



Bacteria



Fungus



Parasite



Virus

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Information Sheets



Amoebiasis (*Entamoeba histolytica*)

What is it?	Amoebiasis is caused by a parasite called <i>Entamoeba histolytica</i> , which can live in the gut (intestines). Its effects can range from nothing to severe diarrhea 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 (bum to mouth) contact.
Signs and symptoms	<ul style="list-style-type: none"> • Diarrhea • Bloody or black/tarry feces (poop) • Fever • Abdominal pain • Weight loss <p>Anyone who is experiencing one or more of these symptoms should be seen by a healthcare professional for assessment.</p>
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. 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.
More information	Toronto Health Connection: 416-338-7600 www.cdc.gov/ncidod/dpd/parasites/amebiasis/factsht_amebiasis.htm



Antibiotic Resistant Organisms-AROs

What are they?	<p>Antibiotic Resistant Organisms or AROs are common bacteria 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:</p> <ul style="list-style-type: none"> • a) MRSA – Methicillin Resistant Staphylococcus Aureus. Staphylococcus is a common germ found on the skin. • b) VRE – Vancomycin Resistant Enterococcus. Enterococcus is a common germ found in the gut of all mammals.
Who is at risk?	<p>Anyone can contract AROs but most commonly they are 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.</p>
How are they spread?	<p>AROs 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, etc.).</p>
Signs and symptoms	<p>Often it is impossible to tell if someone has an ARO. Sometimes people can develop pneumonia, bladder, skin or wound infections.</p> <p>If you are concerned about AROs, contact a healthcare professional for assessment.</p>
Diagnosis	<p>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.</p>
Treatment	<p>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.</p>
Prevention and control	<p>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.</p>
Public Health's role	<p>AROs are not a reportable disease.</p>
More information	<p>Information sheet on C. difficile, page 72 Toronto Health Connection: 416-338-7600 www.health.gov.on.ca/english/providers/pub/pubhealth/aroprogram/aroprogram.html www.cdc.gov/drugresistance/community/</p>



Bed Bugs

What are they?	Bed bugs are not new but in recent years, they have been a growing problem for hotels, shelters and hostels. Bed bugs are pests that feed off of blood and leave bites and scabs.
Who is at risk?	People most at risk include those living in, 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	<ul style="list-style-type: none"> • Red spots appearing on exposed skin (e.g., ankles, face, etc.) • A whitish bump that appears after the bite • Itchiness <p>If you are concerned about bed bug bites, contact a healthcare professional for assessment.</p>
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 holes in the walls, vacuuming and pest management.
Public Health's role	The Healthy Environment section of Toronto Public Health in partnership with the Shelters, Support and Housing Administration, monitors the bed bug situation and provides advice on strategies. Bed bugs do not specifically cause a threat to public health and are not a reportable disease.
More information	<p>Appendix 10, page 118</p> <p>Toronto Health Connection: 416-338-7600</p> <p>Hostel Services: 416-392-8741</p>



C. difficile (Clostridium difficile)

What is it?	Clostridium difficile bacteria are often seen in hospital or institutional environments. It can cause cramping and foul smelling, moderate-to-severe diarrhea. 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 (poop) and the mouth (e.g., not washing hands properly after using the bathroom and then eating).
Signs and symptoms	<ul style="list-style-type: none"> • Moderate to severe diarrhea • Fever • Stomach cramps • Loss of appetite <p>If you are concerned about C. difficile, contact a healthcare professional.</p>
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.
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.
More information	Toronto Health Connection: 416-338-7600 Public Health Agency of Canada: www.phac-aspc.gc.ca/c-difficile



Chickenpox (Varicella Zoster Virus)

