as necessary
- Soiled linen/towels should be removed from area promptly
If using a brush to scrub tubs, showers etc, it should also be disinfected (can be placed in tub during disinfection) for the recommended contact time and then hung to dry

**Baby bath tubs**

Where possible, baby bath tubs should be dedicated to one family for the duration of their stay. The caregiver should be instructed to wash the bath with hot soapy water and dry after each use.

If the tub is shared/given to another individual to use, it must be cleaned and disinfected before use. Follow these steps:

a) Inspect all surfaces of the baby bath tub for scratches, cracks or any marks compromising the integrity of the surface

b) Wash with detergent/soap and water. Scrub with a brush if there is a build up of soap scum or visible soil. Rinse with clean water and dry.

c) Disinfect using a disinfectant wipe or bleach and water solution. Allow the surface to remain wet for the contact time recommended by the manufacturer. The best disinfectants will state “tuberculocidal” on the label.

d) Because a baby’s skin may be sensitive, it is suggested to rinse the bath with fresh clean water prior to next use and after the disinfecting process has been performed.
Outreach health

When involved in outreach activities, access to running water and hygiene supplies may be difficult. The following are special suggestions for people involved in outreach activities.

Hand hygiene
Regular hand hygiene is considered one of the most effective ways to reduce the spread of infection! Hand hygiene includes washing hands at a sink with soap and running water or the use of alcohol based hand rub.

When running water is not available, advance planning is important. Before you begin any outreach activities, make sure you have the supplies you need and enough of them. The first goal of hand hygiene is to remove dirt or debris from your hands. This can be accomplished through friction. A disposable moist wipe cloth (the type some fast food restaurants carry) can be used to remove dirt and debris.

Follow these key points when using a moist cloth:
- Make sure the cloth is clean
- Generate enough friction to remove dirt/debris, particularly around the nail beds and in between fingers
- Once most of the dirt/debris has been removed, use an additional clean moist cloth to make sure hands are clean

Using a cloth substitute is not as effective as hand washing. This technique should only be used when running water is not available. As well, no matter how clean a hand may look, there will still be germs living on the skin. **If you clean your hands using a moist cloth, make sure you follow this with the use of an alcohol based hand rub.**

Always wash your hands before and after an outreach activity.

Every outreach worker should carry a personal supply of alcohol based hand rub. They are available at most drug stores and shops that carry personal hygiene supplies. You should always sanitize your hands before and after you have direct contact with an outreach client/resident or their belongings to make sure you are not passing germs to them or catching germs from them. Refer to the section on hand hygiene in chapter 2 for more information. In addition, a poster is available at [www.peelregion.ca – Clean Your Hands Poster](http://www.peelregion.ca—Clean+Your+Hands+Poster)

Outreach kit

The following is a minimum list of supplies that should be carried by every worker during outreach activities:
- two pairs of disposable rubber gloves
- one pair of non-latex gloves
- two surgical masks
- one bottle of personal alcohol based hand rub
• 10 moist (preferably alcohol-soaked) hand-wipes
• two re-sealable plastic bags for contaminated garbage
• a water-resistant bag to carry supplies, such as a plastic bag

These supplies are compact and can easily be transported in a backpack or carry bag. You will notice that most supplies have expiry dates and care should be taken to make sure expired items are not kept in the kit. Also, temperature extremes (hot or cold) and moisture (water) should be avoided as much as possible. The quality of materials in the kit may be compromised by exposure to moisture.
Chapter 6
Occupational Health

- Occupational health program
- Staff immunization
- Communicable disease management
- Disease specific recommendations
Occupational health program

In order to maintain a safe environment for staff and clients/residents, each facility must ensure that certain requirements are in place for staff, before staff commence their responsibilities and on an ongoing basis.

A thorough occupational health program protects both employees and clients/residents.

The minimum components of the occupational health program should include the following:

1) Pre-employment

Prior to commencing employment or as soon as possible after they have started work in the facility, each employee should have the following documented.

1. Result of a 2-step tuberculin test (Mantoux). Documentation of the skin test result must be reported in millimetres of indurations. If the employee has had a positive skin test, there should be documentation from a physician of a current chest x-ray and counselling of the employee regarding signs and symptoms of TB.
2. A history of communicable diseases which the employee has had during their lifetime.
3. A record of immunizations the employee has received. This must be maintained to reflect current status.

2) Ongoing

Employees should maintain their immunizations. See next section – Staff Immunization.

All employees should receive education regarding the importance of sound personal hygiene habits and compliance with recommended infection control practices as an individual’s responsibility in the prevention of transmission of infections. This should be done as part of their orientation to the facility and on an annual basis.

