A Guide to common childhood infections

- Signs and Symptoms of Infectious Diseases
- How Infectious Diseases Spread
- How to Prevent Spread of Infectious Diseases
- When to Exclude and When to Report

Elgin St. Thomas Public Health
www.elginhealth.on.ca

ML Bureau de Santé de Middlesex-London Health Unit
www.healthunit.com

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Welcome to the online interactive version of the Guide to Common Childhood Infections. Look for this symbol throughout the guide and click for more information.

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Introduction

This guide will help you determine your role in the event a child attending your school or day care has an infectious disease. This resource provides general information about:

- Infectious diseases including signs and symptoms
- How they are spread
- How to prevent spread
- When to exclude from school and daycare
- When to report

If a person is confirmed or suspected of having a disease from the Reportable Disease List, the local health unit must be informed in accordance with the health protection and promotion act.

The Health Protection and Promotion Act (R.S.O. 1990, CHAPTER H.7; Part IV)

If a principal of a school or an operator of an institution, such as a day care, has knowledge of, or suspects that a child in their school or day care has a reportable disease, they must monitor and report to the local public health unit.

Note: This guide is for information purposes only. Diagnosis of an infection must be made by a health care provider.

References:

Ministry of Health and Long-Term Care (2009) Infectious Disease Protocol
Infectious Disease Basics

WHAT IS AN INFECTIOUS DISEASE?
A disease that can be spread from one person to another is considered to be an infectious disease. When a person is sick with an infection there are only certain times they can give that disease to others; this is known as the infectious period. During this time, the person may be excluded from school or day care to prevent spreading the infection to others.

HOW DO INFECTIONS SPREAD?
Infectious diseases are caused by germs, which include bacteria, viruses, parasites, or fungi. These germs are found in body secretions, such as stool, saliva, mucus, phlegm or in tiny droplets that are breathed, coughed, or sneezed out. Germs that cause infectious diseases are spread from person-to-person in different ways. Some germs are spread through respiratory droplets, like influenza (flu) and fifth disease. Other diseases such as impetigo are spread by touching a person infected with the illness or by touching an object that has the germ on it. Germs like salmonella and e. coli spread through drinking contaminated water or eating contaminated food.

Infection Prevention Tips

In your school or day care you can control the spread of germs by:

- Washing your hands often using warm water, soap, and rubbing your hands together for 20 seconds, about the length of time it takes to sing “Happy Birthday”.
- Ensuring there’s always a supply of alcohol-based hand sanitizer and/or soap and water and paper towels available.
- Teaching good hand hygiene practices. Hand hygiene is the single most important measure to prevent the spread of infections. Allow time for children to wash hands after washroom breaks and before eating.
- Teaching and practicing respiratory etiquette which includes coughing and/or sneezing into your elbow or tissue, throwing the tissue in the garbage, and then washing your hands. Ensure tissues are available.
- Stressing the importance of not sharing any personal items such as drinking cups and glasses, eating utensils, lip balm, brushes, etc.
- Being vigilant about cleaning and disinfecting surfaces and objects that are touched often (e.g., toys, books, desks, doorknobs, workstations, countertops, etc.).
- Increasing the frequency of cleaning and disinfecting when indicated, to control certain infectious diseases.
- Handling and disposing of contaminated items properly.
- Encouraging parents to keep their child at home if they are sick and show signs of illness.
Refer to the following chart when determining whether to exclude staff/students:

