



Public Health Information for Toronto Bathhouses

Public
Health
Information
for Toronto
Bathhouses

References:

This resource includes content and adaptations from the following documents:

NSW (New South Wales) Health Department, *NSW Communicable Diseases Health and Safety Guidelines for Sex on Premises Venues*, 2001, reprinted April 2002.

Toronto Public Health, *Breaking the Chain, Infection Control Manual (Infection prevention and control for homeless and housing service providers)*, March 2006.

Acknowledgements:

Toronto Public Health acknowledges the assistance of:

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The following Toronto bathhouses:

Club Toronto

The Oak Leaf

St. Marc's

Spa Excess

Steamworks

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416-338-7600

Public Health Information for Toronto Bathhouses is intended to provide a wide range of information. Users should be aware that this manual is a guide only. It should not replace consultation with Public Health staff and other professionals.

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Introduction

Bathhouses provide a unique communication link between gay and bisexual men and Toronto Public Health that is important in improving the health of this population. At the same time, bathhouses present public health challenges as a result of the sexual nature of activities that occur on site and the potential for exposure to blood and body fluids.

Outbreaks of infections spread by the fecal-oral route are of particular concern in bathhouses in addition to the transmission of sexually transmitted infections and other infections where close personal contact is a factor. The venues themselves are also of public health interest as facilities can include a number of public use areas such as spas, pools, steam rooms, saunas, and showers. Each of these areas requires specific cleaning and sanitizing procedures.

Operators of Toronto bathhouses can take a number of simple precautions to minimize the risk of infection transmission including:

- providing a clean and safe environment;
- providing information on disease prevention to staff and patrons;
- providing access to safer sex supplies including condoms and water-based lubricant; and
- being aware of the regulatory requirements in relation to the design and operation of their venue.

Toronto Public Health, in consultation with the owners of Toronto bathhouses, has developed this resource, **Public Health Information for Toronto Bathhouses**, to assist operators in minimizing health risks for staff and patrons within Toronto bathhouses.

Purpose

Public Health Information for Toronto Bathhouses provides general advice and is intended as a framework within which operators can develop detailed operational guidelines appropriate to their venues. Operators are encouraged to obtain additional health and safety advice as needed. For more information, operators are encouraged to contact Toronto Health Connection at 416-338-7600. A variety of public health staff are available for consultation on specific public health and health and safety issues with the aim of reducing public health risks and concerns.



Toronto Public Health and Bathhouses

Toronto Public Health has a history of working with bathhouses in the field of sexual health. Public health staff have been a part of many outreach strategies to address the sexual health needs of men who attend bathhouses. The successful collaboration between bathhouse operators and Toronto Public Health on addressing sexual health issues has provided a model for collaboration on other health-related issues that can affect bathhouse staff and patrons.

Public health inspectors also play a role in protecting the health of patrons and staff of bathhouses. A public health inspector or other Toronto Public Health official may visit your bathhouse under the following circumstances:

To ensure compliance with legislation regarding food service, swimming pools and spas.

To respond to complaints about smoking in the bathhouse.

To investigate an outbreak of a communicable disease.

To provide advice or answer questions about public health issues.

To communicate health promotion messages.

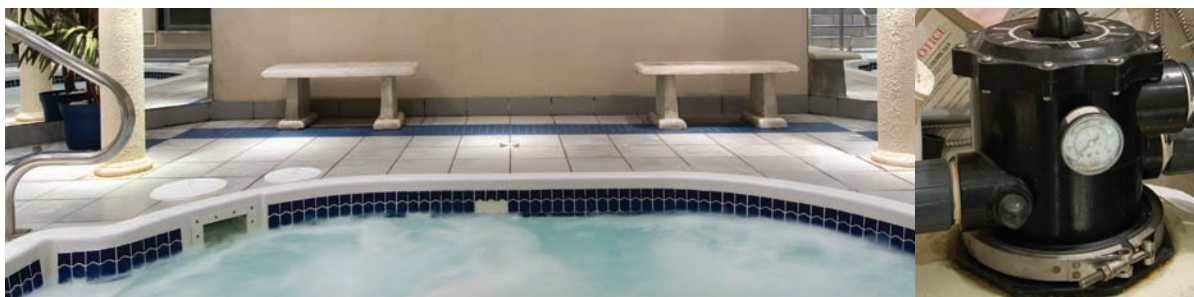
Inspections will be conducted on both a routine and complaint basis. The frequency of routine inspections is determined by the type of inspections that are applicable (spa, food safety, etc.) as well as past performance. Previous infractions lead to re-inspections and return visits to ensure compliance.

Toronto Public Health is required by provincial law to respond to all complaints related to the inspection activities that they conduct. There may also be visits during the investigation of communicable disease outbreaks. Regardless of why they are visiting, remember that Toronto Public Health staff are interested in helping you make your facility as safe and healthy as possible.



Sale of Food

Preparing and selling food in a bathhouse is subject to provincial legislation known as the Food Premises Regulation (562/90). The regulations ensure that food prepared for sale to the public is prepared according to standards of cleanliness and safety. In general, the complexity of the menu items provided will determine requirements for types of kitchen equipment, food handler training and the frequency of inspections per year. If food is prepared in your bathhouse, you are probably very familiar with the regular visits from a public health inspector. If you would like to sell food, contact Toronto Public Health for expert advice.



Swimming Pools and Spas

Spas and swimming pools require daily attention to keep them safe for users. Spas are of particular concern because the high temperature of the water promotes the growth of organisms if not treated properly. The hot water can also present physical challenges to users who are sensitive to heat or who overuse the spa. It is a requirement that all staff responsible for the maintenance of a spa or pool are trained in spa operation (under the Spa Regulation S3[2]). The good news is that there are very simple methods that, if followed, will prevent dangerous conditions from developing.

Swimming pools and spas are subject to provincial legislation which determines precise standards for water quality, safety equipment, bather load, record keeping and sanitation. Indoor swimming pools are inspected four times yearly and spas are inspected annually by public health inspectors.

It is difficult, if not impossible, to simplify the important aspects of pool and spa operations. After all, the safe operation of swimming pools and spas is fairly complex and requires a constant commitment of time and energy. Chances are, if you have a pool or spa, you are already familiar with the regulations and their scope. Public health inspectors are available to answer questions about the inspection process. Questions about technical advice on spa and pool operations should be directed to a pool and spa maintenance company.

Sample spa test record forms are included on pages 6 and 7.

Spa/Swimming Pool First Aid Kit

If you have a spa or a swimming pool in your bathhouse, provincial regulations require that a first aid box be conveniently located for emergency use.

The first aid kit should contain as a minimum:

- a current copy of a standard First Aid Manual
- 12 safety pins
- 24 adhesive dressings, individually wrapped
- 12 sterile gauze pads, each 75 millimetres square
- four rolls of 50 millimetre gauze bandage
- four rolls of 100 millimetre gauze bandage
- four sterile surgical pads suitable for pressure dressings, individually wrapped
- six triangular bandages
- two rolls of splint padding
- one roll-up splint
- one pair of scissors (spas only)
- two pairs of non-permeable gloves (spas only)
- one resuscitation pocket mask (spas only)

When to Close a Spa

Close your spa immediately when any of the following conditions are observed:

- Water clarity is poor (can't see the lowest drain).
- Fouling (e.g. feces or chemical).
- Physical hazards (e.g. broken glass).
- Filtration or circulation system is not operating properly.
- Power outage.
- Drain cover or fittings missing or broken.
- Suction system missing or malfunctioning (e.g. vacuum release).
- Emergency telephone missing or broken.
- Emergency stop button missing or broken.
- Audible and visual signal missing or broken.
- Ground Fault Circuit Interrupter (GFCI) missing or broken.
- Spa temperature greater than 40°C (104°F).
- Disinfectant not available.
- Laboratory Confirmed pathogenic agents isolated.
- Electrical hazards.
- Any other conditions that may be considered a risk to health.

Sample Spa Test Record Forms

Spa Hourly Water Tests

Date:

Free Available Chlorine	1/2 hr. before opening	m/L	1AM	2AM	3AM	4AM	5AM	6AM	7AM	8AM	9AM	10AM	11AM	12AM
Total Br. /CL Residual		m/L												
pH														
Temperature		°C												
Alkalinity														
Water clarity														
Operator's initial														

Free Available Chlorine	1/2 hr. before opening	m/L	1PM	2PM	3PM	4PM	5PM	6PM	7PM	8PM	9PM	10PM	11PM	12PM
Total Br. /CL Residual		m/L												
pH														
Temperature		°C												
Alkalinity														
Water clarity														
Operator's initial														

Spa Daily Inspection and Records

Emergency Phone (before opening)	Satisfactory or Unsatisfactory	am/pm	Month/Day/Year	Signature
Ground Fault Interrupter	Satisfactory or Unsatisfactory	am/pm	Month/Day/Year	Signature
O.R.P. :1/2 hour before open + 1x during the day	1st reading	2nd reading	Month/Day/Year	Signature
Spa tank drained	Yes	No	Month/Day/Year	
Spa tank refilled	Yes	No	Month/Day/Year	
Number of bathers	# of bather		Month/Day/Year	
Water meter reading	1st reading am/pm	2nd reading am/pm	Water added	
Chemicals added manually	Type & amount		Month/Day/Year	
Emergencies, Rescues breakdown of equipment			Month/Day/Year	Signature

Spa Monthly Water Tests		Date:	
Month	Inspection of gravity and suction outlet covers, etc.	Emergency stop button	Vacuum release mechanism
January	Month/Day /Year Signature	Month/Day /Year Signature	Month/Day /Year Signature
February	Month/Day /Year Signature	Month/Day /Year Signature	Month/Day /Year Signature
March	Month/Day /Year Signature	Month/Day /Year Signature	Month/Day /Year Signature
April	Month/Day /Year Signature	Month/Day /Year Signature	Month/Day /Year Signature
May	Month/Day /Year Signature	Month/Day /Year Signature	Month/Day /Year Signature
June	Month/Day /Year Signature	Month/Day /Year Signature	Month/Day /Year Signature
July	Month/Day /Year Signature	Month/Day /Year Signature	Month/Day /Year Signature
August	Month/Day /Year Signature	Month/Day /Year Signature	Month/Day /Year Signature
September	Month/Day /Year Signature	Month/Day /Year Signature	Month/Day /Year Signature
October	Month/Day /Year Signature	Month/Day /Year Signature	Month/Day /Year Signature
November	Month/Day /Year Signature	Month/Day /Year Signature	Month/Day /Year Signature
December	Month/Day /Year Signature	Month/Day /Year Signature	Month/Day /Year Signature



Responding to Complaints about Smoking

Bathhouses, like all other workplaces and public places in Ontario, are required to be smoke-free. Public health staff responsible for enforcing the *Smoke-Free Ontario Act* may visit your facility in response to complaints about smoking. During their visit, they will look for evidence of smoking and will also look at how staff and patrons are informed about the requirement and what actions are taken if someone chooses to smoke in any part of the bathhouse.