Each facility must have written policies to prevent/manage exposures or infections in employees. e.g., there must be a policy for staff exposures to blood/body fluids through sharps injury or splash to mucous membranes. The policy should direct staff on actions to be taken in the event of an injury and be reviewed annually.
Staff immunization

Maintaining immunity against vaccine-preventable diseases is an important part of the Occupational Health program to prevent transmission of infection to:

- employees
- residents/clients
- co-workers
- families

There are routine vaccines that all adults should have and there are other vaccines that are recommended for shelter workers if they are considered to be at increased risk. You should discuss this with your own family doctor.

According to the recommendations of the National Advisory Committee on Immunization, as published in the Canadian Immunization Guide, the following is a list of routine immunizations that ALL adults should receive (unless there is a medical reason why they cannot). Everyone should know his/her immunization status and take steps to get any vaccinations that are overdue.

**Diphtheria-Tetanus vaccine:** One primary series (usually given at childhood) and then a booster every 10 years.

**Measles-Mumps-Rubella vaccine:** Usually this is given in childhood, and is now given in two doses. Individuals who did not attend school in Canada, such as immigrants and refugees, may not have received one or more of the vaccine components, such as rubella. Adults born in 1970 or later who do not have documentation of adequate measles immunization or who are known to be sero-negative should receive a MMR vaccination.

If you are not sure about your status, you can be tested. Starting the series over again or having one booster should be discussed with your healthcare professional.

**Hepatitis B vaccine:** Recommended for all staff or volunteers who may be exposed to blood or blood products, or who may be at increased risk of sharps injury, bites or penetrating injuries. It is given in 3 doses at 0, 1 and 6 months.
**Hepatitis A vaccine:** Hepatitis A is a virus that attacks the liver. It is passed in the stool from people who are infected. The hepatitis A vaccine is available free of charge to men who have sex with men, drug users, people with chronic liver disease such as hepatitis B or C and household or sexual contacts of a person with hepatitis A. Ask your family doctor for more information or call Peel Public Health: 905-799-7700.

**Chickenpox vaccine:** Many adults who grew up in Canada have already had chickenpox and would be considered immune (protected). If you have a clear history of chickenpox as a child, then you are likely immune. If there is any doubt, ask your family doctor to test your blood to see if you are immune or not. If you are not protected, then it is highly recommended that you get immunized against chickenpox. Chickenpox is very common in shelters that have children or families. If you are exposed and not protected, you may be required to miss some time from work. If you get chickenpox as an adult, it can be very severe.

**Influenza vaccine:** It is highly recommended that individuals who work/volunteer in a shelter get their influenza vaccination every year. It has been shown to reduce worker illness and absenteeism during the Influenza season. Contraindications (reasons why not to get an influenza vaccination):
- people who had an anaphylactic reaction to a previous dose
- persons with a known IgE-mediated hypersensitivity to eggs, manifested as hives, swelling of the mouth and throat, difficulty breathing, hypotension or shock
- persons known to have developed GBS within 8 weeks of a previous influenza vaccination

For more information:
**Canadian Immunization Guide, Seventh Edition, 2006**
Communicable disease management

Other considerations for workplace health and safety, infectious diseases and homeless clients/residents.

All agencies should make themselves aware of their obligations under the Occupational Health and Safety Act. Some organizations will have an occupational health department that will actively monitor the environment in which employees are working.

Make sure:
- There are adequate supplies for personal hygiene at all times, such as soap, alcohol based hand rub, paper towels, running water, toothpaste, brushes, tampons, etc.
- Basic personal protective equipment, such as disposable and rubber gloves, masks, etc., is available to all staff and volunteers and that they know how to use it properly.
- All staff and volunteers have training in infection prevention and control on a regular basis. Topics to be covered include how infections are spread and the prevention of infections (hand hygiene, cover your cough, stay home when ill etc).
- There is an established way for management to communicate concerns to staff and for staff to communicate concerns to management.
- Emergency supplies such as a first aid kit and outbreak response kit are accessible and appropriately stocked.
- That used syringes, needles and razors are carefully thrown out in a designated sharps disposal container.
### Disease specific recommendations