<table>
<thead>
<tr>
<th>Disease</th>
<th>Exclusion Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chickenpox (Varicella)</td>
<td>Do not exclude unless too ill to take part in activities.</td>
</tr>
<tr>
<td>Diarrhea (e.g. Norovirus, Rotavirus)</td>
<td>Exclude symptomatic food handlers, staff and students until symptom free for at least 24 hours or until a physician determines the diarrhea is not infectious.</td>
</tr>
<tr>
<td>E. coli</td>
<td>Exclude symptomatic food handlers, staff and students until two consecutive stool specimens or rectal swabs taken at least 24 hours apart are negative.</td>
</tr>
<tr>
<td>Fifth Disease (Parvovirus)</td>
<td>Do not exclude unless too ill to take part in activities.</td>
</tr>
<tr>
<td>Hepatitis A</td>
<td>Exclude symptomatic food handlers, staff and students for one week after the start of jaundice or for 2 weeks after the start of illness if no jaundice present.</td>
</tr>
<tr>
<td>Impetigo</td>
<td>Exclude until 24 hours after the start of appropriate antibiotic treatment and are feeling well enough to take part in activities.</td>
</tr>
<tr>
<td>Influenza</td>
<td>Exclude until fever free for 24 hours and well enough to take part in activities.</td>
</tr>
<tr>
<td>Measles</td>
<td>Exclude until at least 4 days after the onset of rash. Non-immune children and staff must also be excluded from 5 days after the first exposure and up to 21 days after the last exposure, unless they: 1) can be immunized within 72 hours from the first exposure; 2) show lab confirmation of immunity or, 3) have received immune globulin.</td>
</tr>
<tr>
<td>Meningitis, bacterial</td>
<td>Exclude until 24 hours after the start of antibiotic treatment and well enough to take part in activities.</td>
</tr>
<tr>
<td>Mumps</td>
<td>Exclude until 5 days after the onset of swelling of the glands at the jaw line on one or both sides of the face.</td>
</tr>
</tbody>
</table>
| Pink eye, bacterial and viral (Conjunctivitis) | Exclude until seen by a healthcare provider.  
  Bacterial pinkeye: Exclude until 24 hours after the start of treatment.  
  Viral pinkeye: Return to school with the approval of a healthcare provider. |
| Ringworm                       | Exclude until appropriate treatment has started.                                         |
| Rubella (German Measles)       | Exclude for 7 days from the onset of rash.                                               |
| Scabies                        | Exclude until 24 hours after appropriate treatment is first applied.                     |
| Strep Throat/Scarlett Fever    | Exclude until 24 hours after the start of appropriate antibiotic treatment and are feeling well enough to take part in activities. |
| Whooping Cough (Pertussis)     | Exclude until 5 days after the start of treatment or three weeks from onset of “whooping” cough if no treatment is given. |

**INFECTIOUS DISEASES AND PREGNANCY**

If you are pregnant or planning to become pregnant:

1. Review your immunization status and occupation with a family doctor, preferably before pregnancy.
2. Avoid contact with people who appear ill.
3. Clean your hands often.

For more information about infections and pregnancy call Mother Risk at **1-877-439-2744** or visit [www.motherisk.org](http://www.motherisk.org)
### Campylobacter*

<table>
<thead>
<tr>
<th>What are the symptoms?</th>
<th>Incubation period: 2 - 5 days after contact with the bacteria.</th>
<th>How is it spread?</th>
<th>How to prevent spread</th>
<th>Exclusion Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diarrhea (with or without blood), abdominal pain, malaise, fever, nausea and vomiting. The symptoms can range from mild to severe and illness may last for 1 to 2 weeks.</td>
<td>While diarrhea is present. Spread from person-to-person is uncommon.</td>
<td>Through contact with the stool of person or animal who is sick and through eating or drinking contaminated food or water.</td>
<td>Wash hands after using the washroom, before preparing and eating food and after handling animals.</td>
<td>Exclude food handlers, staff and students until symptom free for at least 24 hours, or 48 hours after completion of antibiotic or anti-diarrheal medications.</td>
</tr>
</tbody>
</table>

*Indicates a reportable disease

### Chickenpox (Varicella)*

<table>
<thead>
<tr>
<th>What are the symptoms?</th>
<th>Incubation period: 14 - 21 days after contact with the virus.</th>
<th>How is it spread?</th>
<th>How to prevent spread</th>
<th>Exclusion Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mild fever and itchy rash of red spots which turn into fluid filled blisters and crust over. Rash can be seen all over the body.</td>
<td>As long as 5 days, but usually 1 - 2 days before rash starts until rash is crusted over; usually 5 days from rash onset.</td>
<td>Person-to-person through breathing in air contaminated with the virus as well as being in direct contact with the fluid from a blister or saliva of a sick person. Also spread through contact with surfaces or items that have become contaminated.</td>
<td>1) Keep blisters covered. 2) Avoid contact with infants, children, pregnant women and adults who have never had chickenpox. 3) Wash hands with soap and water or use alcohol based hand sanitizer. 4) Notify staff and parents. 5) Consider chickenpox vaccine if no history of chickenpox. 6) Pregnant staff who have not had chickenpox and immunocompromised and HIV infected persons should consult with their health care provider promptly.</td>
<td>Do not exclude unless too ill to take part in activities.</td>
</tr>
</tbody>
</table>