In addition to posting the required no smoking signs and removing ashtrays, you should also consider the following options:

- Inform patrons as they enter or add the smoke-free message to items such as receipts, room keys and locker keys.
- Make regular announcements that the bathhouse is smoke-free, with additional messages if you detect smoke.

Smoking Cessation

You may want to consider making information available to patrons about the benefits of quitting smoking. Local smoking cessation resources are included in the back pocket of this binder.

Investigating Communicable Disease Outbreaks

Bathhouses have been identified as sites where communicable disease outbreaks can occur given the nature of the physical environment and the sexual behaviors of patrons. There have been outbreaks of sexually transmitted and other infections linked to bathhouses in both Canada and the United States. A list of communicable diseases of concern is provided on page 29.

Outbreaks of communicable diseases are investigated promptly so that they can be stopped from spreading as quickly as possible. Cooperating with public health investigations benefits both you and your patrons. By helping to learn the cause of an outbreak, precautions can then be taken to prevent future outbreaks, and will assist in protecting you, your staff and patrons from illness.

Toronto Public Health is mandated to receive and investigate reports of designated reportable diseases under the Health Protection and Promotion Act, RSO 1990 and Regulation 559/91.

Public Health Consultations

The professional staff at Toronto Public Health are experts in a wide range of public health issues that can be of value to you, your staff and your clients. Information and advice can be provided upon request and bathhouse operators are encouraged to contact Toronto Public Health with questions or concerns.

Communicating Health Promotion Messages

Toronto Public Health and its partner agencies develop social marketing campaigns and health promotion materials that may be of interest to bathhouse staff and patrons. Public health staff may approach bathhouse operators to post or display such health information. This is an important health communication link between Toronto Public Health and marginalized gay and bisexual men and men who have sex with men but who do not identify as gay or bisexual.

Health and Safety at Work

Health Education for Staff

Operators of bathhouses should provide a clean environment and information to staff about safety and cleanliness practices which reduce the likelihood of exposure to infections. Understanding how certain communicable diseases are spread, and knowledge of prevention practices, enables staff to perform their work in a manner that is safe.

A communicable disease identified by bathhouse operators as being of particular concern is tuberculosis. Since tuberculosis (TB) can be spread from person to person through the air, many workplaces have concerns about TB. However, TB is not highly contagious and is only spread under certain conditions. Please refer to the information sheet on page 56 for more information.

Exposure to blood-borne and fecal-oral communicable diseases can occur in bathhouses through accidental exposures. Mechanisms should be in place to ensure that staff are aware of first aid procedures and routine practices in relation to blood or body fluids and to seek medical advice following an exposure incident.

Immunization is an effective means of preventing certain infections. All staff should be informed of the benefits of immunization and encouraged to discuss the issue with their health care provider. In particular, employees should seek immunization against hepatitis A and B as well as tetanus prior to (or as soon as possible after) commencement of employment. Information about immunizations is provided on page 27.

TPH staff are available for consultation and education sessions on communicable diseases or other health issues if you have concerns about the health of staff or patrons.

Personal Protective Equipment

Personal protective equipment helps to keep staff safe from exposures to potentially infectious body fluids as well as harsh cleaning chemicals. Operators should provide and maintain adequate personal protective equipment necessary to protect staff. Examples include latex and non-latex gloves, waterproof aprons, face shields and goggles. Staff should be required to wear appropriate footwear to prevent slips and to protect staff from injury or contact with sharp objects.

Vinyl gloves are not recommended for use where there may be exposure to blood and body fluids. Latex gloves should be worn in these instances. If staff are allergic to latex, gloves made of nitrile or neoprene are also excellent barriers.

Medical gloves should never be used when handling cleaning chemicals. For environmental cleaning and disinfecting, general purpose reusable rubber gloves are appropriate. Always refer to the product's Material Safety Data Sheet (MSDS) for information on what protective equipment should be worn for each specific cleaning or sanitizing product.

What is a Material Safety Data Sheet (MSDS)?

A Material Safety Data Sheet (MSDS) is a document that contains information about potential hazards (health, fire, reactivity and environmental) and how to work safely with the chemical product. It is an essential starting point for the development of a complete health and safety program. The MSDS is prepared by the supplier or manufacturer of the material and contains much more information about the material than the label. It is intended to tell what the hazards of the product are, how to use the product safely, what to expect if the recommendations are not followed, what to do if accidents occur, how to recognize symptoms of overexposure, and what to do if such incidents occur. (From the website of the Canadian Centre for Occupational Health and Safety, <http://www.ccohs.ca/>)

First Aid

All employers covered by the *Workplace Safety and Insurance Act* are required to have first aid equipment, facilities, and trained personnel in all workplaces. Regulation 1101 states what each employer is obligated to provide. A brochure about first aid requirements that includes the law (Regulation 1101) and the policy on first aid is available from the Workplace Safety and Insurance Board, www.wsib.on.ca.

Routine Practices

Routine practices involve the use of barriers and practices to prevent exposure to potentially infectious blood and other body substances. **Routine practices assume that all blood and body fluids and substances are potential sources of infections.** Routine practices for bathhouses are:

- hand washing,
- proper use of barrier precautions such as aprons, gloves, and eye protection,
- routine cleaning/disinfecting; and
- provision of proper sharps containers/disposal methods.

Micro-organisms which cause infections can be spread by:

- unwashed hands
- handling soiled towels and linen
- handling soiled equipment
- handling soiled furnishings and fittings
- handling soiled articles such as sex toys
- reusing single-use items such as douching tubing

If furnishings such as couches and mattresses are located in sexual activity areas, they should be covered with a water-proof covering such as vinyl to ensure ease of cleaning. If mattresses are provided, they should be positioned off of the floor on non-porous frames to facilitate cleaning.



Housekeeping

Maintaining a high standard of cleanliness is important in preventing the spread of infection. In bathhouses, the increased presence of blood and body fluids also increases the risk of disease. If followed, the advice offered in the following section will significantly reduce these risks.

Cleaning and Disinfection

Surfaces are not considered “clean” unless they are first washed and then properly disinfected. Cleaning removes dirt and debris while disinfection removes some level of bacteria and viruses. In general, the following steps are involved in cleaning and disinfection:

- remove any visible fluids/substances
- wash area with detergent and water
- rinse area with clean water
- apply disinfection solution to full surface
- allow area to air dry for 20 minutes

Remember that it is important to clean first and then disinfect.



Disinfecting Solutions

Water plus bleach is a commonly used disinfecting solution for the routine disinfection of surfaces and for surfaces where there is blood, body substances/fluids or other contamination:

- mix 9 equal parts of water with 1 part bleach
- avoid skin contact with solution
- disinfectants with 7% accelerated hydrogen peroxide solution are also suitable.

All areas should be cleaned and disinfected if soiled with semen, feces or urine.

Procedure for Cleaning Up Body Fluids

1.	Make sure that the area where the body fluid spill has occurred is blocked off.
2.	Wash hands for 15 seconds using soap and water.
3.	Check the MSDS sheet for the chemicals to be used. Put on disposable rubber gloves specific for cleaning. See “Personal Protective Equipment” (p. 11) for information about glove use.
4.	Wipe up the spill using disposable paper towels, then place paper towels in a garbage bag.
5.	Any needles or sharps should be picked up using tongs and placed into a sharps container.
6.	Pour the bleach disinfecting solution (9 equal parts water with 1 part bleach) onto all contaminated areas (be careful not to spill on your skin or clothing).
7.	Let the bleach solution sit for at least of 10 minutes
8.	Wipe up any remaining bleach solution with a mop or paper towels.
9.	Any mops or non-disposable materials should be soaked in the bleach solution and air dried.
10.	Remove gloves and place in the garbage bag. Double bag and secure the garbage bag before throwing out.
11.	Wash hands for at least 15 seconds using soap and water.

Routine Cleaning

Routine cleaning and disinfection should be performed for:

- staff areas
- sexual activity areas/rooms/glory holes
- bathroom and shower areas including toilets and hand basins
- floors and walls
- couches and other furniture
- door knobs and handles
- light switches
- common dispensers (soap, hand sanitizer, lubricant)
- slings, chains and other equipment
- garbage bins and receptacles
- storage areas

Spot Cleaning

All areas should be cleaned if soiled such as areas contaminated with semen, feces, blood or urine. Spot cleaning should be undertaken at least hourly (or more frequently if warranted during busy periods) and after an area has been vacated. Spot cleaning should be undertaken with adequate lighting.

Surface Materials

The correct design of bathhouse facilities assists in minimizing the risk of infection by providing optimal physical conditions for the implementation of appropriate infection control practices. In areas where there is the potential for blood or body fluids, surfaces must be smooth, impervious and seamless. Floors, walls, benches and other surfaces must be regularly inspected and repaired as needed to maintain surfaces in a state that can be readily cleaned and sanitized.





Saunas and Steam Rooms

Given the difficulty in cleaning the kind of untreated wood surfaces used in saunas and steam rooms, patrons should be encouraged to use towels as a protective barrier between themselves and surfaces that may become contaminated with blood and other body fluids. Further, to protect themselves from contracting fungal infections, including athlete's foot, patrons should be encouraged to wear water-resistant rubber-soled sandals or slippers.

Particular attention should be given to these high humidity areas when cleaning all surfaces. Cleaning and disinfection products that kill mould should be used.



Garbage Disposal

Discard all contaminated disposable material (e.g. paper towels) in a clear and sealable plastic bag. Make sure, when disposing of garbage, you do not reach into the bag or step on it with your feet. Bags should never be too full but, if a bag is overflowing, use a tool (e.g. tongs) to empty excess garbage into a second bag. Never use your hands.