What is it?	Chickenpox is a highly contagious virus commonly seen in children.
Who is at risk?	Individuals who have not had chickenpox or been vaccinated against chickenpox are at risk. Those who have weakened immune systems and the elderly are at risk of complications should they become infected. Generally, chickenpox tends to affect adults more severely than it does children.
How is it spread?	The most common way to catch chickenpox is through direct contact with respiratory secretions (e.g., mucous) of an infected individual. It can also be spread through the air or through contact with soiled articles (e.g., clothes). Most people pass chickenpox to others before they show a rash.
Signs and Symptoms	<ul style="list-style-type: none"> • Red circular itchy patches all over the body that become vesicles (bubble- like) then scab over • Mild fever <p>If you are concerned about chickenpox, contact a healthcare professional for assessment.</p>
Diagnosis	Often a healthcare professional can make a diagnosis after seeing the patches (pox) on the patient. A small sample of the patches can be taken for laboratory study.
Treatment	Most treatment involves relieving the symptoms (e.g., itching). In some severe cases an antiviral drug may be used.
Prevention and control	People affected by chickenpox should remain isolated for five days after the onset of rash or until all spots have scabbed over. Contact Toronto Public Health to determine the steps that should be taken in your facility. Staff should make sure that extra care is taken with hand washing if there is a known outbreak.
Public Health's role	Chickenpox is a reportable disease. Toronto Public Health may wish to speak with infected people to help determine where the infection came from and offer the chickenpox vaccine to exposed people to stop further spread.
More information	Toronto Health Connection: 416-338-7600 www.healthyontario.com www.cdc.gov/nip/diseases/varicella

Chlamydia



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	<p>Many people do not have any symptoms (especially women). Symptoms can include:</p> <p>Women:</p> <ul style="list-style-type: none"> • Increased vaginal discharge and/or irritation • Bleeding during or after sexual intercourse • Painful lower abdomen during sex • Painful or burning urination • Abnormal vaginal bleeding <p>Men:</p> <ul style="list-style-type: none"> • Discharge and/or itching from the penis • Pain and swelling in the testicles • Painful or burning urination <p>Symptoms of Chlamydia may come and go. If you are concerned about any of the above, consult a healthcare professional for assessment.</p>
Diagnosis	A sample of urine is needed. Swabs of the cervix/urethra may also be taken. Samples are sent to the laboratory for analysis.
Treatment	Once diagnosed, Chlamydia can be treated with antibiotics. It is important that all 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.
More information	Toronto Public Health – Sexual Health InfoLine: 416-392-2437 www.toronto.ca/health

Common Cold



What is it?	A cold is caused by a viral infection. Most people will experience such infections every year.
Who is at risk?	Anyone can catch a cold but those with weakened immune systems and the elderly may be more at risk of complications.
How is it spread?	A cold can be spread through the air with coughing and sneezing, through direct contact with an infected person and through indirect contact with objects or surfaces that have been touched by an infected person.
Signs and Symptoms	<ul style="list-style-type: none"> • Coughing • Sneezing • Runny nose • Fever • General “sick” feeling (malaise) <p>If you are concerned about a cold you should speak with a healthcare professional.</p> <p>If a person develops any of the following symptoms they should be assessed by a healthcare professional:</p> <ul style="list-style-type: none"> • Earache • Fever higher than 39°C (102°F) • Excessive sleepiness • Skin rash • Rapid breathing or difficulty breathing • Persistent coughing
Diagnosis	A diagnosis is often made based on a thorough interview combined with any obvious signs. In some cases a healthcare professional may order a swab for laboratory analysis.
Treatment	As a virus causes a cold, antibiotics are not effective in treating this infection. Most treatment is aimed at controlling the symptoms (e.g., fever, runny nose, etc.).
Prevention and control	Effective hand washing is your best defence against the common cold. Using a tissue to cover the mouth and nose when sneezing or coughing is also an effective barrier to prevent the spread of these germs.
Public Health’s role	Although the common cold is not a reportable condition, Toronto Public Health should be consulted if an increased number of people or increased level of severity (beyond the normal) is noticed.
More information	Toronto Health Connection: 416-338-7600

Foodborne Illnesses (or food poisoning)



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 properly refrigerated, cooked or stored. 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 live in food and grow well and produce toxins when the food is not stored or cooked according to accepted standards. Foodborne germs and toxins can also be spread through food which has not been handled properly (e.g., contaminated surfaces).
Signs and symptoms	<p>Although a variety of germs and toxins can cause foodborne illnesses, the following are the most common signs and symptoms:</p> <ul style="list-style-type: none"> • Vomiting • Diarrhea • Stomach cramps <p>If you are concerned about a foodborne illness, contact a healthcare professional for assessment. Call Toronto Public Health to investigate the cause.</p>
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 the Ontario food premises regulation 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, etc.). 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.
More information	Toronto Health Connection: 416-338-7600