### Common Cold/Croup

<table>
<thead>
<tr>
<th>What are the symptoms?</th>
<th>Incubation period: 2 - 3 days but can be up to 7 days.</th>
<th>How is it spread?</th>
<th>How to prevent spread</th>
<th>Exclusion Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>The common cold and croup are caused by the same viruses. <strong>Cold:</strong> sore throat, runny nose, sneezing, cough, decreased appetite and sometimes a headache and/or low grade fever. <strong>Croup:</strong> cold like symptoms, followed by fever, baryk cough and hoarse voice. It can also progress to difficulty breathing. Symptoms are often worse at night.</td>
<td>1 day before to 10 days after symptoms develop. Most contagious 2 - 3 days after symptoms start.</td>
<td>Person-to-person through contact with nose and throat secretions of someone who is sick or from sharing items with a sick person. Also spread from touching contaminated surfaces or objects then touching your eyes, nose or mouth.</td>
<td>1) Wash hands with soap and water or use alcohol based hand sanitizer. 2) Cover coughs and sneezes and throw away used tissues into garbage followed by hand hygiene.</td>
<td>Do not exclude unless too ill to take part in activities.</td>
</tr>
</tbody>
</table>

*Indicates a reportable disease
# Cryptosporidiosis*

<table>
<thead>
<tr>
<th>What are the symptoms?</th>
<th>Incubation period:</th>
<th>How is it spread?</th>
<th>How to prevent spread</th>
<th>Exclusion Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lots of watery diarrhea with abdominal cramps, fever, loss of appetite, nausea and vomiting in children. Symptoms may come and go and last one to two weeks or as long as a month.</td>
<td>Usually 1 week, but illness may start as soon as 1 day or as long as 12 days after contact with the parasite.</td>
<td>Through contact with the stool of a person or animal who is sick or through eating contaminated food or drinking contaminated water.</td>
<td>1) Wash hands after using the washroom, before preparing and eating food and after handling animals. 2) Drink only treated water and avoid drinking recreational water (pools or lakes).</td>
<td>Exclude food handlers, staff and students until symptom free for at least 24 hours</td>
</tr>
</tbody>
</table>

## Incubation period:
Usually 1 week, but illness may start as soon as 1 day or as long as 12 days after contact with the parasite.

## Infectious period:
From the start of diarrhea up to several weeks after diarrhea stops.

## How is it spread?
Through contact with the stool of a person or animal who is sick or through eating contaminated food or drinking contaminated water.

## How to prevent spread
1) Wash hands after using the washroom, before preparing and eating food and after handling animals.
2) Drink only treated water and avoid drinking recreational water (pools or lakes).

## Exclusion Recommendations
Exclude food handlers, staff and students until symptom free for at least 24 hours.

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# Diarrhea

<table>
<thead>
<tr>
<th>What are the symptoms?</th>
<th>Incubation period:</th>
<th>How is it spread?</th>
<th>How to prevent spread</th>
<th>Exclusion Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase in frequency of stools and/or change to unformed, loose, or watery stool. Fever, loss of appetite, nausea, vomiting, abdominal pain, mucus or blood in stool may also occur. Diarrhea may lead to dehydration that can be dangerous in infants and young children.</td>
<td>Varies depending on the cause of diarrhea.</td>
<td>Through contact with the stool of someone who is sick or through contact with surfaces or food that have become contaminated or through eating contaminated food or drinking contaminated water.</td>
<td>Wash hands after using the washroom and before preparing and eating food.</td>
<td>Exclude food handlers, staff and students until symptom free for at least 24 hours or until a health care provider determines the diarrhea is not infectious.</td>
</tr>
</tbody>
</table>

## Incubation period:
Varies depending on the cause of diarrhea.

## Infectious period:
While diarrhea is present.

## How is it spread?
Through contact with the stool of someone who is sick or through contact with surfaces or food that have become contaminated or through eating contaminated food or drinking contaminated water.