Clients should be advised to dispose of used condoms by tying the condom closed and placing it in a garbage bin. Used condoms should never be flushed down the toilet.

Used needles must be disposed of in sharps containers and not in the regular garbage. When sharps containers are full, arrange to have them picked up by a biomedical waste company. Sharps containers cannot be disposed of in the regular garbage.



Air Quality

Ensuring adequate exhaust and fresh air replacement makes your facility more comfortable for your guests and contributes to a healthy work environment. Regular maintenance checks should be done on all heating and ventilation equipment to make sure that the systems are operating and all filters and duct work are clean. This is especially important for areas of high humidity and areas where chemicals are used for cleaning and disinfection.

Laundry

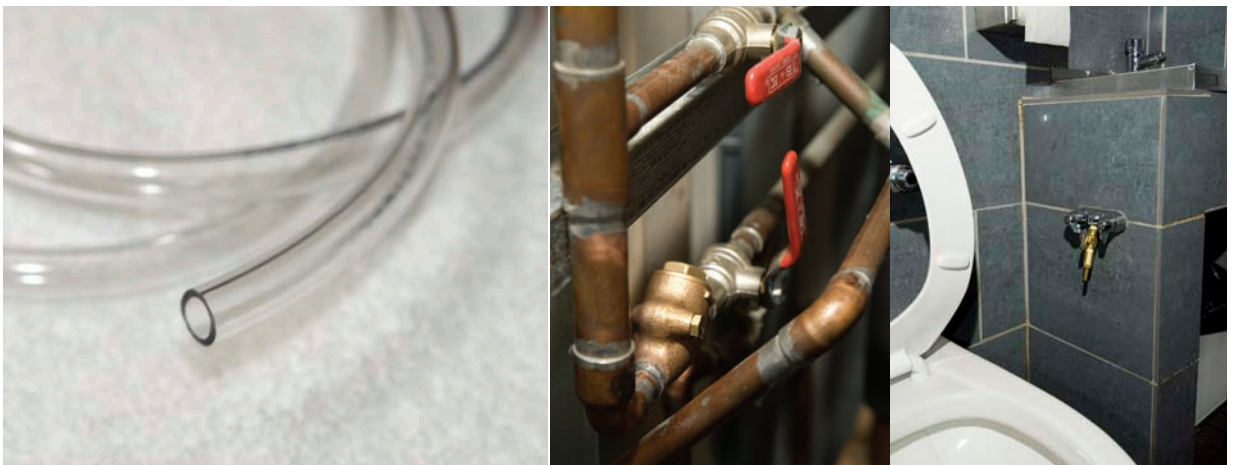
If laundry is done on the premises, ensure the following:

- Washing machines are in good repair.
- Washing machines are designed for longer wash cycles of 25 minutes or more.
- Washing machines can provide hot water of 71°C (160°F).
- Separate and repeated wash cycles are used for linen which is heavily soiled with body fluids.
- Avoid overloading washing machines.
- Linens should be dried at a high heat and stored in a manner that minimizes contamination.

Douching

The potential for spreading micro-organisms present in feces from a douching facility is extremely high. If douching facilities are provided, they should comply with the following:

- single-use tubing for anal insertion must be provided
- a back flow prevention device must be installed
- a toilet must be located at the site of the douching facility
- the facility must contain a hand basin and be provided with liquid soap and paper towels
- a bin with a lid should be available in the douching area for the disposal of single use tubing
- patrons should be directed to dispose of tubing after each use and not to use tubing which has been used by other patrons
- waste must be regularly removed from the douching area
- the douching room should be cleaned between each use



Pandemic Influenza

The City of Toronto, like most cities, is involved in extensive planning to respond to a future influenza pandemic. Up-to-date information can be found on the Toronto Public Health website, www.toronto.ca/health. Businesses and community are important stakeholders in reducing the spread of infection and in maintaining social order. Bathhouses provide a unique communication link between Toronto Public Health and the gay community. Bathhouse operators have expressed an interest in having information about the role of government agencies in pandemic influenza preparedness as well as their own role in communicating important health information to their patrons.

Historically, influenza pandemics have occurred approximately every 35 – 40 years. Some pandemics have caused only mild illness in people, while others have caused serious illness, death and social disruption. Although there is no way to predict when the next influenza pandemic will occur or how severe it will be, planning and preparedness is the best way to help reduce the impact of a pandemic or any other emergency.

What is influenza?

Influenza, or “the flu,” is a common and highly contagious respiratory illness caused by a virus. It is transmitted from person to person by coughing, sneezing or direct contact. The influenza season is usually October to April.

The best protection against seasonal influenza is to get vaccinated every fall. As the influenza virus changes, a new vaccine must be developed every year based on current and emerging viral strains. Vaccination protects individuals against the seasonal strains of the flu virus.

What is pandemic influenza?

The virus that causes the flu is constantly changing. A pandemic may start when three conditions are met:

- 1) a completely new strain of flu virus emerges that is different from the common strains of the flu that have been circulating;
- 2) the virus spreads easily from person to person; and
- 3) the virus has the ability to cause serious illness in people.

What is avian influenza (bird flu)?

Avian influenza or “bird flu” is a contagious disease that normally infects birds and sometimes pigs. Avian influenza viruses have on rare occasions mutated to infect humans. The H5N1 virus that is currently circulating in Asia and parts of Europe has infected a small number of people who have been in close contact with infected birds. Although it can cause serious illness in people, at this time it does not transmit easily between people. Governments and international organizations worldwide are monitoring the situation.

How will Toronto be affected by pandemic influenza?

Previous influenza pandemics have occurred in two to three waves over several months or years, with each wave lasting six to eight weeks. In a severe pandemic flu situation, most people will be affected in some way. Supplies of goods and services could be disrupted, hospitals could be overwhelmed and the psychological impact on the public may be significant. In the worst case, important community services may need to be curtailed, consolidated, or suspended because of absenteeism in the workplace and to prevent the spread of infection.

Pandemic Influenza – Roles and Responsibilities

Pandemic planning and preparedness activities are underway around the globe. International agencies and governments—including the three orders of government in Canada—are working continuously to refine their plans for pandemic response. The following outlines government roles and responsibilities.

International – World Health Organization

The World Health Organization (WHO) is the United Nations specialized agency for health. The WHO conducts world-wide monitoring and reporting of diseases. The WHO will declare the beginning of a pandemic, co-ordinate global response based on the various stages of a pandemic and provide recommendations on the management of a pandemic.

Federal – Public Health Agency of Canada

The Public Health Agency of Canada (PHAC) is responsible for co-ordinating the nation-wide health response to pandemic influenza, and works with international organizations such as WHO to support surveillance, coordination and investigation activities. The Canadian Pandemic Influenza Plan (CPIP) details the federal government's actions and expectations for the provinces and territories. PHAC will declare the beginning of a pandemic in Canada.

Provincial – Ontario Ministry of Health and Long-Term Care

The Ministry of Health and Long-Term Care (MOHLTC) is responsible for coordinating the province-wide response to pandemic influenza, including the declaration of a provincial emergency. The MOHLTC will declare the beginning of a pandemic in Ontario.

Municipal – Toronto Public Health

The Toronto Public Health Plan for an Influenza Pandemic (released in October 2007) lists specific Toronto Public Health roles for:

- Disease surveillance and reporting.
- Case and contact investigation and management.
- Health risk assessment and communications, including infection control advice.
- Liaison with hospitals and other agencies.
- Assessing the capacity of local health services, including health human resources, and helping health services identify additional/alternative resources.
- Community-based disease control strategies.
- Vaccine and antiviral medication distribution.
- Planning for influenza assessment, treatment and referral centres (community flu centres).
- Coordinating the provision of psychosocial supports.

The Mayor, in consultation with the Medical Officer of Health, is responsible for declaring an emergency in the City of Toronto. The role of Toronto Public Health and the City of Toronto is described in more detail in the Toronto Public Health Pandemic Influenza Plan at www.toronto.ca/health. For more information, call Toronto Health Connection at 416-338-7600.

Introduction to Pandemic Influenza Preparedness for Community Agencies/Businesses

Community agencies and businesses need to prepare for pandemic influenza to reduce the impact on your operations, ensure continuation of your services wherever possible, and prepare for possible disruptions during a pandemic. The following information should assist you with planning and preparedness for any emergency.

Working Together

Toronto Public Health, in collaboration with the City of Toronto and the provincial and federal governments, will keep the public informed before, during and after a pandemic by providing timely, clear and up-to-date information. This will be done as necessary through the media, Toronto Public Health web site and our Toronto Health Connection telephone information line.

All governments, the private sector and the community must work together to ensure that essential services (e.g. access to food, water, hydro) continue to be available. In addition, the needs of the most vulnerable members of the community must be addressed. The City of Toronto is developing plans to keep the City's key municipal services operating during a pandemic.

During a pandemic, the use of particular public health measures—such as the closure of schools and child care centres or the cancellation of public events—will be determined by the Chief Medical Officer of Health for Ontario, in consultation with local Medical Officers of Health and others.

Infection control measures are actions that can help prevent the spread of the influenza virus in the workplace and other settings. These measures include:

1) Practise hand hygiene

Clean your hands frequently with an alcohol-based hand sanitizer or soap and water, especially after you cough, sneeze, or blow your nose. A 60 to 90% alcohol-based hand sanitizer is the preferred agent for hand hygiene unless your hands are visibly soiled. If your hands are visibly soiled, you should wash them with soap and water. If you are not near water and your hands are visibly soiled, clean your hands with a moist towelette to remove visible debris, then use an alcohol-based hand sanitizer. The influenza virus is easily killed by soap, hand wash or hand sanitizer products.

2) Practise respiratory etiquette

People should be encouraged to cover their mouth and nose when they cough or sneeze. If you do not have a tissue, cough or sneeze into your sleeve, not in your hands. This will help stop the spread of germs that can make people sick. It is important to keep your distance (e.g. more than one metre/three feet) from people who are coughing or sneezing, if possible.

3) Avoid touching your eyes, mouth and nose

Influenza spreads when the infected respiratory secretions from the mouth or nose of one person come into contact with the mucous membranes (mouth, nose or eyes) of another person. Without even realizing it, you may touch the infected nose and mouth secretions of someone who has influenza (e.g. by shaking hands). If you go on to touch your mouth, nose or eyes, the influenza virus may gain entry into your body causing infection.