<table>
<thead>
<tr>
<th>Disease/Organism</th>
<th>Transmission</th>
<th>Incubation</th>
<th>Workplace Considerations</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Chickenpox</strong>&lt;br&gt;(Varicella-Zoster Virus)&lt;br&gt;(VZV)</td>
<td>Inhalation of airborne virus or direct or indirect contact of oral or nasal mucous membranes with clear fluid from the blister or respiratory secretions from an infected individual</td>
<td>10-21 days. Communicable for 2 days before symptoms appear and until lesions are dry and crusted.</td>
<td>Staff members with chickenpox should be excluded from work until all lesions are dry and crusted. If staff member worked while they were considered to be infectious then the facility must identify any staff who are not immune. Non-immune staff should be excluded from work from 10 days after exposure until 21 days after exposure. All staff should be directed to be tested for immunity to Varicella. Vaccine is available.</td>
</tr>
<tr>
<td><strong>Gastroenteritis</strong></td>
<td>Direct or indirect ingestion of infectious feces or by ingestion of contaminated food or water. Airborne transmission has been suggested in some Norwalk-like virus outbreaks.</td>
<td>Varies depending on organism</td>
<td>Staff members with vomiting and/or diarrhea should be excluded from contact with clients/residents and their environment and from food handling until no longer experiencing loose stools or staff member is cleared to return to work by Peel Public Health.</td>
</tr>
<tr>
<td><strong>Hepatitis A</strong> (HAV)</td>
<td>Direct or indirect ingestion of infectious feces or by ingestion of contaminated food or water</td>
<td>15-50 days. Communicable from 2 weeks before to 1 week after onset of symptoms</td>
<td>Vaccine is available. Staff members with HAV should be referred to a doctor for confirmation of diagnosis and clinical management. Staff members should be excluded from work until cleared to return by Peel Public Health.</td>
</tr>
<tr>
<td><strong>Herpes simplex virus</strong>&lt;br&gt;(HSV)</td>
<td>Direct or indirect contact with primary or recurrent lesions, infectious saliva or genital secretions</td>
<td>2-12 days. Period of communicability is until lesions are healed. Asymptomatic viral shedding may occur.</td>
<td>Reinforce Routine Practices and importance of frequent hand hygiene. Avoid touching face. Staff with weeping lesions should wear protective dressing. Staff with herpetic whitlow (finger infection) should not provide direct care to clients/residents until lesions are healed.</td>
</tr>
<tr>
<td><strong>Influenza</strong></td>
<td>Droplet contact</td>
<td>1-3 days. Period of communicability is 1 day before to 5 days after onset of symptoms</td>
<td><strong>Annual influenza immunization</strong> is the most important way to prevent influenza. Staff showing symptoms of influenza should have the appropriate laboratory tests done to confirm the diagnosis. Symptomatic staff should be excluded for at least 5 days after the onset of symptoms unless they have been immunized or have received antiviral therapy.</td>
</tr>
<tr>
<td>Disease/Organism</td>
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<td>Incubation</td>
<td>Workplace Considerations</td>
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</tr>
<tr>
<td><strong>Lice</strong></td>
<td>Head lice – direct head-to-head contact with infested individual or indirectly by objects used by them (e.g. hats, brushes). Body lice – direct skin-to-skin contact or exchange of infested clothing or bedding.</td>
<td>6-10 days. Period of communicability continues until 24 hours after effective treatment of lice and ova.</td>
<td>Exclude affected staff until the completion of effective therapy. Instruct affected staff to follow treatment directions exactly.</td>
</tr>
<tr>
<td><strong>Meningococcus</strong></td>
<td>Droplet and direct contact</td>
<td>2-10 days. Communicability is 7 days prior to onset of symptoms to 24 hours after start of effective therapy.</td>
<td>Reinforce Routine Practices. Vaccine is available for some strains. Prophylactic medication is available for high-risk (significant) exposures.</td>
</tr>
<tr>
<td><em>Neisseria meningitides</em></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Parvovirus B 19</strong></td>
<td>Droplet and direct contact of the mouth, nose or eye secretions from a sick individual.</td>
<td>4-21 days. Individual is no longer infectious by the time the rash appears.</td>
<td>Reinforce Routine Practices. No work restrictions needed for ill staff.</td>
</tr>
<tr>
<td><strong>Erythema infectiosum</strong></td>
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<td></td>
</tr>
<tr>
<td><strong>Fifth Disease</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Respiratory Infections</strong></td>
<td>Primarily by droplet-contact of the mouth, nose or eye secretions from a sick individual.</td>
<td>Varies depending on organism.</td>
<td>Minimize contact of staff with acute respiratory infections with clients/residents. Evaluate symptomatic staff on an individual basis for fitness to work based on type of work, hygiene measures and acuity of symptoms.</td>
</tr>
<tr>
<td><strong>Ringworm</strong></td>
<td>Direct or indirect skin contact with scalp or skin lesions of infectious individual or animal or contaminated environment</td>
<td>5-7 weeks. Communicable as long as lesions are present.</td>
<td>Cover lesions with an occlusive dressing. Reinforce hand hygiene. If lesions on hands or arms cannot be covered by a dressing, the staff member should not provide direct care. If facility has pets, assess pets to ensure that they are free of ringworm.</td>
</tr>
<tr>
<td><em>Tinea</em></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Scabies</strong></td>
<td>Direct skin-to-skin contact with an infected individual. It takes approximately 4 hours of contact for scabies to spread.</td>
<td>4-6 weeks after initial infestation. Repeat exposures: 1-4 days. Communicable as long as person is infested and untreated.</td>
<td>Exclude affected staff until one application of effective treatment has been completed. Ensure that staff follow treatment directions exactly.</td>
</tr>
<tr>
<td>(typical or Norwegian)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disease/Organism</td>
<td>Transmission</td>
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</tr>
<tr>
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</tr>
<tr>
<td><strong>Shingles</strong> (Herpes Zoster)</td>
<td>Direct or indirect contact with rashes. Transmission causes chickenpox in susceptible individuals.</td>
<td>10-21 days. Communicable until lesions are crusted.</td>
<td>Staff with localized lesions may work if lesions can be completely covered by a dressing and clothing. If lesions cannot be covered, then staff member should be excluded until lesions are dry and crusted. Staff with disseminated lesions should be excluded from work until all lesions have dried and crusted.</td>
</tr>
<tr>
<td><strong>Streptococcus</strong> (Group A Strep Strep throat Scarlet fever Invasive GAS)</td>
<td>Droplet, direct or indirect contact of oral or nasal mucous membrane with infectious respiratory or wound secretions</td>
<td>1-3 days. Period of communicability is from 7 days before until 24 hours after start of effective therapy.</td>
<td>Exclude ill staff until completion of 24 hours of effective therapy.</td>
</tr>
<tr>
<td><strong>Tuberculosis</strong></td>
<td>Inhalation of airborne bacteria</td>
<td>2-10 weeks.</td>
<td>All staff should have documented Two Step Testing (TST). Staff member with active TB disease should be excluded from work until cleared by their physician and Peel Public Health for return to work.</td>
</tr>
<tr>
<td><strong>Typhoid fever</strong> (Salmonella typhi)</td>
<td>Ingestion of contaminated food or water. Direct or indirect ingestion of infectious feces or urine.</td>
<td>3-60 days. Communicable as long as the organism appears in feces.</td>
<td>Exclude ill staff. Consult Peel Public Health regarding return to work.</td>
</tr>
<tr>
<td><strong>Whooping cough</strong> (Pertussis)</td>
<td>Droplet contact of the oral or nasal mucous membranes with the respiratory secretions of an infected individual</td>
<td>6-20 days. Period of communicability is 1-2 weeks before the onset of cough until 3 weeks after cough onset if untreated or 5 days if treated.</td>
<td>Vaccine is available but immunity wanes over time. All staff should be considered susceptible unless they have received pertussis booster in adulthood. Exclude symptomatic or infected staff until 5 days after start of effective therapy or if untreated through the 3rd week after the onset of coughing. Staff exposed to whooping cough should see his/her doctor.</td>
</tr>
</tbody>
</table>