## How to prevent spread
Wash hands after using the washroom and before preparing and eating food.

## Exclusion Recommendations
Exclude food handlers, staff and students until symptom free for at least 24 hours.

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# E. coli*

<table>
<thead>
<tr>
<th>What are the symptoms?</th>
<th>Incubation period:</th>
<th>How is it spread?</th>
<th>How to prevent spread</th>
<th>Exclusion Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diarrhea with abdominal cramps ranging from mild non-bloody to nearly straight blood. Generally no fever is present. Some people may develop a serious complication called haemolytic uremic syndrome (HUS).</td>
<td>3 - 4 days after contact with the bacteria.</td>
<td>Person-to-person especially in families and childcare, from animals to people through direct contact with animal waste or their environment and through eating contaminated food or drinking contaminated water.</td>
<td>1) Wash hands after using the washroom and after contact with animals and before preparing and eating food. 2) Drink only treated water and pasteurized milk, wash fruits and vegetables carefully. 3) Thoroughly cook all ground beef products.</td>
<td>Exclude staff and students until symptom free for at least 24 hours. Exclude symptomatic food handlers, staff and students until two consecutive stool specimens or rectal swabs taken at least 24 hours apart are negative.</td>
</tr>
</tbody>
</table>

## Incubation period:
3 - 4 days after contact with the bacteria.

## Infectious period:
While diarrhea is present. Typically 1 week or less in adults, but up to 3 weeks in some children.

## How is it spread?
Person-to-person especially in families and childcare, from animals to people through direct contact with animal waste or their environment and through eating contaminated food or drinking contaminated water.

## How to prevent spread
1) Wash hands after using the washroom and after contact with animals and before preparing and eating food. 2) Drink only treated water and pasteurized milk, wash fruits and vegetables carefully. 3) Thoroughly cook all ground beef products.

## Exclusion Recommendations
Exclude staff and students until symptom free for at least 24 hours. Exclude symptomatic food handlers, staff and students until two consecutive stool specimens or rectal swabs taken at least 24 hours apart are negative.

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*Indicates a reportable disease
### Fifth Disease (Parvovirus B19)

**What are the symptoms?**
Very red rash on the cheeks followed 1 - 4 days later by a lace-like rash on the torso and arms, then over the rest of the body. The rash may be itchy and may come and go for 1 - 3 weeks. There may be a slight fever and mild cold symptoms prior to the rash. Adults with fifth disease may have fever and joint pain. About 50% of adults have had fifth disease and will not get it again.

**Incubation period:**
4 - 20 days from contact with the virus.

**Infectious period:**
Most contagious several days before onset of rash. Once the rash develops, the person is no longer contagious.

**How is it spread?**
Person-to-person through contact with fluids from the nose or throat of someone who is sick and then touching your eyes, nose or mouth and through contact with surfaces and objects that have become contaminated with the virus. If a pregnant woman is infected, there is a small risk of spread from mother to fetus.

**How to prevent spread**
1) Advise parents to have their child seen by their healthcare provider as soon as possible. 2) Avoid sharing objects that have been in someone else’s mouth like eating utensils and drinking cups. 3) Wash your hands often, especially after wiping a child’s nose, after going to the washroom, before eating etc. 4) Advise exposed pregnant staff and parents to consult with their healthcare provider. A routine policy of exclusion of pregnant staff is not recommended.

**Exclusion Recommendations**
Do not exclude unless too ill to take part in activities.

### Giardia*

**What are the symptoms?**
Watery diarrhea or foul smelling pale stools, abdominal pain and weight loss. Children may not have symptoms.

**Incubation period:**
1 - 3 weeks after contact with the parasite.

**Infectious period:**
For entire period of infection and can be several months.

**How is it spread?**
Person-to-person through contact with the stool of someone who is sick with the parasite especially in childcare or institutions where children are not toilet trained, or through eating or drinking contaminated food or water.

**How to prevent spread**
1) Wash hands after using the washroom, changing diapers and before preparing and eating food. 2) Drink only treated water.

**Exclusion Recommendations**
Exclude food handlers, staff and students until they have been symptom free for at least 24 hours.

### Hand, Foot and Mouth Disease (Coxsackie virus or Enterovirus)

**What are the symptoms?**
Fever, headache, sore throat, blister-like sores in the mouth, loss of appetite, lack of energy, and a skin rash. Red spots, often with small blisters on top, appear on the hands and feet and sometimes elsewhere on the body. Symptoms usually last 7 - 10 days. It is possible to have the infection and not have any symptoms.

**Incubation period:**
3 - 6 days from contact with the virus.

**Infectious period:**
Most contagious during the first week of illness. The virus may remain in the stool weeks from the onset of symptoms.

**How is it spread?**
Person-to-person through contact with the stool, saliva or fluid from blisters of someone who is sick or through contact with surfaces and objects that have the virus on it. The infection spreads easily in settings where children are close together.