4) Stay home if you are ill

Most adults infected with influenza can transmit the virus from 24 hours before and up to five days after they begin to experience symptoms. For some adults, this period may last for seven or more days. The best advice at this time is that adults should not return to their usual activities for at least five days after they begin to experience influenza symptoms or when they feel well enough to return to their duties, whichever is longer. It should be made clear that employees must not come into work when they have influenza-like symptoms. If an employee develops influenza-like symptoms while at work they should immediately leave the workplace.

5) Keep the workplace clean

People with influenza may contaminate their surroundings with respiratory secretions from their nose and mouth. Surfaces that are touched frequently by people (e.g. door knobs, bathroom faucets or other shared equipment) should be cleaned more often than usual during a pandemic, if possible. The influenza virus is easily killed by regular cleaning products, therefore special cleaning agents or disinfectants are not required. Garbage created by a person with known or suspect influenza does not need any special handling and may be placed with the regular garbage for disposal.

Pandemic Influenza Web Links

For more information on pandemic influenza, visit the following websites:

Toronto Pandemic Influenza Plan www.toronto.ca/health/pandemicflu/pdf/toronto_pandemic_influenza_plan.pdf

Ontario Pandemic Influenza Plan
www.health.gov.on.ca/english/providers/program/emu/pan_flu/pan_flu_plan.html

Canadian Pandemic Influenza Plan
www.phac-aspc.gc.ca/cpip-pclcpi/index.html

Centres for Disease Control and Prevention, checklist for faith-based and community organizations
www.pandemicflu.gov/plan/faithcomchecklist.html#1

Contact Information

For more information about pandemic influenza, contact Toronto Health Connection at 416-338-7600.

Immunizations

What is immunization?

Immunization, also called vaccination, refers to injections or other agents (e.g. nasal sprays) that are given to boost a person's immune system for protection against certain infections. Immunization helps the body recognize and fight a particular infection before the person gets sick.

When to get immunized?

Most people receive a majority of their immunizations as children. In Ontario, certain immunizations are required by law for children to attend school.

Recommended Routine Adult Immunizations

Vaccine	Who needs it?	How often?
Tetanus and diphtheria	Everyone	A booster is needed every 10 years for tetanus and diphtheria (provided a primary series of three vaccinations was given previously, usually in childhood).
Tetanus and diphtheria and pertussis (Adacel)	Everyone	One booster in adulthood, usually combined with a tetanus and diphtheria booster.
Measles, mumps and rubella (MMR)	Everyone born in or after 1970 without a history of measles or those who do not have immunity to rubella or mumps.	A second dose is required for students in a post-secondary school, healthcare workers and travellers.
Varicella (chicken pox)	Everyone without a history of natural chickenpox or without immunity. Only high risk groups are publicly funded.	Two doses are required at least 4 weeks apart.
Influenza	Everyone, especially adults ≥ 65 years; adults < 65 years with chronic diseases such as lung or heart disease and their household contacts; healthcare workers.	Fall of each year.

Adult Immunizations continued

Vaccine	Who needs it?	How often?
Pneumococcal polysaccharide	Adults \geq 65 years; adults < 65 who are living in a nursing home or who have conditions putting them at risk such as those without a spleen, persons living with HIV infection, alcoholism or chronic medical conditions such as diabetes, heart, liver, kidney or lung disease.	One dose required. May be repeated after 5 years.
Hepatitis A	Persons with chronic liver disease (including hepatitis C), injection drug users and MSM can receive publicly funded vaccine.	Two doses 6-12 months apart.
Hepatitis B (given routinely to grade 7 students in Ontario)	Publicly funded for high risk groups such as those with multiple sexual partners, MSM, injection drug users, household and sexual contacts of cases, chronic liver disease and persons on renal dialysis.	Three doses at 0, 1 and 6 months.
Meningococcal conjugate, type C	Young adults.	One dose required.
Meningococcal polysaccharide	People who do not have a spleen, or who have immune deficiencies. Given to a close contact of a person who is diagnosed with invasive meningococcal disease.	One dose required. Can be repeated every 5 years.

Note: travel-related vaccines have been excluded from this table.

Not all vaccines are recommended for all people. Consult with your health care provider to see which vaccines are best for you. Certain health conditions and allergies can make the use of certain vaccines unsafe.

Source: National Advisory Committee on Immunization. *Canadian Immunization Guide, Seventh Edition*. Ottawa: Minister of Public Works and Government Services Canada; 2006.

Communicable Disease Information Sheets

Information is provided here on a number of communicable diseases that were identified in consultation with Toronto bathhouse owners as diseases of particular interest. This is not a complete listing of communicable diseases. For additional information about these communicable diseases or other communicable diseases not included here, please contact Toronto Health Connection at 416-338-7600 or www.toronto.ca/health.

Information Sheets:

Amoebiasis
Antibiotic Resistant Organisms
Athlete's Foot
Bed Bugs
C. difficile
Chlamydia
Foodborne illnesses
Giardiasis
Gonorrhoea
Hepatitis A
Hepatitis B
Hepatitis C
Human Immunodeficiency Virus (HIV) and Acquired Immune Deficiency Syndrome (AIDS)
Impetigo
Legionnaires' Disease
Lice
Meningitis
Molluscum Contagiosum
Norwalk Virus
Pink Eye (conjunctivitis)
Scabies
Severe Acute Respiratory Syndrome (SARS)
Shigellosis
Staphylococcus aureus/MRSA
Streptococcus Infections (Group A Streptococci)
Syphilis
Tuberculosis (TB)

What is it?

Amoebiasis is caused by a parasite called *Entamoeba histolytica*, which can live in the gut (intestines). Its effects can range from nothing to severe diarrhoea and pain.

Who is at risk?

Anyone can catch amoebiasis, however those who are most at risk for carrying this parasite include: recent immigrants or return visitors from regions of the world with poor sanitation, people who have been recently institutionalized (e.g. prison, psychiatric hospital), and men who have sex with men. The very young, the elderly and pregnant women are most at risk of developing complications from this infection.

How is it spread?

It can be spread through contaminated food and water but can also be spread through fecal-oral (poop to mouth) contact.

Signs and symptoms

- Diarrhoea
- Bloody or black/tarry stools (poop)
- Fever
- Abdominal pain
- Weight loss

Anyone who is experiencing one or more of these symptoms should be seen by a healthcare professional for assessment.

Diagnosis

A healthcare professional can make a diagnosis with stool (poop) tests or blood samples that are sent to a laboratory for analysis.

Treatment

This infection is treated with anti-parasitic medications. In rare and severe cases, surgery may be required.

Prevention and control

Careful hand washing and hygiene is required, especially after going to the bathroom and before touching food. Use a latex barrier for rimming. Make sure food is properly stored and cooked according to safety standards.

Public Health's role

Public Health will investigate individual cases and outbreaks. Education and counselling will also be provided if required.

What are they?

Antibiotic Resistant Organisms or AROs are common germs that have developed a resistance to some or all antibiotics. AROs develop either through natural mutations over time or through the incorrect use of antibiotics. Some common AROs that you may have heard mentioned include:

- MRSA – Methicillin Resistant Staphylococcus Aureus. Staphylococcus is a common germ found on the skin.
- VRE – Vancomycin Resistant Enterococcus. Enterococcus is a common germ found in the gut of all mammals.

Who is at risk?

Anyone can contract AROs but they are most commonly spread in institutions such as hospitals. People most at risk of becoming ill from an ARO include those with weak immune systems (e.g. AIDS or cancer) and the elderly.

How are they spread?

ARO's are often spread through direct contact with a person (touching an infected person). They can also be spread through contact with a contaminated environment (e.g. unclean door knobs, counter tops).

Signs and symptoms

Often it is impossible to tell if someone has an ARO. Sometimes people can develop pneumonia, bladder, skin or wound infections.

If you are concerned about AROs, contact a healthcare professional for assessment.

Diagnosis

Diagnosis is made through collecting and growing a sample (called a culture) of the germ. The culture can be swabbed from the skin, nose, bum or wounds and is a painless test.

Treatment

If treatment is required, it will often involve powerful antibiotics. In otherwise healthy people, the healthcare professional may decide to observe and let the germ run its course.

Prevention and control

The best way to prevent the spread of an ARO is consistent hand washing. In some cases, additional precautions may be required, but this is usually in the hospital setting.

Public Health's role

ARO's are not a reportable disease.

More information

See fact sheet on *C. difficile* and *Staphylococcus aureus*.

What is it?

Tinea Pedis is a fungal infection of the foot most commonly known as Athlete's foot.

Who is at risk?

Tinea Pedis occurs in children and adults. Adults are affected more often than children and males more often than females.

How is it spread?

Athlete's Foot is spread by direct or indirect contact with skin lesions of infected people or contaminated floors, shower stalls and other articles used by infected people. The fungal organisms easily spread from one person to another in moist places where people walk barefoot such as gym locker rooms, saunas, and swimming pools.

Signs and symptoms

- Itchy, scaling, cracking skin or blisters containing a thin watery fluid. This occurs commonly between the toes.

Diagnosis

Diagnosis can be made by a microscopic examination of material from the affected area or by fungal culture.

Treatment

Topical antifungal, expose feet to the air by wearing sandals, use dusting powders.

Prevention and control

- Thorough cleaning and disinfecting of locker rooms, showers, saunas, steam rooms and other similar sources of infection.
- Good personal hygiene, with attention given to carefully drying between the toes.
- Wear water-resistant rubber-soled sandals or slippers in areas that are considered a potential source of infection.

Public Health's role

Athlete's foot is not a reportable disease. Public Health offers information resources through Toronto Health Connection.

What are they?

Bed bugs are not new, but in recent years they have been a growing problem for hotels, residences, shelters, hostels and bathhouses. Bed bugs are pests that feed off of blood and leave nasty bites and scabs.

Who is at risk?

People most at risk include those living in residences, homeless shelters and hostels, hotels/motels, etc.

How are they spread?

Bed bugs live in clothing, furniture and other places where they can hide during the day but are close to people at night. They are transported in people's belongings and can bite many people who are using the same bed or sleeping space.

Signs and symptoms

- Red spots appearing on exposed skin (e.g. ankles, face)
- A whitish bump that appears after the bite
- Itchiness

If you are concerned about bed bugs, contact a healthcare professional for assessment.