Giardiasis (Giardia Lamblia)

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 diarrhea 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	<ul style="list-style-type: none"> • Watery diarrhea • Very bad smelling bowel movements • Weight loss • Stomach pain/cramps • There may be no symptoms <p>If you are concerned about Giardiasis, contact a healthcare professional for assessment.</p>
Diagnosis	A diagnosis is usually made through a thorough history, examination and then a stool (poop) sample.
Treatment	It is important that anyone experiencing diarrhea 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 (e.g., changing diapers, etc.), 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.
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.
More information	Toronto Health Connection: 416-338-7600 www.cdc.gov/ncidod/dpd/parasites/giardiasis/factsht_giardia.htm



Gonorrhoea (*Neisseria gonorrhoeae*)

What is it?	Gonorrhoea is a sexually transmitted infection caused by a bacterium called <i>Neisseria gonorrhoeae</i> .
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	<p>Many men and women who have gonorrhoea, have NO symptoms. Symptoms can include:</p> <p>Women:</p> <ul style="list-style-type: none"> • Pain during urination • Bleeding during or after sexual intercourse • Pain in the lower abdomen • Abnormal bleeding between periods • White or yellow smelly vaginal discharge <p>Men:</p> <ul style="list-style-type: none"> • 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 <p>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.</p> <p>If you are concerned about gonorrhoea, contact a healthcare professional for assessment.</p>
Diagnosis	For men, diagnosis is made from a urine sample or swab. For women, a swab of the cervix must be taken. If gonorrhoea is suspected in the throat or anus, a swab of either the throat or anus must 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 provide additional education and support as needed.
More information	Toronto Public Health – Sexual Health InfoLine: 416-392-2437

Hepatitis A



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. So are 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	<ul style="list-style-type: none"> • Tiredness • Abdominal pain • Jaundice (yellowing of the skin and/or eyes) • Loss of appetite • Nausea • Diarrhea • Fever • There may be no symptoms <p>If you are concerned about hepatitis A infection, contact a healthcare professional for assessment.</p>
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. 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 foodhandler, Public Health will decide if there is a risk to those who have consumed food.
More information	Toronto Health Connection: 416-338-7600 www.liver.ca



Hepatitis B

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 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	<ul style="list-style-type: none"> • Loss of appetite • Jaundice (yellowing of the skin and/or eyes) • Abdominal pain • Fever • There may be no symptoms • Nausea and vomiting • Joint pain • Tiredness <p>If you are concerned about hepatitis B infection, contact a healthcare professional for assessment.</p>
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 as hepatitis B virus can easily be 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.
More information	Toronto Health Connection: 416-338-7600 www.liver.ca

Hepatitis C



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	<p>Early signs and symptoms are very mild and are often missed. Symptoms can include:</p> <ul style="list-style-type: none"> • Nausea • Weight loss • Vomiting • Jaundice (yellowing of the skin and/or eyes) • Stomach pain • Tiredness • There may be no symptoms <p>If you are concerned about hepatitis C infection, contact a healthcare professional for assessment.</p>
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., using 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.
More information	Toronto Health Connection: 416-338-7600 www.liver.ca



Human Immunodeficiency Virus (HIV) and Acquired Immuneodeficiency Syndrome (AIDS)

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 Immuneodeficiency 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 can not 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: <ul style="list-style-type: none"> • Frequent or severe pneumonia • Swollen lymph nodes • Oral thrush (white patches) • Night sweats <p>If you are concerned about HIV or AIDS, contact a healthcare professional for assessment.</p>
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 longer and healthier 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. HIV positive women should be counselled about using anti-retroviral treatment and not breastfeeding.
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.
More information	Toronto Public Health – Sexual Health InfoLine: 416-392-2437



Impetigo (skin infection)