**How to prevent spread**
1) Avoid sharing objects that have been in someone else’s mouth like eating utensils and drinking cups. 2) Wash your hands often, especially after using the washroom, changing diapers and before preparing and eating food. 3) Dispose or clean and disinfect any objects that may have come in contact with nose and mouth secretions or stool.

**Exclusion Recommendations**
Do not exclude unless too ill to take part in activities.

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*Indicates a reportable disease
### Hepatitis A*

<table>
<thead>
<tr>
<th>What are the symptoms?</th>
<th>Incubation period: 28 days from contact with the virus but can start as soon as 15 days or as long as 50 days after contact.</th>
<th>How is it spread?</th>
<th>How to prevent spread</th>
<th>Exclusion Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fever, loss of appetite, nausea, and abdominal discomfort followed in a few days by jaundice (yellowing of skin and eyes). Children under 6 years may not have symptoms. Symptoms may be mild and last 1 - 2 weeks or severe and last several months.</td>
<td>Person-to-person through contact with the stool of an infected person or through eating/drinking contaminated food or water.</td>
<td>1) Talk to your health care provider about immunization. 2) Wash hands after using the washroom, changing diapers and before eating. 3) Travelers going to developing countries should be aware of how to select food and drink to avoid infection.</td>
<td>Exclude food handlers, staff and students for one week after the start of jaundice or for 2 weeks after the start of illness if no jaundice present.</td>
<td></td>
</tr>
</tbody>
</table>

### Hepatitis B*

<table>
<thead>
<tr>
<th>What are the symptoms?</th>
<th>Incubation period: 45 - 180 days (average 60 - 90 days) from contact with the virus.</th>
<th>How is it spread?</th>
<th>How to prevent spread</th>
<th>Exclusion Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of appetite, nausea, vomiting, tiredness, abdominal pain and jaundice (yellowing of skin and eyes). Only 10% of infected children will have symptoms.</td>
<td>Person-to-person through contact with the blood or body fluids of an infected person. The virus mainly spreads through unprotected sex, from an infected mother to her baby and through sharing needles. It is rare for the infection to be passed through biting; for transmission to occur, the bite must break the skin. The vast majority of children’s bites cause bruising only. The biting child is more likely to be exposed to blood than the child who has been bitten.</td>
<td>1) Review routine practices for all contact with blood and body fluids. Staff should be adequately trained and regularly updated in the proper care of blood exposure or bite wounds. 2) Immediately report any bites that cause bleeding to the health unit. 3) Hepatitis B vaccine and/or immune globulin may be indicated for close contacts under special circumstances.</td>
<td>Do not exclude.</td>
<td></td>
</tr>
</tbody>
</table>

### Herpes Simplex

<table>
<thead>
<tr>
<th>What are the symptoms?</th>
<th>Incubation period: 2 - 14 days after contact with the virus.</th>
<th>How is it spread?</th>
<th>How to prevent spread</th>
<th>Exclusion Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>High fever, many painful ulcers in and around the lips and mouth, often referred to as “cold sores”. Infection can recur over a lifetime. Many infections occur without any symptoms.</td>
<td>Person-to-person through touching saliva or blisters of someone with cold sores.</td>
<td>1) Wash hands with soap and water after having contact with an infected person. 2) Avoid touching blisters or cold sores of an infected person.</td>
<td>Do not exclude unless too ill to take part in activities.</td>
<td></td>
</tr>
</tbody>
</table>

*Indicates a reportable disease
### Impetigo

**What are the symptoms?**
Fluid filled blisters followed by crusted honey coloured rash around the face, arms or legs. Common skin condition caused by the same bacteria that causes strep throat.

**Incubation period:**
7 - 10 days after contact with the bacteria.

**Infectious period:**
From onset of rash until one day after the start of treatment with antibiotics. Contagious until blisters go away if untreated.

**How is it spread?**
Person-to-person through touching fluid from the blisters. Also spread through contact with contaminated surfaces or objects.

**How to prevent spread**
1) Wash hands with soap and water after having contact with rash.
2) Keep rash covered.
3) Clean and disinfect toys and objects and surfaces that are touched often.
4) Avoid sharing towels and clothing.

**Exclusion Recommendations**
Exclude until 24 hours after the start of appropriate antibiotic treatment and well enough to take part in activities.