Diagnosis

A diagnosis is based on the appearance of the bites, where they are appearing on the body and where the individual has been living or staying.

Treatment

The bites should be kept clean and scratching should be avoided. Protocols should be put in place for the control and prevention of bed bugs.

Prevention and control

Prevention should involve frequent laundering of bed linen, sealing of cracks, vacuuming and pest management.

Public Health's role

The Healthy Environment Section of Toronto Public Health can provide advice on strategies to deal with bed bugs. Bed bugs do not specifically cause a threat to public health and are not a reportable disease. A fact sheet on bed bugs can be found at www.toronto.ca/health/bedbugs.htm.

What is it?

Clostridium difficile (C. difficile) bacteria are often seen in hospital or institutional environments. C. difficile can cause cramping and foul smelling, moderate-to-severe diarrhoea. Strains of C. difficile that are resistant to antibiotics have been seen in some people who acquire this infection.

Who is at risk?

People who are in hospitals or other institutional care settings, who have weakened immune systems or are elderly and/or are receiving multiple antibiotic therapies, are particularly at risk.

How is it spread?

C. difficile is spread when there is either direct or indirect contact with feces and the mouth (e.g. not washing hands properly after using the bathroom and then eating).

Signs and symptoms

- Moderate to severe diarrhoea
- Fever
- Stomach cramps
- Loss of appetite

If you are concerned about C. difficile, contact a healthcare professional.

Diagnosis

Diagnosis is made through a stool (poop) sample that is analysed for bacteria in a laboratory.

Treatment

Sometimes no treatment is required and the bacteria goes away on its own. In other people, the bacteria goes away when antibiotic treatment is stopped. In more serious cases, additional medications and therapy may be required.

Prevention and control

The best prevention for C. difficile is through frequent and thorough hand washing. Also, antibiotics should be properly used and prescribed in order to prevent resistance. Use a latex barrier for rimming.

Public Health's role

Although C. difficile is not a reportable disease, Toronto Public Health should be consulted if an abnormally large number of people are sick with this infection or the above symptoms.

What is it?

Chlamydia is one of the most common sexually transmitted infections. It is caused by bacteria called *Chlamydia trachomatis*.

Who is at risk?

Anyone who is not practising safer sex and babies born to infected mothers.

How is it spread?

Chlamydia is spread through unprotected anal, oral or vaginal sex with an infected person. It can take two to six weeks or longer for symptoms to appear. It can also be passed from an infected mother to her baby during delivery. A person remains infectious until properly treated.

Signs and symptoms

Many people do not have any symptoms (especially women). Symptoms can include:

- Women:
 - Increased vaginal discharge and/or irritation
 - Bleeding during or after sexual intercourse
 - Painful lower abdomen during sex
 - Painful or burning urination
 - Abnormal vaginal bleeding
- Men:
 - Discharge and/or itching from the penis
 - Pain and swelling in the testicles
 - Painful or burning urination

Symptoms of Chlamydia may come and go. If you are concerned about any of the above, consult a healthcare professional for assessment.

Diagnosis

A sample of urine is needed. Swabs of the cervix/urethra may also be taken. Samples are sent to the laboratory for analysis if Chlamydia is suspected. If Chlamydia is suspected in the throat or anus, a swab of the throat or anus should be taken and sent to the laboratory for analysis.

Treatment

Once diagnosed, Chlamydia can be treated with antibiotics. It is important that all of the antibiotics be taken and that sex be avoided for seven days after treatment is finished.

Prevention and control

Safer sex (proper and consistent use of a male or female condom) is essential to prevent the spread of Chlamydia. Regular screening for sexually transmitted infections for those with high risk sexual behaviour is recommended.

Public Health's role

Chlamydia is a reportable disease. Public Health will want to speak with any infected people to determine who might have contracted it. Public Health will also want to make sure that sexual partners are informed, tested and treated. Additional education and support are provided as needed.

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 - Bleeding during or after sexual intercourse
 - Painful lower abdomen during sex
 - Painful or burning urination
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- Men:
 - Discharge and/or itching from the penis
 - Pain and swelling in the testicles
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Symptoms of Chlamydia may come and go. If you are concerned about any of the above, consult a healthcare professional for assessment.

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A sample of urine is needed. Swabs of the cervix/urethra may also be taken. Samples are sent to the laboratory for analysis if Chlamydia is suspected. If Chlamydia is suspected in the throat or anus, a swab of the throat or anus should be taken and sent to the laboratory for analysis.

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Prevention and control

Safer sex (proper and consistent use of a male or female condom) is essential to prevent the spread of Chlamydia. Regular screening for sexually transmitted infections for those with high risk sexual behaviour is recommended.

Public Health's role

Chlamydia is a reportable disease. Public Health will want to speak with any infected people to determine who might have contracted it. Public Health will also want to make sure that sexual partners are informed, tested and treated. Additional education and support are provided as needed.

What is it?

Every year, many people in Toronto are made quite sick by a range of germs and toxins that are found in foods which have not been handled, refrigerated, stored or cooked properly. Some foods may come into contact with other substances (e.g. chemicals) that can also make people sick. Some of these illnesses can be very severe and even life-threatening.

Who is at risk?

People who eat food that has not been properly refrigerated or cooked or is contaminated in other ways.

How is it spread?

A variety of germs or toxins live in food and grow well when the food is not stored or cooked according to accepted standards. Foodborne germs/toxins can also be spread through food which has not been handled properly (e.g. contaminated surfaces).

Signs and symptoms

Although a variety of germs and toxins can cause foodborne illnesses, the following are the most common signs and symptoms:

- Vomiting
- Diarrhoea
- Stomach cramps

If you are concerned about a foodborne illness, contact a healthcare professional for assessment. Call Toronto Public Health to investigate the cause.

Diagnosis

Most foodborne illnesses can be diagnosed through a stool (poop) sample combined with the symptoms and information given.

Treatment

Most people recover on their own with treatment for their symptoms (e.g. medication for nausea). However, more serious cases can require intense treatment and even hospitalization.

Prevention and control

Follow standards and guidelines established for food safety. Make sure that all people who work in food preparation areas know about safe food handling practices (e.g. proper temperature control, don't work with exposed skin/nose/eye infections, separate raw and cooked meat). Frequent hand washing is essential!

Public Health's role

Public Health inspects all food premises regularly and offers food handling courses. Public Health will investigate cases of suspected or actual food poisoning. All cases of food poisoning (regardless of cause) are reportable to Public health. If a case of food-poisoning can be confirmed, steps will be taken to make sure contaminated food is disposed of, staff trained, facilities cleaned and any faulty equipment repaired.

What is it?

Giardiasis is caused by a parasite (protozoa) of the small intestines.

Who is at risk?

The elderly, the very young and people with a weak immune system are most at risk from the effects of this parasite. However, any person with severe diarrhoea is at risk of dehydration.

How is it spread?

Giardiasis can be spread directly from fecal-oral (poop to mouth) contact (e.g. changing a diaper, rimming-mouth to anus sexual activity) or indirectly through contaminated water or food.

Signs and symptoms

- Watery diarrhoea
- Very bad smelling bowel movements
- Weight loss
- Stomach pain/cramps
- There may be no symptoms

If you are concerned about Giardiasis, contact a healthcare professional for assessment.

Diagnosis

A diagnosis is usually made through a thorough history, examination and then a stool (poop) sample.

Treatment

It is important that anyone experiencing diarrhoea consume enough liquid so that they do not become dehydrated. People diagnosed with Giardiasis may be prescribed a type of drug known as an anti-protozoal (anti-parasitic).

Prevention and control

Thorough and frequent hand washing is one of the best methods for preventing the spread of this parasite. Those assisting people with hygiene must be especially careful to wash their hands. If contact is expected with body fluids (e.g. poop) gloves should also be worn, followed by careful hand washing. A latex barrier should be used for rimming.

Public Health's role

Giardiasis is a reportable disease. The healthcare professional or laboratory will report the diagnosis to the Public Health unit which will then likely want to speak to the affected person(s). Public Health will want to discover where the infection came from so that they can prevent any further spread and will offer stool tests to close contacts.

What is it?

Gonorrhoea is a sexually transmitted infection caused by a bacterium called *Neisseria Gonorrhoeae*.

Who is at risk?

Any sexually active person not practising safer sex and newborn babies born to infected mothers.

How is it spread?

Gonorrhoea is spread through unprotected anal, oral or vaginal sex with an infected person. It can also be passed from an infected mother to her baby during birth.

Signs and Symptoms

Many men and women who have gonorrhoea, have NO symptoms. Symptoms can include:

- Women:
- Pain during urination
 - Bleeding during or after sexual intercourse
 - Pain in the lower abdomen
 - Abnormal bleeding between periods
 - White or yellow smelly vaginal discharge
- Men:
- Discharge from the urethra (the opening of the penis)
 - Itching around the urethra
 - Frequent urination which may be painful
 - Pain and swelling in the testicles

In both men and women, gonorrhoea from oral sex can cause a sore throat and swollen glands. From anal sex, gonorrhoea may cause itchiness, discharge or bleeding from the anus.

If you are concerned about gonorrhoea, contact a healthcare professional for assessment.

Diagnosis

For men, diagnosis is made from a urine sample or swab. For women, a swab of the cervix should be taken. If gonorrhoea is suspected in the throat or anus, a swab of either the throat or anus should be taken and sent to the laboratory for analysis.

Treatment

Gonorrhoea is treated with antibiotic medication (either pills or injection).

Prevention and control

The best way to prevent gonorrhoea is by practising safer sex (e.g. using a condom) every time you have sex (anal, oral or vaginal). Regular testing for sexually transmitted infections is recommended if you practise high risk sexual behaviour.

Public Health's role

Gonorrhoea is a reportable disease. Public Health will want to speak with any affected people to determine who might have contracted it. Public Health will also want to make sure that sexual partners are informed, tested and treated. Public Health will also provide additional education and support as needed.

What is it?

Hepatitis is a general term used to describe an inflammation (swelling) of the liver due to a number of causes. In the case of hepatitis A infection, the hepatitis A virus is the cause of the inflammation.

Who is at risk?