Adapted From: *Prevention and Control of Occupational Infections in Health Care*, CCDR March 2002; Volume 28S1
Chapter 7
Tuberculosis (TB)

- TB infection vs. TB disease
- Information about TB
- TB skin testing
- Active TB disease
- TB risk factors
- Role of Peel Public Health in TB prevention and control
- Environmental and infection control measures
- Recommended TB policy for homeless service agencies
- Question and answers
# TB infection vs. TB disease

There is a big difference between TB infection and TB disease. It is important for you to know the difference.

<table>
<thead>
<tr>
<th>Infection (Latent)</th>
<th>OR</th>
<th>Disease (Active)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive TB skin test</td>
<td>▶️SKIN TEST◄</td>
<td>Positive TB skin test</td>
</tr>
<tr>
<td>TB germ has entered the body but is not growing (inactive)</td>
<td>▶️STATUS◄</td>
<td>TB germ has entered the body and is growing (replicating)</td>
</tr>
<tr>
<td>NOT CONTAGIOUS Cannot pass the TB germ to anyone else</td>
<td>▶️INFECTION◄</td>
<td>CONTAGIOUS If disease is in the lungs/throat and not properly treated with medication</td>
</tr>
<tr>
<td>Normal chest x-ray</td>
<td>▶️CHEST X-RAY◄</td>
<td>May have an abnormal chest x-ray OR evidence of TB in another part of the body</td>
</tr>
<tr>
<td>No symptoms</td>
<td>▶️SYMPTOMS◄</td>
<td>Symptoms become more severe over time (e.g., new or worsening cough, chest pain, chills, weakness, fever, weight loss, night sweats, coughing up blood)</td>
</tr>
<tr>
<td>May be prescribed medication for up to nine months to prevent disease from developing</td>
<td>▶️TREATMENT◄</td>
<td>Requires treatment with several medicines for at least six months to cure disease</td>
</tr>
<tr>
<td>Person is at risk of developing disease in the future</td>
<td>▶️ASSOCIATED RISKS◄</td>
<td>Person has disease and must be treated. Early treatment prevents disease from getting worse and limits spreading to others</td>
</tr>
</tbody>
</table>
Information about tuberculosis (TB)

What is TB?