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	<p>There are several types of impetigo with different symptoms.</p> <p>Impetigo contagiosa (most common type):</p> <ul style="list-style-type: none"> • 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 <p>Bullous impetigo (usually affects children under two years old):</p> <ul style="list-style-type: none"> • Larger blisters, usually on the body arms and legs • Sometimes a fever, diarrhoea and/or general weakness <p>Ecthyma (most serious type)</p> <ul style="list-style-type: none"> • rare form of deep infection with ulcers <p>If you are concerned about impetigo, contact a healthcare professional for assessment.</p>
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 they 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 that are reportable to Public Health.
More information	Toronto Health Connection: 416-338-7600 www.mayoclinic.com/health/impetigo/DS00464



Influenza (Flu)

What is it?	Influenza (flu) is a serious respiratory infection caused by a virus . It is different from, and more serious than, the common cold. Every year there are outbreaks of influenza. Every 30 to 40 years there can be a more serious pandemic (an epidemic that involves a very large geographic area).
Who is at risk?	<p>People with any of the following conditions are more at risk of a serious infection:</p> <ul style="list-style-type: none"> • Chronic heart or lung disorders • Diabetes or kidney disease • Cancer or a weak immune system (including HIV infection) • Anaemia • Those over 65 years old and residents of nursing homes
How is it spread?	Influenza is spread through droplets when someone coughs or sneezes. It can spread through the air in crowded enclosed spaces. It is also spread through direct contact with contaminated hands/skin and indirect contact with contaminated objects (e.g., door knobs). Influenza arises seasonally (most often occurring in the fall and winter months).
Signs and symptoms	<ul style="list-style-type: none"> • Fever • Dry cough • Tiredness/a general “sick” feeling • Body aches/headache • In children there may also be vomiting and diarrhoea <p>If you are concerned about influenza, contact a healthcare professional for assessment.</p>
Diagnosis	Testing often involves a swab inserted in the nose to collect a sample to be sent to the laboratory for analysis.
Treatment	Influenza is a virus, therefore antibiotics are not effective against it. Most often, treatment is for the symptoms (e.g., dehydration, high fever, etc.). In some serious cases, a healthcare professional may prescribe an antiviral drug, but this is only effective in certain circumstances.
Prevention and control	One of the most effective methods for preventing influenza is frequent hand washing. Additionally, the influenza vaccine is now free to all residents of Ontario. It is strongly recommended for anyone who works or resides in institutional settings (e.g., hospitals, hostels and shelters). People with egg allergies should not receive this vaccine.
Public Health’s role	Public Health is actively involved in the prevention of influenza. With the cooperation and assistance of the Ontario Ministry of Health and Long-Term Care, Public Health distributes prevention information and operates immunization clinics around the city. Public Health in partnership with Emergency Medical Services offers the influenza vaccine at selected shelters.
More information	<p>Toronto Health Connection: 416-338-7600 www.toronto.ca/health www.healthyontario.com</p>



Lice (head and body)

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	<ul style="list-style-type: none"> • Itching • Lice on the hair or body • Nits (tiny white eggs found at the base of hair or in clothing seams) • Small red bites <p>If you are concerned about head or body lice or any of the above symptoms, contact a healthcare professional for assessment.</p>
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 Baths (416-392-7984) has a program to assist with delousing.
Prevention and control	Prevention of lice can be a challenge, especially when people live and work in crowded conditions. <ul style="list-style-type: none"> • 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.
More information	Toronto Health Connection: 416-338-7600