Anyone who lives with a person who is infected with hepatitis A is at an increased risk of catching it. Others at high risk include sexual contacts of infected persons, men who have sex with men, injecting and non-injecting drug users and people who have travelled to regions of the world where there is poor sanitation.

How is it spread?

Hepatitis A is spread through fecal-oral (poop to mouth) contact or contaminated food or water.

Signs and symptoms

- Tiredness
- Abdominal pain
- Jaundice (yellowing of the skin and/or eyes)
- Loss of appetite
- Nausea
- Diarrhoea
- Fever
- There may be no symptoms

If you are concerned about hepatitis A infection, contact a healthcare professional for assessment.

Diagnosis

Diagnosis is often made through a combination of symptoms and a blood test.

Treatment

There is no cure for hepatitis A infection. Treatment is aimed at controlling symptoms until the virus has a chance to run its course.

Prevention and control

The best prevention against hepatitis A infection is regular hand washing. As well, the sexual practice of rimming (mouth to anus) should be avoided unless a latex barrier is used. There is a hepatitis A vaccine and it is recommended for close contacts of cases and those who are at higher risk of infection (e.g. men who have sex with men, injection drug users).

Public Health's role

Hepatitis A is a reportable disease. Public Health will also want to make sure that close contacts are informed, tested and offered vaccine. In the case of a food handler, Public Health will decide if there is a risk to those who have consumed food.

What is it?

Hepatitis is a general term used to describe an inflammation (swelling) of the liver due to a number of different causes. In the case of Hepatitis B infection, the Hepatitis B virus is the cause of the inflammation. The Hepatitis B virus can cause acute illness and can become chronic (lifelong). It can lead to severe scarring of the liver and, less commonly, liver cancer. These are more likely if infection occurs in infancy.

Who is at risk?

People with multiple sexual partners, men who have sex with men, people with a diagnosis of a sexually transmitted infection, sexual partners of infected people and injection drug users. Unsterilized or home-made tattooing or body piercing equipment can transmit it. Hepatitis B is a very common disease in less developed countries.

How is it spread?

The most common way is for body fluids from an infected person to enter the body of a non-immune person. It is spread through sexual contact, sharing needles or razors, unsterilized tattooing or body piercing equipment and from an infected mother to a baby during delivery.

Signs and symptoms

- Loss of appetite
- Nausea and vomiting
- Jaundice (yellowing of the skin and/or eyes)
- Joint pain
- Abdominal pain
- Tiredness
- Fever
- There may be no symptoms

If you are concerned about Hepatitis B infection, contact a healthcare professional for assessment.

Diagnosis

Diagnosis is made through a blood test.

Treatment

There is no cure for Hepatitis B. Infected people should be monitored regularly by their healthcare professional to watch for liver damage. If someone develops a chronic Hepatitis B infection, there are antiviral medications that may be prescribed to help control the infection.

Prevention and control

Vaccination is an effective way to help prevent Hepatitis B virus infection. As well, always practising safer sex (e.g. using condoms) can help to reduce a person's chances of getting infected with Hepatitis B. Avoid injection drugs or at least do not re-use needles because the Hepatitis B virus can be easily spread in this way. Make sure that any tattooing or piercing is done with strict hygiene and using only sterile utensils.

Public Health's role

Hepatitis B infection is a reportable disease. Public Health will likely want to speak with any affected people to determine where they contracted the virus and to make sure that it has not spread. Public Health will also offer education and resources to make sure infected people do not transmit the virus to others. Hepatitis A vaccine is offered to chronic Hepatitis B carriers. Vaccines are also offered to contacts, high risk people and routinely to all grade 7 students.

What is it?

Hepatitis is a general term used to describe an inflammation (swelling) of the liver. Hepatitis C is a virus that affects the liver and often becomes chronic (lifelong). This can lead to scarring or cancer of the liver.

Who is at risk?

People who share injection equipment and people who have had direct blood-to-blood contact with an infected person.

How is it spread?

Hepatitis C is spread through direct blood-to-blood contact from an infected person. This can include the sharing of needles, occupational exposures and blood transfusions (although all blood is now screened for Hepatitis C) and tattooing and body piercing with unsterile or home-made equipment. Mothers can also transmit hepatitis C to their infants and more rarely Hepatitis C can be transmitted through sex. Sharing of other drug paraphernalia (e.g. cocaine straws and crack pipes) may also be a source of infection.

Signs and symptoms

Early signs and symptoms are very mild and are often missed. Symptoms can include:

- Nausea
- Weight loss
- Vomiting
- Jaundice (yellowing of the skin and/or eyes)
- Stomach pain
- Tiredness
- There may be no symptoms

If you are concerned about Hepatitis C infection, contact a healthcare professional for assessment.

Diagnosis

Diagnosis of Hepatitis C is made through a blood test.

Treatment

There is no cure for Hepatitis C. Many cases become chronic and require lifelong treatment in order to control the infection or to treat liver failure.

Prevention and control

There is no vaccine available to prevent Hepatitis C. The best ways to prevent catching this virus are to avoid injection drugs, or always use clean needles, as Hepatitis C can easily be spread in this way. Also, practise safer sex (e.g. use condoms). Make sure any tattooing or piercing is done with strict hygiene and using only sterile utensils.

Public Health's role

Hepatitis C is a reportable disease. If Public Health is made aware of a Hepatitis C diagnosis, they will be interested in determining where the infection came from so that future cases can be prevented. Public Health can also provide education so the affected individual can prevent other people from becoming infected. Public Health offers Hepatitis A and B vaccines to anyone who tests positive for Hepatitis C.

What is it?

The Human Immunodeficiency Virus (HIV) attacks the immune system. The immune system is the body's internal defence force against infection and some diseases. HIV can lead to Acquired Immune Deficiency Syndrome (AIDS) which is a cluster of diseases that a person can contract when their immune system is weakened.

Who is at risk?

People who have unprotected anal, oral or vaginal sex, people who have multiple sex partners, injection drug users and people who received blood products prior to 1985. HIV can also be passed from an infected mother to her baby during birth or breastfeeding.

How is it spread?

HIV is spread through direct blood-to-blood contact and through direct contact with certain body fluids (semen, vaginal secretions and blood). Unprotected anal and vaginal sex and injection drug use through the sharing of needles are known to be high risk activities. HIV can also be spread through unprotected oral sex, from a mother to her baby at birth or through breastfeeding. Casual contact cannot spread HIV.

Signs and symptoms

Initially, people infected with HIV may experience a brief illness similar to mononucleosis (mono) with tiredness, swollen lymph nodes, etc. This illness will clear up on its own and the individual may be symptom-free for many years. If left untreated, the immune system deteriorates and the individual may develop certain infections. Possible signs and symptoms can include:

- Frequent or severe pneumonia
- Swollen lymph nodes
- Oral thrush (white patches)
- Night sweats

If you are concerned about HIV or AIDS, contact a healthcare professional for assessment.

Diagnosis

HIV can be diagnosed with a blood test. AIDS is diagnosed through a combination of a confirmed HIV infection, additional blood tests and the presence of certain infections.

Treatment

There is no cure for HIV. However, with lifelong (anti-retroviral) medication, people can live long and healthy lives with this virus.

Prevention and control

The best prevention for HIV is through safer sex and harm reduction. Condoms should always be used for sex and needles should never be shared.

Public Health's role

HIV/AIDS is a reportable disease. Public Health will want to speak with any affected people so that they may determine who might have contracted it. Public Health will also want to make sure that sexual partners or others exposed are informed, tested and provided with additional education and support as needed. Counselling is also offered.

What is it?

Impetigo is an infection on the surface of the skin. It is usually caused by Group A streptococci bacteria or staphylococcus aureus bacteria.

Who is at risk?

Impetigo often affects school-aged children and people who live in crowded conditions, play contact sports (e.g. skin-to-skin contact) or have skin problems/irritations.

How is it spread?

Impetigo can be spread from one part of the body to another by scratching with contaminated fingers. It can also be spread on bed sheets, towels or clothing that has been in contact with infected skin.

Signs and symptoms

There are several types of impetigo with different symptoms.

Impetigo contagiosa (most common type):

- Red sores and tiny blisters, often on the face, that rupture (pop) and ooze a clear fluid or pus that turns into a honey-coloured crust
- Itchiness

Bullous impetigo (usually affects children under two years old):

- Larger blisters, usually on the body arms and legs
- Sometimes a fever, diarrhoea and/or general weakness

Ecthyma (most serious type)

- rare form of deep infection with ulcers

If you are concerned about impetigo, contact a healthcare professional for assessment.

Diagnosis

A diagnosis can be made through the symptoms and a sample of the infected area or fluid may be sent to the laboratory for analysis.

Treatment

Antibiotics are used to treat impetigo. Depending on how serious the infection is, treatment may be given in a cream/ointment or by mouth (pills).

Prevention and control

Washing hands and good personal hygiene is important in prevention. If a person has impetigo, the affected area should be kept clean. They may also want to cover the area with gauze or a bandage to prevent scratching and keep medicated cream on the area. Also, fingernails should be kept short to prevent scratching.

Public Health's role

Impetigo on the skin is not a reportable disease. The bacteria that cause impetigo (streptococci and staphylococci) may cause other, more serious diseases which are reportable to Public Health.

What is it?

Legionnaires' disease is caused by bacteria called *Legionella pneumophila*. *Legionella* bacteria are found naturally in the environment, usually in water.

Who is at risk?

Older people (65 years and older) are most at risk for serious disease. People who are smokers and those who have chronic lung disease or weak immune systems are also at higher risk.

How is it spread?

Legionella bacteria are NOT spread from one person to another. To get infected, you must breathe contaminated droplets from a source of *Legionella* bacteria.

Signs and symptoms

- High fever
- Chills
- Cough
- Muscle aches
- Headaches

Diagnosis

A sample of urine and/or respiratory secretions is needed. Samples are sent to the laboratory for analysis.

Treatment

Most cases can be treated successfully with antibiotics. Healthy people usually recover from the infection.

Prevention and control

- Proper cleaning and disinfection of areas such as showers and whirlpools.
- Search for common exposures among cases and possible environmental sources of infection.
- Decontamination of implicated source.

Public Health's role

Legionella is a reportable disease. Public Health will investigate individual cases and outbreaks. Education and counseling will also be provided if required. Healthy Environments will follow up with all environmental investigations.

What is it?