- Tuberculosis (TB) is a communicable disease caused by the bacteria called Mycobacterium tuberculosis
- Respiratory TB is active TB disease in the lungs and/or throat that can be spread to other people
- Non-respiratory TB is active TB disease in another part of the body (e.g., lymph node, kidney, bone or joint, brain). This is usually not contagious.
- Latent TB Infection (LTBI) is inactive TB bacteria in the body that is not causing any harm

How do you get TB?

- You can catch TB by spending time in close quarters with someone who has active respiratory TB disease. When the person with active TB disease coughs, shouts, sings, or sneezes, tiny germs will float in the air. People nearby can breathe the TB germs into their lungs and get TB infection.
- TB is not a highly infectious disease. Transmission usually requires close and frequent contact with someone who has active respiratory TB disease.
- You cannot get TB from sharing clothes, bedding, drinks, cigarettes or dishes

What happens if you breathe in TB germs?

- TB germs enter your lungs
- Your immune system fights the TB germs by building a wall around them. The wall stops the germs from growing in the lungs or any other part of your body. If you have this, you have latent TB infection or inactive TB and:
  - You may never get sick
  - You cannot pass the germs on to others

How do you know if you have TB germs in your body?

- You can tell if you have LTBI (inactive) by having a TB skin test.
TB skin testing

What is the TB skin test?

- The TB skin test tells you if the TB germ is in your body. It is also called the Mantoux test or tuberculin skin test (TST).
- A nurse or doctor injects a small amount of clear fluid called “tuberculin” under the skin of your forearm. It will look like a mosquito bite. Two or three days later, the nurse or doctor examines your arm, measures the bump and tells you if the test result is positive or negative.
- The test in considered positive or negative depending on the size of the bump
- You cannot catch TB from the TB skin test
- Regular TB skin testing will not cause you to become positive later on.
- Even if you had a TB vaccine (BCG) in the past, you can still have the TB skin test. You should tell your healthcare professional if you have had BCG.
- It is safe to have the TB skin test if you are pregnant

What does a positive TB skin test mean?

- If your skin test is “positive” it means you have TB germs in your body
- You need a check-up by your doctor, a chest x-ray and sputum test to rule out active TB disease
- A positive skin test, normal chest x-ray, normal physical exam and negative sputum test results mean you have latent TB infection (inactive)
- Latent TB infection means your body has created a wall around the TB germs
- If you are otherwise healthy, you have a five to ten percent chance of developing active TB disease in the future
- You may take medicine (e.g., Isoniazid for nine months) to reduce your chance of getting active TB disease in the future

What does a negative TB skin test mean?

- If your TB skin test is “negative”, it means the TB germs are not present or not showing in your body now
- The germs may not be showing because people with a weakened immune system caused by diseases such as diabetes, HIV, or cancer may not react to the skin test and should be referred to at TB specialist or clinic for further testing
What is 2-step TB skin testing?

2-step TB skin testing is used only as the initial test for people who will be getting repeated TB skin tests.

- The body’s reaction to the TB skin test can decrease over time. A person who was infected with TB a long time ago may initially have a negative skin test. The test should be repeated (second step) in one to four weeks. If the second skin test is positive, this is caused by the booster effect and it shows the person was infected some time in the past.

- It is important to know the true TB skin test results of those people who will be tested regularly. People who work in places where there is a greater risk of becoming infected with TB should be tested regularly (e.g., people who work in shelters, hospitals, jails or those who regularly travel to or live in countries where TB is common).

- For those people whose current TB skin test is unknown, here is how 2-step skin testing works:
  - **First TB skin test:**
    - If negative, you will have a second skin test
    - If positive, there is no need to have a second test
  - **Second TB skin test:**
    - The second TB skin test should be done one to four weeks after the first negative test
    - The results of the second TB skin test are recorded as your true reaction. All future TB skin test reactions are compared to this result.
    - **It is important to keep a record of your TB skin test results**
Active TB Disease testing

Can TB germs make you sick?

When you have latent TB infection (inactive), the wall surrounding the TB germs can break down if your immune system is weakened because you are:

- Ill with another disease, such as diabetes, cancer or HIV
- On steroid therapy
- Stressed
- Getting older
- Underweight or malnourished

If this happens, the germs begin to grow and spread (become active) and you have active TB disease.