Measles

What is it?	Measles, also known as “Red Measles” or “Rubeola”, is a very easily spread airborne infection caused by a virus .
Who is at risk?	Anyone who has not had measles or been immunized, and infants who have not yet received vaccination. Measles can be severe in infants and adults.
How is it spread?	Measles is a very contagious airborne infection. People can contract it from tiny droplets of fluid released into the air by an infected person. Direct contact with nose or throat fluids or articles soiled with those fluids can also spread it. A person can transmit the infection from four days before the rash appears to four days after it appears.
Signs and symptoms	<p>Symptoms occur in two stages:</p> <p>First stage:</p> <ul style="list-style-type: none"> • Runny nose • Red and watery eyes that are sensitive to light • Low grade fever • Cough <p>Second stage:</p> <ul style="list-style-type: none"> • After three to seven days a high fever develops • Red rash, first on face then moving down the body • White spots inside the mouth <p>If you are concerned about measles, contact a healthcare professional for assessment as soon as possible.</p>
Diagnosis	Measles is diagnosed through a physical examination and a blood test that is sent for laboratory analysis.
Treatment	There is no cure for measles. Treatment often involves helping people with the symptoms until the infection clears on its own. In severe cases, hospitalization may be required.
Prevention and control	Measles vaccination is routinely given to children in Canada. It is a safe and effective way of preventing this infection. For people who are not vaccinated but suspect that they might have come into contact with measles, it is important to see a healthcare professional as soon as possible as certain therapies may help prevent contracting the infection. Make sure you notify the healthcare professional of your concerns before you see him/her (i.e. on the phone) so that you avoid passing the germs on to other people.
Public Health’s role	Measles is a reportable disease. Public Health will want to speak with any affected people to determine where the infection came from and to try to stop other people from becoming infected. Education, guidance and vaccinations will be offered as needed.
More information	Toronto Health Connection: 416-338-7600 www.healthyontario.com

Meningitis (bacterial, fungal and viral)



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?	<p>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).</p> <p>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.</p> <p>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, etc.).</p>
Signs and symptoms	<ul style="list-style-type: none"> • Stiff/painful neck • Headache • Rash • Fever • Disorientation/confusion • General “sick” feeling <p>If you are concerned about meningitis, contact a healthcare professional for assessment as soon as possible.</p>
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	<ul style="list-style-type: none"> • 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 may wish 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 offers Meningitis C vaccine to youth aged 15 to 19 and through the grade 7 immunization program.
More information	Toronto Public Health: 416-338-7600 www.toronto.ca/health



Molluscum Contagiosum

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	<ul style="list-style-type: none"> • 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 <p>If you are concerned about molluscum contagiosum, contact a healthcare professional for assessment.</p>
Diagnosis	It is usually diagnosed by its appearance but can 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.
More information	Toronto Public Health – Sexual Health InfoLine: 416-392-2437 www.aad.org/pamphlets/molluscum.html

Mumps



What is it?	Mumps is a serious, but uncommon, viral infection of the salivary (saliva) glands.
Who is at risk?	People who have not received the mumps vaccine and are exposed to a person with mumps.
How is it spread?	Mumps is an airborne virus but can also be spread through direct contact with an infected person's saliva.
Signs and symptoms	<ul style="list-style-type: none"> • Many children may have no signs or symptoms or very mild symptoms • Swelling around the jaw and neck • Fever • Swelling of the testicles in men <p>If you are concerned about mumps, contact a healthcare professional for assessment.</p>
Diagnosis	A blood test is required for diagnosis.
Treatment	There is no cure for mumps and treatment often involves easing the symptoms (i.e. reducing pain).
Prevention and control	The mumps vaccine is a common, safe and effective vaccination that most children in Canada receive. It is important that you notify your healthcare professional of your symptoms in advance of seeing them so that you can avoid infecting other people. Isolation is required for nine days from the beginning of the swelling.
Public Health's role	Mumps is a reportable disease. Public Health will want to speak with any affected individuals to determine where the infection came from and how to stop it. Education and guidance would be provided as needed. Vaccination may be offered to contacts.
More information	Toronto Health Connection: 416-338-7600 www.healthyonario.com

Norwalk Virus



What is it?	Norwalk virus is a common cause of vomiting and diarrhea each winter.
Who is at risk?	Outbreaks occur in large institutional settings (e.g., hostels, hospitals, etc.). People with weakened immune systems and the elderly may experience a more severe infection.
How is it spread?	Norwalk virus lives in the stomach and intestines (guts) of people. Therefore, both the feces (poop) and vomit of infected people carry this virus. It is spread through the fecal-oral route (e.g., poop to mouth) and through indirect contact (e.g., door knobs that have been handled by a contaminated individual) as well as through contaminated food or water. It is possible that it might also be spread through the air, but this is not clear.
Signs and symptoms	<ul style="list-style-type: none"> • Nausea • Watery diarrhea • Vomiting • Fever • Stomach cramps <p>Symptoms usually last for one to two days. If you are concerned about Norwalk virus, contact a healthcare professional for assessment.</p>
Diagnosis	Sometimes a stool (poop) sample will be required, but if the symptoms resolve rapidly, this is not necessary.
Treatment	As this is a viral infection, antibiotics are not effective. Treatment is usually for the symptoms (e.g., lots of fluids, medications for nausea, fever, etc.).
Prevention and control	Frequent hand washing is an excellent way to prevent this infection. Anyone with symptoms of Norwalk virus should not be handling food that may be eaten by others.
Public Health's role	Although Norwalk virus is not a reportable disease, any large number of cases or increases in the above symptoms should be reported to Public Health. Public Health will investigate and recommend ways to reduce the spread. Information and guidance can be provided on request.
More information	Toronto Health Connection: 416-338-7600 www.healthyontario.com