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### Influenza*

**What are the symptoms?**
Sudden onset of fever, cough, nasal congestion, body aches, sore throat and chills.

**Incubation period:**
1 - 3 days after contact with the virus.

**Infectious period:**
1 day before symptoms start to 7 days after symptoms develop. May be longer in younger children.

**How is it spread?**
Person-to-person through contact with the fluids from the nose or throat of an infected person or from sharing items that have been in the sick person's mouth. Also spread from touching contaminated surfaces then touching your eyes, nose or mouth.

**How to prevent spread**
1) Get the flu shot every year.
2) Wash hands with soap and water or use alcohol based hand sanitizer.
3) Cover coughs and sneezes and throw away used tissues into garbage followed by hand washing.
4) Stay home if sick.

**Exclusion Recommendations**
Exclude until fever free for 24 hours and well enough to take part in activities.

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### Lice

**What are the symptoms?**
Head lice are small insects that live on the scalp and lay their eggs. They have three stages 1) the egg (nit), 2) the nymph and 3) the adult. Symptoms may include an itchy scalp and small red lesions or scratch marks. Many people have no symptoms. The best way to confirm head lice is by detection of a live louse.

**Incubation period:**
In 7 - 12 days lice eggs will hatch. The egg to egg cycle averages 3 weeks.

**Infectious period:**
As long as live lice and live nits are present.

**How is it spread?**
Person-to-person through hair to hair contact or indirectly by sharing items that come into contact with the head such as hats, hairbrushes, combs or headphones.

**How to prevent spread**
1) Encourage parents to check for head lice.
2) Treat using insecticide or non-insecticide product that has been approved for use in Canada.
3) Discourage direct head to head contact between children and sharing of items that come in contact with the head.
4) Items that may have had prolonged contact with the child’s head at the school can be washed in hot water or placed in a plastic bag for two weeks or in the freezer for 48 hours.

**Exclusion Recommendations**
Refer to school board/day care policy.

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*Indicates a reportable disease

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### Measles*

**What are the symptoms?**
High fever, cough, runny nose, and red eyes for a few days before the rash appears. The rash usually starts on the face and moves to the rest of the body.

**Incubation period:**
10 - 14 days (range seven to 21 days) from contact with an infected person.

**Infectious period:**
4 days before until 4 days after the onset of rash.

**How is it spread?**
Person-to-person through breathing in air contaminated with measles virus or through direct contact with the nose or respiratory secretions of an infected person.

**How to prevent spread**
1) Stay up-to-date with immunizations.
2) Advise parents to call their healthcare provider by phone to arrange for child to be assessed.
3) Contact the health unit immediately. Be prepared to provide immunization records for all children and staff.
4) Distribute information about measles to the parents of all children in co-ordination with the local public health unit.

**Exclusion Recommendations**
Infected children should be excluded until at least 4 days after the onset of rash. Non-immune children and staff must also be excluded from 5 days after the first exposure and up to 21 days after the last exposure, unless they:
1) can be immunized within 72 hours from the first exposure;
2) show lab confirmation of immunity; or,
3) have received immune globulin.

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### Meningitis*

**What are the symptoms?**
Fever, headache, stiff neck, irritability, vomiting, decreased appetite, nausea, confusion, sleepiness, and sensitivity to light. Sometimes a red pinpoint rash develops and seizures may occur as the disease progresses. Not every person will have all those symptoms. 5-10% of the population are asymptomatic carriers of the bacteria.

**Incubation period:**
- **Bacterial Meningitis:** 3 - 4 days (range 2 - 10 days) from contact with an infected person.
- **Viral Meningitis:** Varies according to the virus causing the infection.

**Infectious period:**
- **Bacterial meningitis:** From 7 days before symptoms start until 24 hours after the start of appropriate antibiotics.
- **Viral Meningitis:** Varies depending on the virus causing the infection.

**How is it spread?**
- Some forms of bacterial meningitis are contagious, although it doesn’t spread very easily from person-to-person. The bacteria may be passed person-to-person through contact with the fluid from the mouth and nose of a person who is sick. The bacteria are not spread by casual contact or by simply breathing the air where a person with meningitis has been. If you are around someone with viral meningitis, you may be at risk of becoming infected with the virus that made them sick. But you have only a small chance of developing meningitis as a complication of the illness.