What are the symptoms of active TB disease?

- Cough – new or worsening, lasting more than three weeks
- Chest pain, shortness of breath, coughing up blood
- Unexplained weight loss
- Fatigue
- Loss of appetite
- Fever, chills, night sweats
- If the TB disease is in another part of the body, the symptoms will depend on where it is located (e.g., enlarged lymph node, joint pain)

If you have any of these signs or symptoms, you should see a doctor or nurse right away. The doctor or nurse may collect sputum, send you for a chest x-ray and do other tests for TB.

Can TB disease be cured?

- TB disease can be cured with medicine (antibiotics). TB medicine is FREE.
- You will need to take four or five TB medicines (antibiotics) for at least six months
- Your healthcare professional will decide when you are no longer contagious. The healthcare professional will check the sputum to make sure the TB disease is not contagious.
- It is important to take your medicine for as long as the doctor tells you to
- Peel Public Health staff will support you in taking your TB treatment
Every year in Peel, approximately 100 - 120 people are diagnosed with TB disease. In Toronto, approximately 370 – 400 people are diagnosed with TB disease. Approximately five percent of these active TB cases are in the homeless and under-housed population. An outbreak of TB was identified in two downtown Toronto men’s shelters in 2001 and 2004. Such outbreaks can take years to control.

TB risk factors

Some groups are at higher risk of having latent TB infection (inactive).

They include:
- People who have had close and prolonged contact with people who have active TB of the lungs or throat
- People who have lived or travelled where TB is common (Asia, Africa, South America, some parts of Eastern Europe)
- People who have lived on a reserve or in an Inuit community
- People who have HIV/AIDS
- Staff and clients/residents of long-term care facilities, hospitals and correctional centres
- Older people, especially those who have lived through times when TB was common
- Staff and clients/residents of shelters or agencies that work with homeless and under-housed people

Some groups who have latent TB infection (inactive) are at higher risk of developing active TB disease.

They include:
- People with a history of active TB disease that has not been treated properly
- People with an abnormal chest x-ray
- People with medical problems that reduce their ability to fight infection (e.g. cancer, diabetes, organ transplantation, chronic kidney failure, HIV/AIDS)

Why are homeless people at greater risk of TB?

People who are homeless are at increased risk for both latent TB infection (inactive) and active TB disease because some risk factors for TB are common among this group.
These risk factors include:

- Contact with other homeless people who have untreated active TB disease
- Poor access to nutritious food
- Poor access to healthcare
- Difficulty getting close follow-up by healthcare professionals after exposure to TB
- Increased likelihood of having chronic health conditions
- Substance use, especially injection drug use and alcohol
- Limited access to HIV education and prevention measures, increasing the risk of HIV infection
Role of Peel Public Health in TB prevention and control

TB is a reportable disease. This means that every case of both active TB disease and latent TB infection (inactive) must be reported by a healthcare professional to Peel Public Health.

Management of TB

The Public Health Nurse will do the following:

- Verify whether the client/resident has latent TB infection (inactive) or active TB disease
- Contact the physician/hospital/clinic for additional information
- If the client/resident has latent TB infection, the nurse will send information to the client/resident to:
  - Teach about latent TB infection
  - Review the option of taking TB medicines to prevent the development of TB disease
- If the client/resident has active TB disease, the nurse will visit the client/resident to:
  - Teach about active TB disease and how to prevent its spread
  - Discuss TB medicines and their side effects
  - Check that medicines are being taken properly
  - Encourage medical follow-up appointments
  - Identify contacts and refer them for follow-up
  - Refer clients/residents with other health/social needs to other sources of help
- Assess the need for Directly Observed Therapy

Directly Observed Therapy (DOT)

- It is a free program to help cure TB
- A DOT worker regularly meets with the client/resident to help them with his/her TB medicine

How does the DOT program work?

A DOT worker will meet with the client/resident:

- At home or another place (e.g., shelter or work)
- About five times a week until the treatment is finished

How can the DOT worker help the client/resident?

A DOT worker will:

- Support the client/resident throughout the long TB treatment
- Watch for side effects from the TB medicine
- Help the client/resident take the TB medicine correctly
- Help the client/resident to understand TB
- Help the client/resident with TB doctor appointments
- Refer the client/resident to appropriate agencies to address other concerns

Contact tracing

- All people reported with active TB disease are assessed by Public Health to determine if they are contagious
- The purpose of contact tracing is to identify, notify and educate anyone who has been in close prolonged contact with someone who has active TB disease, and to make sure that they are tested so they know if they have been infected and may need treatment
- If someone is contagious with active TB disease in a shelter or drop-in, Public Health will educate, advise, and follow-up with staff, volunteers and clients/residents
Recommended TB policy for homeless service agencies

TB skin testing for staff and volunteers

All staff and volunteers, who spend regular ongoing time (an average of eight hours a month or more) in a drop-in or shelter in Peel, should be tested for TB. Anyone who works or volunteers should have the pre-employment screening and annual recheck.