Pink Eye (Conjunctivitis)

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	<ul style="list-style-type: none"> • Redness and itchiness of one or both eyes • “Sticky” fluid from infected eye • Swelling of the eyelid <p>If you are concerned about pink eye, contact a healthcare professional for assessment.</p>
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.
More information	Toronto Health Connection: 416-338-7600 www.healthyonario.com



Rubella/German Measles (Rubella Virus)

What is it?	Rubella is a viral infection, which causes a rash and other associated symptoms. It can be particularly harmful to unborn children.
Who is at risk?	People who have not had rubella and are not immunized. Unborn children of mothers who do not have immunity, as it can cause Congenital Rubella Syndrome. This syndrome can result in hearing, vision and heart problems, as well as developmental delays.
How is it spread?	Rubella is spread when people breathe in droplets released into the air by an infected person or through direct contact with nasal/throat secretions.
Signs and symptoms	<ul style="list-style-type: none"> • Mild fever • Swollen lymph glands in the neck • Rash • Symptoms can start to emerge before the onset of the rash • Children and adults can have different symptoms <p>If you are concerned about rubella, contact a healthcare professional.</p>
Diagnosis	A diagnosis is made through a history, examination and blood test.
Treatment	In healthy children and young adults, rubella is usually a mild disease with no specific treatment available. Individuals with more severe symptoms should be referred for medical care.
Prevention and control	Immunization is an effective way to prevent this disease. Thorough hand washing and use of barriers (e.g., tissues) when sneezing are also important for stopping the spread of contact and droplet infections such as rubella.
Public Health's role	Rubella is a reportable disease. Public Health will want to speak with affected people to determine where the infection came from and how it can be stopped. Public Health will also try to identify pregnant female contacts and refer for blood tests. A vaccine may be offered to contacts. Public Health will also provide education and guidance materials as needed.
More information	Toronto Health Connection: 416-338-7600 www.healthyontario.com



Scabies (*Sarcoptes scabiei*)

What is it?	Scabies is a disease caused by a common mite (a tiny bug related to spiders) called <i>Sarcoptes scabiei</i> . 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 (e.g., sleeping in or wearing) bed sheets, furniture or clothing.
Signs and symptoms	<ul style="list-style-type: none"> • 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 <p>If you are concerned about scabies, contact a healthcare professional for assessment.</p>
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 seven-eight 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. Public Health takes an active interest in making sure that common standards of hygiene and cleanliness are followed so infestations can be avoided.
More information	Toronto Health Connection: 416-338-7600 www.healthyonario.com



Severe Acute Respiratory Syndrome (SARS)

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 sacks 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	<ul style="list-style-type: none"> • Fever (over 38°C or 100.4°F) • Dry cough • Shortness of breath • Difficulty breathing • Muscle aches <p>If you are concerned about SARS, contact a healthcare professional for assessment.</p>
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, problems breathing). 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.
More information	Toronto Health Connection: 416-338-7600 www.toronto.ca/health www.healthyonario.com

Staphylococcal Infections (Staphylococcus aureus)