Lice have been a problem for centuries. Although there is no serious medical risk posed by lice, they are a serious annoyance and can affect someone's quality of life. Head lice live on the scalp and lay their eggs on the base of a human hair shaft. Body lice live on clothing and lay their eggs on clothing fibres which are then incubated by body heat.

Who is at risk?

School-aged children and other people who have frequent direct physical contact with many people on a regular basis (e.g. people living in a hostel or shelter).

How is it spread?

Head lice are spread through direct physical contact with an infested person. Head lice must physically transfer from one hair to another. Body lice are transmitted through shared bedding and/or clothing. The eggs of body lice are deposited in clothing fibres. Eggs (or nits) are frequently found in seams and folds of clothing where body heat is greatest.

Signs and symptoms

- Itching
- Lice on the hair or body
- Nits (tiny white eggs found at the base of hair or in clothing seams)
- Small red bites

If you are concerned about head or body lice or any of the above symptoms, contact a healthcare professional for assessment.

Diagnosis

A diagnosis is made by seeing either the lice or nits in combination with the above symptoms.

Treatment

There are many over-the-counter treatments available from pharmacies. Most chemical treatments will kill the lice with a single application, but the manufacturer's instructions should always be followed. Following a chemical treatment, nits must also be physically removed from the hair with a fine toothed nit comb (also available from pharmacies). Clothes and bedding should be laundered in hot water and/or dried in a hot dryer for at least 20 minutes. Natural treatments do exist, but their effectiveness can vary. Contact a healthcare professional for guidance. The Harrison Swimming Pool (416-392-7984) has a program to assist with delousing. Call the pool for more information.

Prevention and control

Prevention of lice can be a challenge, especially when people live and work in crowded conditions.

- Check hair at first sign of itching.
- Wash and dry ALL clothing in hot temperatures during a lice outbreak.
- Sealing articles in plastic bags for at least 10 days will kill lice.
- Do not share combs or brushes. Discard or disinfect infested combs and brushes by soaking for an hour in rubbing alcohol (70 per cent isopropyl alcohol).
- Frequent vacuuming of living and sleeping areas.

Public Health's role

Lice are not a reportable disease. Public Health offers information resources accessed through Toronto Health Connection.

What is it?

Meningitis is a general term that refers to swelling in the lining of the brain and spinal cord. There are many different causes of meningitis including bacteria, fungi and viruses. Different types of meningitis are treated differently.

Who is at risk?

People who have a weak immune system, the elderly, people who have had recent neurosurgical procedures and those who have recently been in contact with an infected person.

How is it spread?

Bacterial: There are a number of bacteria that can cause meningitis. The most serious type is called meningococcal meningitis. The most common way of contracting a bacterial form of meningitis is through direct contact with nose / throat secretions from an infected person (e.g. kissing, sharing cigarettes).

Fungal: Various forms of fungus can also cause meningitis. This is a rare form of meningitis that is often seen in people with weak immune systems.

Viral: This is the most common form of meningitis. Many different types of viruses can cause this condition. Depending on the type of virus, there are many different ways that it can be spread, but most often it is through direct or indirect contact (e.g. handling of food, sharing of drinks, sneezing).

Signs and symptoms

- Stiff/painful neck
- Headache
- Rash
- Fever
- Disorientation/confusion
- General “sick” feeling

If you are concerned about meningitis, contact a healthcare professional for assessment as soon as possible.

Diagnosis

Diagnosis is often made through a thorough examination and history. Based on the findings, the healthcare professional may test the fluid in the spinal cord for infection. Additional tests such as a CT scan may also be ordered.

Treatment

Treatment depends on the type of germ that is affecting the person and that person’s level of health. It is important to know that antibiotics are only effective against bacterial meningitis. Most cases of viral meningitis clear up on their own.

Prevention and control

- There is a vaccine available only for bacterial meningitis (meningococcal)
- Hand washing
- Not sharing drinks/food/cigarettes

Public Health’s role

Any form of meningitis is a reportable condition. Public Health will want to speak with the affected person to determine how the infection was caught. They may also take additional steps to make sure that there are no further infections and offer vaccines to close contacts if appropriate. Public Health also offers meningitis C vaccine through the grade 7 immunization program.

What is it?

Molluscum contagiosum is a skin infection caused by a virus.

Who is at risk?

People with a weak immune system might have a more severe infection. Additionally, children are more likely to get molluscum than adults.

How is it spread?

Molluscum contagiosum is spread through direct contact with the skin of an infected person or by sexual contact. Scratching can also spread the infection.

Signs and symptoms

- Tiny “pinpoints” appear on the skin one to six months after exposure
- The “pinpoints” grow into pinkish-white bumps that are smooth and shiny
- Bumps have a dip in the middle and a milky-white liquid inside
- Bumps can appear anywhere on the body

If you are concerned about molluscum contagiosum, contact a healthcare professional for assessment.

Diagnosis

It is usually diagnosed by its appearance but, is often be mistaken for a wart.

Treatment

Sometimes the infection disappears on its own without treatment. Even if treated, molluscum can reappear. Podophyllin, liquid nitrogen or surgical removal can treat molluscum. Treatment may need to be repeated.

Prevention and control

The use of condoms lowers the chances of contracting molluscum contagiosum through sexual contact. Frequent and proper hand washing is a good practice for preventing direct contact transmission.

Public Health’s role

Although molluscum contagiosum is not a reportable disease, Public Health is available for information and guidance.

What is it?

Noroviruses are a group of viruses that cause an infection in the stomach and intestines called gastroenteritis. It is often called Norwalk-like virus or the “stomach flu” though it is not caused by the influenza virus.

Who is at risk?

Anyone can get norovirus infection since it is highly contagious. Norovirus infections have been linked to outbreaks in hospitals, day nurseries, long term care homes, schools, cruise ships, camps, dormitories, restaurants, households and other places where people gather in groups.

How is it spread?

Norovirus can be spread directly from fecal-oral (poop to mouth) contact or indirectly by eating contaminated food or touching contaminated surfaces.

Signs and symptoms

- Nausea
- Vomiting
- Watery diarrhea
- Other symptoms may include fever, headache, and stomach cramps.

Diagnosis

A diagnosis is usually made based on symptoms that resolve after 2-3 days. However, a stool sample may be suggested in certain circumstances.

Treatment

There is no specific treatment for norovirus infection. People who are ill should drink plenty of fluids since dehydration is a common complication.

Prevention and control

Thorough and frequent hand washing is one of the best methods for preventing the spread of this virus. Do not prepare food for others if you have symptoms. Thoroughly and frequently disinfect environmental surfaces and equipment with a chlorine bleach disinfectant, especially in areas that are touched often. A latex barrier should be used for rimming. A person may have the virus present in their stool up to 2 days after the diarrhea stops.

Public Health's role

Although Norovirus is not reportable unless there is an outbreak in an institutional setting, Toronto Public Health should be consulted if an abnormally large number of people are sick with this infection or experience the above symptoms.

What is it?

This is an infection of the covering of the eyeball called the conjunctiva. It is usually caused by viruses but can also be caused by bacteria. Occasionally, people can develop the symptoms of pink eye due to allergies.

Who is at risk?

People who work or live in institutional settings where there is frequent close contact (e.g. schools, hospitals, shelters).

How is it spread?

Pink eye is spread through contact with infected fluids from the eye (e.g. tears, drainage). It can be transmitted through shared eye makeup or contaminated hands.

Signs and symptoms

- Redness and itchiness of one or both eyes
- “Sticky” fluid from infected eye
- Swelling of the eyelid

If you are concerned about pink eye, contact a healthcare professional for assessment.

Diagnosis

A sample of fluid from the eye is often required to determine what is causing the symptoms.

Treatment

Bacterial pink eye can often be successfully treated with antibiotic eye drops. There is usually no treatment for viral pink eye.

Prevention and control

Good hand washing is essential. People with untreated pink eye should avoid close contact with other people and use separate towels and linen. Contact a healthcare professional for specific instructions.

Public Health's role

Although pink eye is not a reportable disease, information and guidance is available from Public Health.

What is it?

Scabies is a disease caused by a common mite (a tiny bug related to spiders) called *Sarcoptes scabiei*. These mites burrow (dig) under the top layer of the skin where they lay eggs. These eggs cause a reaction in the skin which may be very itchy and red.

Who is at risk?

People who live or stay in crowded conditions (e.g. nursing homes, shelters, day nurseries) where there is often skin-to-skin contact. Also, people with weakened immune systems or older people are at risk of a more severe infestation called Norwegian or crusting scabies.

How is it spread?

Scabies can be spread either sexually or non-sexually through close physical contact. A person can also catch scabies through prolonged contact with infested bed sheets, furniture or clothing.

Signs and symptoms

- Pimple-like bumps on the skin
- Itching (worse at night)
- Burrow (digging) tracks especially in between the fingers, in the groin area or between toes

If you are concerned about scabies, contact a healthcare professional for assessment.

Diagnosis

A diagnosis can be made based on signs and symptoms. Rarely, a healthcare professional may try to find the bug in the skin and look at it under a microscope to confirm the diagnosis. Samples from the affected areas may be collected.

Treatment

Scabies is often treated with creams that are left on the body overnight (approximately 7–8 hours) and then washed off. It is very important to carefully follow the instructions for the medication. You may need more than one treatment to get rid of the infestation. The itchiness may last for a few weeks after treatment even if there are no scabies present.

Prevention and control

Not sharing the towels, linens or clothes of infected people and making sure that infestations are quickly treated are all important steps. Also, infected people should not have intimate (e.g. sexual) contact until the infestation has cleared.

Public Health's role

Scabies is not a reportable disease. However, Public Health takes an active interest in making sure that common standards of hygiene and cleanliness are followed so infestations can be avoided.

What is it?

SARS (Severe Acute Respiratory Syndrome) is a viral infection, which causes a severe pneumonia-like condition. Pneumonia is an inflammation of the air sacs in the lungs. When people have pneumonia, the lungs fill with fluid, which makes it difficult for oxygen to get into the blood. SARS was first recognized in February 2003.

Who is at risk?

People in close contact with a case and those who have recently travelled to affected regions of the world.

How is it spread?

SARS is spread from person-to-person by close contact (i.e. living with, caring for, or direct contact with, respiratory secretions/body fluids of a case).