Initial testing

TB testing should be done pre-employments, pre-volunteer or student placement. Initial testing should be 2-step TB skin testing.

If a person has a positive TB skin test, a medical exam and chest x-ray will be required. The results of the TB skin test (doctor’s note and chest x-ray results if needed) should be kept in a separate, confidential health file.

If a person has a documented positive TB skin test in the past, repeated TB skin testing when starting work with homeless people is not necessary. The person should be aware of the signs and symptoms of TB, and seek medical follow-up if these symptoms occur.

NOTE: The purpose of TB skin testing at the start of work is to document current status; this makes medical follow-up for staff much more straightforward if they are exposed to someone with infectious TB later on at work. A negative TB skin test should never be a requirement of employment.

Annual follow-up

Annual testing is recommended if the initial 2-step TB skin test is negative. However, the follow up for a positive TB skin test includes seeing a doctor so active TB disease can be ruled out. There are no workplace or employment restrictions necessary for people who have a positive TB skin test.

TB education

Staff and volunteers should receive TB education within 30 days of starting work. Regular TB updates should be provided as needed.

Symptom screening

All staff who works directly with clients/residents should be aware of the signs and symptoms of TB and must know how to refer someone who is ill for assessment and follow-up. The TB symptom screening form included in this manual can be used to obtain information for assessment and referral.
Environmental and infection control measures

The following environmental and infection control measures will help reduce the spread of TB:

- Instruct someone who is coughing or sneezing to cover their nose or mouth
- Supply disposable tissue to the clients/residents
- Place each bed/cot as far from neighbouring beds/cots as possible in head-to-foot arrangements
- Adequate ventilation and/or air circulation systems may help reduce the risk of TB. Consult your building engineer to make sure ventilation units are maintained regularly and operating properly (e.g., intake vents are open).
- Make sure all staff and volunteers have had appropriate TB skin testing
- Make sure regular surgical masks are available to give to clients/residents who have possible TB symptoms. They should wear the masks until they can be seen by a healthcare professional.
- Make sure that one staff member per shift (e.g., shift manager/supervisor) has been fit-tested for an N95 mask. These will be needed only when providing direct support for a client/resident with possible TB who is so severely ill that you have called an ambulance to get them to the emergency room.
Questions and answers

How long do you have to be in a room with someone before you will catch TB?

The spread of this germ is influenced by many different factors including: sunlight, ventilation, closeness to and length of time spent with the sick person and how sick the person is.

Peel Public Health will investigate and notify anyone who might be at risk of exposure to a person with active TB disease. However, routine screening for anyone dealing with high risk populations is recommended.

I’ve heard of someone who had TB in their elbow. Is this possible?

Yes, the TB germ can travel to many parts of the body and cause disease to happen. However, active TB disease is only contagious when it is in the lungs or throat.

I had my blood tested at the doctor, wouldn’t they have checked for TB?

No. Even though a very expensive blood test has been licensed for use in Canada, it is not widely available.

How can I get more information?

Peel Public Health TB Program, TB Drug Orders* and/or TB Immigration and Medical Surveillance:

905-799-7700

*All TB medications are free when a healthcare professional orders the medication from Peel Public Health.
Specialized TB clinics in Toronto

The Hospital for Sick Children
555 University Ave., Main Floor
416-813-8327

St. Michael’s Hospital
30 Bond St.
416-864-6060, ext. 2673

Toronto Western Hospital
399 Bathurst St., 8th Floor, New East Wing
416-603-5853

West Park Healthcare Centre
82 Buttonwood Ave., 2 east B
416-243-3600, ext. 2180
Appendices

- Important telephone numbers and websites
- Daily Infection surveillance log sheet
- Brochures and posters
APPENDIX 1

Important telephone numbers and websites

Emergency (Police, Fire, Ambulance) 9-1-1

Peel Police (non-emergency) 905-453-3311

Region of Peel – Homelessness

Useful links to the following agencies servicing Peel Region
http://www.peelregion.ca/social-services/homelessness/links/

Canadian Mental Health Association, Peel Branch, Outreach Program
http://www.cmhapeel.ca/

Housing Initiatives and Resources in Peel
http://www.peelregion.ca/housing/initiatives-resources/