What is it?	Staphylococcus aureus is a type of bacteria that often causes skin infections and can range from mild to life-threatening. Common skin problems associated with staphylococcal infections include: impetigo (skin infection), folliculitis (infection of the hair follicles), furuncles (boil), carbuncles (deep skin infection), abscesses (large fluid filled skin infections), infected wounds and, less commonly, toxic shock syndrome.
Who is at risk?	<ul style="list-style-type: none"> • Newborn children • Chronically ill, elderly and immune-compromised people • Injection drug users
How is it spread?	Staphylococcus germs often live in the nose. It is common for individuals to infect their own skin after coming into contact with nose drops (mucous). People can transmit staphylococcus germs to each other through direct or indirect contact with nose drops or infected wounds.
Signs and symptoms	<p>Infected wounds may appear to be:</p> <ul style="list-style-type: none"> • Red • Warm to the touch • Swollen <p>Sometimes a staphylococcus infection may include:</p> <ul style="list-style-type: none"> • Fever • Headache • Loss of appetite • A general sick feeling <p>If you are concerned about staphylococcus, contact a healthcare professional for assessment.</p>
Diagnosis	A sample of the affected area (a swab) will be sent to the laboratory for analysis.
Treatment	Staphylococcus infections are treated with antibiotics. It is important that the antibiotics be finished in order to avoid drug resistance.
Prevention and control	The best way to prevent staphylococcus infections is with thorough hand washing and good personal hygiene.
Public Health's role	Although staphylococcus aureus infection is not a reportable disease, any abnormal (higher than normal) number of cases should be reported so that sources can be investigated. Public Health will provide education and guidance as needed.
More information	Toronto Health Connection: 416-338-7600

Streptococcal Infections (Group A Streptococci)



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	<p>Symptoms vary depending on the part of the body affected but can include:</p> <ul style="list-style-type: none"> • Sore throat with redness and swelling • Fever • Swollen lymph nodes • Skin redness/discharge/scabbing <p>Streptococcal infections can produce many symptoms. If you are concerned about streptococcal infections, contact a healthcare professional for assessment.</p>
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.
More information	Toronto Health Connection: 416-338-7600 www.healthyontario.com

Syphilis



What is it?	Syphilis is a sexually transmitted infection caused by a bacterium called <i>treponema pallidum</i> .
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	<p>Many infected people have no signs or symptoms of syphilis.</p> <ul style="list-style-type: none"> • 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. <p>If you are concerned about syphilis, contact a healthcare professional for assessment.</p>
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 is needed.
More information	Toronto Public Health – Sexual Health InfoLine: 416-392-2437 www.toronto.ca/health



Tuberculosis (TB)

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?	<ul style="list-style-type: none"> • People who were born or who lived in areas of the world where there is a lot of TB disease • 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	<p>TB infection (inactive): 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 (inactive) and these people:</p> <ul style="list-style-type: none"> • Do not feel sick/have no symptoms • Have a positive TB skin test • May develop active TB disease anytime during their life • Cannot spread TB germs <p>Active 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:</p> <ul style="list-style-type: none"> • New or worsening cough (lasts longer than three weeks) • Fever/night sweats/chills • Fatigue • Unexplained weight loss/loss of appetite <p>If the TB disease is in another part of the body, the symptoms will depend on where the TB disease is located (e.g., swollen lymph nodes).</p>
Diagnosis	Screening for TB infection (inactive) is done by a TB skin test. A positive TB skin test means a person has TB germs in their body. A physical examination, chest x-ray and sputum (mucous collected from the lungs) test are done to check for active TB disease.

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Treatment	TB is a preventable, treatable and curable disease. People with TB infection (inactive) may benefit from medicine to prevent active TB disease. People with active TB disease must complete antibiotic treatment to cure TB. TB drugs are provided free through Public Health.
Prevention and control	All shelter staff and volunteers should be screened for TB when starting work and annually thereafter. All shelter staff and volunteers should receive TB education (includes awareness of symptoms and how to refer an ill resident for assessment).
Public Health's role	TB is a reportable disease. Public Health does a thorough investigation of people diagnosed with active TB disease and traces their contacts. Education and directly observed medication therapy are offered.
More information	Toronto Public Health – TB Program: 416-392-7420 www.toronto.ca/health E-mail: targettb@toronto.ca