Signs and symptoms

- Fever (over 38°C or 100.4°F)
- Dry cough
- Shortness of breath
- Difficulty breathing
- Muscle aches

If you are concerned about SARS, contact a healthcare professional for assessment.

Diagnosis

There is currently no approved test to detect SARS. A healthcare professional makes a diagnosis of SARS by looking at the symptoms, combined with a recent history of potential exposure and chest x-ray. Additional blood tests can be ordered and may assist in the diagnosis.

Treatment

There is no cure for SARS. Treatment is usually for the symptoms caused by the infection (e.g. fever, respiratory problems). People with SARS are usually treated in hospital so they can be properly isolated and monitored.

Prevention and control

Public health agencies around the world monitor for possible cases at all times. If an outbreak is suspected, travellers will be warned in advance. As with all infections, regular hand washing is one of the best defences. A healthcare professional should assess anyone with an abnormal or worsening cough or high fever.

Public Health's role

SARS is a reportable condition. Public Health will want to speak with any person who has been diagnosed with SARS to determine where the infection came from and how best to contain it. Public Health will also be involved in the isolation of cases and monitoring/quarantining of close contacts.

What is it?

Shigellosis is a bacterial infection of the intestines caused by the Shigella bacterium. People are the only source for Shigella bacteria.

Who is at risk?

Anyone can get shigellosis but symptoms are more common in young children. Those who may be at greater risk of becoming infected include children in daycare centers, travelers to certain countries and men who have sex with men.

How is it spread?

Shigella is found in the intestine of infected people and passed in their stool. Shigella can be spread directly from fecal-oral (poop to mouth) contact or indirectly by eating contaminated food or touching contaminated surfaces.

Signs and symptoms

- Diarrhea
- Fever
- Stomach cramps
- Shigellosis can cause severe infection with high fever and seizures in children less than 2 years old.

Diagnosis

A diagnosis is usually made through a thorough history, examination and then a stool (poop) sample.

Treatment

Most infected people with shigella will recover on their own. Some may require intravenous fluids to prevent dehydration. Antibiotics are occasionally used to treat severe cases or to eliminate bacteria from the person's stool. This is particularly important for food handlers, children in daycare or institutionalized individuals.

Prevention and control

Thorough and frequent hand washing is one of the best methods for preventing the spread of this bacterium. Do not prepare food for others if you have symptoms. A latex barrier should be used for rimming. Drink water from a safe supply. When traveling, use bottled water or boil the water for at least five minutes if the water supply is unknown. Avoid swimming in water that may be contaminated. Avoid eating raw shellfish harvested from unknown sources. Protect food against flies and cockroaches as they can carry the shigella bacterium. Wash all fruits and vegetables before use.

Public Health's role

Shigella is a reportable disease. The healthcare professional or laboratory will report the diagnosis to Public Health which will then likely want to speak to the affected person(s) to discover where the infection came from so that they can prevent any further spread.

What is it?

Is a bacterium that can cause skin infections or other very serious infections in surgical wounds, the urinary tract, bloodstream and lungs (pneumonia). Skin infections look like pimples that are red, swollen, and painful and can have pus or other fluids in them. There are Staphylococcus aureus bacteria that are resistant to some kinds of antibiotics. This kind of “staph” is called Methicillin Resistant Staphylococcus Aureus or MRSA.

Who is at risk?

Anyone. Especially persons who have been a patient in hospital, or who had been close contact with another patient or person colonised or infected with MRSA. There is also a risk when there is close contact in gyms and bathhouses. Persons with weakened immune systems are at particular risk.

How is it spread?

On the hands of an infected or colonised person. It is also spread through skin to skin contact or contact with contaminated surfaces or objects like towels or sports equipment. It can also be spread by touching the fluid from a pimple or a cut that is infected with MRSA.

Signs and Symptoms

The symptoms include fever, warmth around the infected area, rash, shortness of breath, chills, chest pain, fatigue, muscle aches, headaches and malaise (general unwell feeling).

Diagnosis

“Staph” infections including MRSA are diagnosed by a combination of symptoms and bacterial cultures from the infected sites (e.g. skin, blood, sputum and urine cultures).

Treatment

Antibiotics are used to treat these infections. It is important to take all of your medication even if you have begun to feel better before the prescription is complete.

Prevention and Control

Wash your hands very well or use an alcohol-based hand sanitizer (minimum 60%) if there is no soap and running water especially after visiting someone at the hospital or going to the gym. Also, avoid sharing personal items like clothing, bedding, towels, wash cloths and razors.

Public Health's Role

Staph aureus infections are not reportable but Public Health may want to contact a facility or person involved if there is an MRSA outbreak. Public Health can also offer advice about preventing the spread of infection and decolonization (getting rid of the bacteria) of infected persons if necessary.

What is it?

Group A Streptococci are bacteria that can cause a wide variety of diseases including strep-throat, skin infections, scarlet fever and rheumatic fever.

Who is at risk?

All people are susceptible to catching streptococcal infections. For people who have had rheumatic fever, there is an increased risk of developing additional rheumatic infections.

How is it spread?

Streptococcal infections are often spread through airborne droplets or direct contact with an infected person.

Signs and symptoms

Symptoms vary depending on the part of the body affected but can include:

- Sore throat with redness and swelling
- Fever
- Swollen lymph nodes
- Skin redness/discharge/scabbing

Streptococcal infections can produce many symptoms. If you are concerned about streptococcal infections, contact a healthcare professional for assessment.

Diagnosis

Diagnosis is through an examination and culture (e.g. throat swab) which will be sent for laboratory analysis.

Treatment

Streptococcal infections are usually treated with antibiotics. It is important to finish any medications that are prescribed.

Prevention and control

People who are exhibiting signs of sickness (e.g. fever, sore throat) should not be going to work and should try to minimize contact with others until on effective antibiotics for 24 hours. Consistent and proper hand washing is an important infection control measure.

Public Health's role

Non-invasive streptococcal infections (skin infections, strep throat, etc.) are not reportable to Public Health. However, when a streptococcal infection becomes internal (invasive), it is reportable. Public Health will want to speak to affected people to determine what the source of the infection was and how future infections can be stopped. Education and resources will be provided as needed.

What is it?

Syphilis is a sexually transmitted infection caused by a bacterium called *treponema pallidum*.

Who is at risk?

Any sexually active person, especially those who do not practise safer sex. Injection drug users and babies born to infected mothers are also at risk. There is an ongoing outbreak among gay and bisexual men in Toronto.

How is it spread?

Syphilis is spread from person-to-person during sex (anal, oral or vaginal). It is spread by direct contact with the syphilis sores or rashes. It can also be spread through sharing needles or passed from an infected mother to her newborn baby during pregnancy.

Signs and symptoms

Many infected people have no signs or symptoms of syphilis.

- If symptoms do develop, they tend to show from three weeks after exposure.
- In the first stage, or primary stage, a painless hard sore called a chancre may appear on the penis, buttocks, vagina, throat or any other site where the bacteria entered the body. After four to six weeks the chancre will go away, even with no treatment.
- If untreated, the next stage, or secondary stage, usually occurs from four to 10 weeks after the chancre appears. This stage may involve a rash forming on the palms of the hands, soles of the feet or any other part of the body. Sometimes there is patchy hair loss, muscle and joint pain or swollen glands. These symptoms may disappear without treatment.
- If left untreated, the person may develop the third stage which will usually happen in 10–20 years (sometimes earlier if the person has HIV). This stage can involve very serious brain, heart and bone disease.
- Can cause congenital syphilis in a baby born to an infected mother.

If you are concerned about syphilis, contact a healthcare professional for assessment.

Diagnosis

A syphilis diagnosis is made with a blood test. It can take two to 12 weeks for syphilis to show up in the blood.

Treatment

Syphilis can be treated and cured with antibiotics.

Prevention and control

It is important to always practise safer sex (e.g. using a condom). It is important to avoid having sex with anyone who has sores in their genital region. All pregnant women should be tested for syphilis and injection drug users should never share needles. Routine testing for sexually transmitted infections is recommended if there is high risk sexual behaviour.

Public Health's role

Syphilis is a reportable disease. Public Health will want to speak with any affected people to determine who might have contracted it. Public Health will also want to make sure that sexual partners are informed, tested and treated and provide additional education and support as needed.

What is it?

TB is an infectious disease caused by a bacterium called mycobacterium tuberculosis. TB usually attacks the lungs but can affect any part of the body.

Who is at risk?

- People who were born or who lived in areas of the world where there is a lot of TB
- People who are homeless or under-housed
- People with weak immune systems (due to HIV/AIDS, cancer, kidney failure, diabetes, drug users, alcoholics)
- Contacts of people with active TB
- People who have lived on a reserve or in an Inuit community
- Elderly people who lived through a time when TB was common
- Staff and residents of shelters, jails, long-term care facilities, hospitals

How is it spread?

The germ is spread from person-to-person through the air when someone who is sick with TB in their lungs or throat, coughs or sneezes. It is not highly contagious. Close, prolonged or regular contact with someone who is sick with active TB disease is needed to spread it.

Signs and symptoms

TB infection: Most people who breathe in TB bacteria are able to stop them from growing. The immune system traps the bacteria and keeps the person healthy. This is called TB infection and these people:

- Do not feel sick/have no symptoms
- Have a positive skin test
- May develop active TB disease anytime during their life
- Cannot spread TB germs

TB disease: TB bacteria become active when the body's immune system cannot stop them from growing. The active TB bacteria begin to multiply and cause damage to the body. Some symptoms of active TB disease in the lungs are:

- Cough (lasts longer than three weeks)
- Fever/night sweats/chills
- Fatigued
- Unexplained weight loss/loss of appetite

If the TB disease is in another part of the body, the symptoms will depend on where (e.g. swollen lymph nodes or groin pain).

Diagnosis

Screening for TB infection is done by a skin test. A positive skin test means a person has TB germs in their body. A physical examination, chest x-ray and sputum (mucous collected from the lungs) are done to check for TB disease because the skin test cannot tell the difference between infection and active disease.

Treatment

TB is a preventable, treatable and curable disease. People with TB infection may benefit from medicine to prevent TB disease. People with TB disease must complete antibiotic treatment to cure TB. TB drugs are provided free through Public Health.

Public Health's role

TB is a reportable disease. Public Health does a thorough investigation of people diagnosed with TB disease and traces their contacts. Education and directly observed medication therapy are offered.

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