Our Place Peel
http://www.ourplacepeel.org/

Peel Information Network
http://www.pinet.on.ca/

Salvation Army
http://www.salvationarmy.ca/#

Social Planning Council of Peel
http://www.spcpeel.com/

St. Leonard’s
http://www.stleonardshouse.com/index.php
United Way of Peel Region
http://www.unitedwaypeel.org/

YMCA of Greater Toronto

Street Helpline Peel 1-877-848-8481

After hours crisis help 905-272-7061

Region of Peel - Needle Exchange Services
647-225-1623
http://www.peelregion.ca/health/needle-exchange/index.htm

Region of Peel – Ontario Works
905-793-9200
http://www.peelregion.ca/ow/

Region of Peel – Public Health
905-799-7700
http://www.peelregion.ca/health/

Region of Peel - TransHelp
905-791-1015
http://www.peelregion.ca/transhlp/

Region of Peel – Children’s Services
905-791-1585
http://www.peelregion.ca/children/

Region of Peel – Housing
Social Housing/Peel Living 905-453-1300
http://www.peelregion.ca/housing/
http://www.peelregion.ca/housing/peel-living/

Region of Peel – Long Term Care
905-791-7800
http://www.peelregion.ca/ltc/

Transitional Housing in Peel Region - 905-793-9200 ext. 8489
Angela’s Place
http://www.peelregion.ca/social-services/homelessness/about/factsheets/angelas-place.htm

Peel Youth Village
http://www.peelregion.ca/housing/peelbuilds/centres/peelyouth.htm

Methadone Clinics in Peel

1) Ontario Addiction Treatment Centres (self referral for all clinics)

   www.oatc.ca

   a) Mississauga location
   3047-A Hurontario Street, Mississauga, ON  L5A 2G9
   905-279-4848
   Dr. S. Hershkop

   b) Brampton location
   65 Queen Street West, Brampton, ON  L6Y 1M2
   905-450-6679

2) Malton Medical Centre
   7330 Goreway Drive, 2nd floor, Mississauga, ON
   905-677-4200
   Dr. Stephen Black
   Dr. Simon Brown

Sexual Assault/Rape Crisis Centre of Peel 905-273-3337

Hand Hygiene Video
(Grey Bruce Public Health)
http://www.publichealthgreybruce.on.ca/Communicable/Handwashing/

Why Don’t We Do It in Our Sleeves? (How to cough or sneeze video)
(ORL Production)
http://www.coughsafe.com/watch-videos.html
Washing Hands with Soap & Water/Alcohol Based Hand Rub for adults and children - video (Wellington Dufferin Guelph Health Unit)
http://www.wdghu.org/page.cfm?id=481

Slide show re preventing spread of infection (particularly in flu season – Simcoe Muskoka Health Unit)
http://www.simcoemuskokahealth.org/Topics/InfectiousDiseases/InfectionPrevention/orderresources/VideosSlideshows.aspx
APPENDIX 2

Daily infection surveillance log sheet

The daily infection surveillance log sheet is designed to assist you in monitoring illnesses in the facility in order to better detect an outbreak of illness.

Further information about outbreak control can be found in this manual.
## Appendix 2

### DAILY SCREENING REPORT OF INFECTIONS

**SHELTER NAME:** ________________________________  **DATE:** ________________

Place a check mark in the appropriate box to identify any signs of infection in the residents. Symptoms should be new presentation or a change in the normal status for the resident.

<table>
<thead>
<tr>
<th>Resident Name</th>
<th>Room #</th>
<th>Sex</th>
<th>Onset Date</th>
<th>Looks flushed/feels feverish</th>
<th>Discharge site &amp; drainage</th>
<th>Diarrhoea</th>
<th>Cough</th>
<th>Skin rash</th>
<th>Headache</th>
<th>Other comments &amp; observations</th>
<th>Actions taken</th>
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<td>Resident Name</td>
<td>Room #</td>
<td>Sex</td>
<td>Onset Date</td>
<td>Looks flushed/feels feverish</td>
<td>Discharge indicators (describe, i.e. eye pus, nasal congestion)</td>
<td>Nausea/Vomiting</td>
<td>Diarrhoea</td>
<td>Cough</td>
<td>Skin rash</td>
<td>Headache</td>
<td>Other comments &amp; observations</td>
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### Routine Practices

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<td><img src="pdf" alt="Poster" /></td>
<td>Perfect Your Tech Skills!</td>
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### Hand Hygiene

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<td><img src="pdf" alt="Poster" /></td>
<td>How to Wash Your Hands</td>
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<td><img src="pdf" alt="Poster" /></td>
<td>Stop Infections! Wash Your Hands</td>
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<tr>
<td><img src="pdf" alt="Poster" /></td>
<td>Hand Hygiene Tips</td>
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[Click on a PDF File to print]
Respiratory Infection Prevention and Control

Screening Sign