West Nile Virus

What is it?	West Nile Virus is a mosquito-borne virus that infects birds, animals and humans. The risk of infection is low and fewer than one per cent of infected people become seriously ill.
Who is at risk?	Mosquitoes are most active at night, especially during dusk and dawn. Therefore, people who sleep outdoors and are outside in the early morning and early evening are at increased risk of getting mosquito bites. Also, people over the age of 55 and those with compromised immune systems (e.g., HIV or cancer) are at a higher risk of developing complications, if they become infected.
How is it spread?	West Nile Virus is a blood-borne illness spread by mosquitoes to people. People cannot transmit this infection to each other.
Signs and symptoms	<p>Many people show no signs or symptoms, but symptoms can include:</p> <ul style="list-style-type: none"> • Fever • Headaches • Body aches • Skin rash • Swollen glands <p>People with a severe infection may develop:</p> <ul style="list-style-type: none"> • Stiff neck • Confusion • Sensitivity to light <p>If you are concerned about West Nile Virus, contact a healthcare professional for assessment.</p>
Diagnosis	Diagnosis is made with a blood test.
Treatment	There is no cure for West Nile Virus. Treatment usually involves reducing the impact of the symptoms (i.e. lowering the fever, easing pain).

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Prevention and control	<p>Cover up as much as possible and tuck pants into socks for extra protection. Try to wear light-coloured clothing, including long-sleeved shirts, or a jacket and long pants. Avoid locations with a large number of mosquitoes, such as ravines, or areas with a lot of bushes and trees, especially in the early morning and early evening. When wearing extra clothing, drink lots of water to reduce the risk of heat stress.</p> <p>Toronto Public Health recommends repellents containing 10 per cent DEET or less for adults.</p> <ul style="list-style-type: none">• Only apply to exposed skin and clothing and only when necessary.• Use small amounts and never on cuts, wounds, sunburns or irritated skin.• Seek medical attention if DEET is swallowed.• Avoid using DEET on a regular basis, only use as necessary.• Note that insect repellent may reduce the effectiveness of sunscreen.• Products containing both sunscreen and repellent are not recommended.• Be sure to wash repellent off daily.• Some alternatives to DEET (e.g., soybean oil) have been approved for use by Health Canada. Check products as some are not recommended for children under three years of age.
Public Health's role	<p>Contact a healthcare professional for more information.</p> <hr/> <p>West Nile Virus illnesses are reportable to Toronto Public Health. Public Health actively monitors for cases of West Nile Virus through routine and targeted investigations. West Nile Virus is a reportable infection and Public Health will want to speak with any affected person to determine how they contracted the infection so that other infections might be prevented. Public Health also offers education and resources to the public.</p> <hr/>
More information	<p>Toronto Health Connection: 416-338-7600 www.toronto.ca/health</p>



Whooping Cough (Pertussis)

What is it?	Pertussis is a bacterial infection of the respiratory system that produces severe coughing often compared to a “whooping” sound. Most people receive childhood vaccinations to prevent the spread of this infection.
Who is at risk?	Unvaccinated/under-vaccinated children and adults and individuals whose protection has worn off are at particular risk. Anyone who is a close contact of an infected person is at risk as pertussis is highly contagious.
How is it spread?	Pertussis is spread through direct contact with infected bodily fluids, especially respiratory mucous. It is also believed to be spread through droplets in the air.
Signs and symptoms	<ul style="list-style-type: none"> • Severe coughing, many coughs can be followed by “crowing” or “whooping” sounds • Vomiting after coughing • Fever <p>If you are concerned about pertussis, contact a healthcare professional for assessment.</p>
Diagnosis	Diagnosis is often made through a combination of symptoms and laboratory tests that are conducted on mucous samples taken from the back of the nose.
Treatment	This infection is usually treated with antibiotics and can sometimes require hospitalization.
Prevention and control	One of the most effective methods for preventing the spread of whooping cough (pertussis) is through childhood vaccinations. If someone is already infected they should be isolated until they receive at least five days of antibiotic treatment. If no antibiotic treatment is received, the isolation lasts for 21 days. Routine practices (e.g., hand washing) should be followed until medications have had a chance to take effect. Droplet precautions are also recommended if providing direct care for an infected person.
Public Health’s role	Pertussis is a reportable disease. Public Health will likely want to speak with the affected individual and their close contacts to attempt to control the spread of this infection. Antibiotics and vaccination of contacts under seven years of age will also be considered.
More information	Toronto Health Connection: 416-338-7600 www.healthyontario.com