**How to prevent spread**
1) Contact the health unit immediately and be prepared to provide immunization records for all children and staff.
2) Do not share items that have been in another person’s mouth.
3) Wash hands with soap and water or use alcohol based hand sanitizer.
4) Cover coughs and sneezes and throw away used tissues into garbage followed by hand washing.
5) Clean and disinfect all common touch surfaces.

**Exclusion Recommendations**
- **Bacterial meningitis:** Exclude until 24 hours after the start of antibiotic treatment and child is well enough to take part in activities.
- **Viral meningitis:** Do not exclude unless too ill to take part in activities.

*Indicates a reportable disease

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### Molluscum Contagiosum

**What are the symptoms?**
A benign infection of the skin. Initially, the infection appears as tiny bumps on the skin that may be itchy but painless. They grow into small waxy, pinkish white, clear or yellow coloured raised lesions that may have a dip in the middle. In children, the bumps most often appear on the face, body, legs and arms.

**Incubation period:** 7 days - 6 months after contact with the virus.

**Infectious period:** While the bumps on the skin (lesions) are present. Does not spread easily from person-to-person.

**How is it spread?**
Person-to-person through skin to skin contact with the lesions or by contact with contaminated objects such as clothing, towels or toys. The lesions can also be spread to another part of the child’s own body by scratching or picking at the lesion.

**How to prevent spread**
1) Encourage children to avoid scratching the bumps.
2) Practice good hand hygiene.

**Exclusion Recommendations**
Do not exclude unless too ill to take part in activities.

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### Mononucleosis

**What are the symptoms?**
Fever, sore throat and swollen glands, extreme fatigue, enlarged liver and spleen and sometimes jaundice (yellowing of the skin and eyes). Symptoms are present in about 50% of people. People often get better in a few weeks but for some people it may take months.

**Incubation period:** Usually 4 - 6 weeks from contact with a sick person.

**Infectious period:** Unknown. The infected person is likely most infectious when the symptoms are at their peak.

**How is it spread?**
Person-to-person through contact with nose or throat secretions of someone who is sick or from sharing items that have been in the sick person’s mouth. Also spread from touching contaminated surfaces or objects then touching your eyes, nose or mouth.

**How to prevent spread**
1) Wash hands with soap and water or use alcohol based hand sanitizer.
2) Do not share anything that has been in another person’s mouth.
3) Clean and disinfect all common touch surfaces.

**Exclusion Recommendations**
Do not exclude unless too ill to take part in activities.

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### Methicillin-Resistant Staphylococcus Aureus (MRSA)

**What are the symptoms?**
MRSA is a bacterium that is resistant to many antibiotics. It can cause wound infections, pimplies, boils and sometimes blood infections and pneumonia. People can carry MRSA and not show any symptoms.

**Incubation period:** Variable and indefinite.

**Infectious period:** As long as wound is draining.

**How is it spread?**
Person-to-person through skin-to-skin contact or by contact with surfaces or objects that have the germs on them.

**How to prevent spread**
1) Avoid activities such as sports that involve skin-to-skin contact until the infection is healed.
2) Anything that has come in to contact with the drainage from an infected person’s wound should be disposed of or cleaned and disinfected (if applicable).
3) Avoid sharing towels and clothing.
4) Linens should be laundered in hot water and dried with heat.
5) Clean hands often.

**Exclusion Recommendations**
Do not exclude unless the wound is draining and cannot be covered by a dry dressing. Wounds should be kept clean and covered until they have healed.

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*Indicates a reportable disease*
### Mumps*

**What are the symptoms?**
Fever, headache, respiratory symptoms and swollen glands at the jaw line on one or both sides of the face.

**Incubation period:** 16 - 18 days (range 12-25 days) from contact with the virus.

**Infectious period:** 7 days before symptoms start until 5 days after the onset of swelling.

**How is it spread?**
Person-to-person through contact with fluids from the nose or throat of someone who is sick. It is spread through sneezing, coughing, kissing and sharing food, drinks or other items that have been in the infected person’s mouth.

**How to prevent spread**
1) Stay up-to-date with your immunizations.
2) Contact the health unit and be prepared to provide immunization records for all children and staff.
3) Do not share anything that has been in another person’s mouth.
4) Clean hands often.
5) Cover coughs and sneezes and throw away used tissues into garbage followed by hand hygiene.

**Exclusion Recommendations**
Exclude until 5 days after the onset of swelling.

### Norovirus

**What are the symptoms?**
Diarrhea, nausea, vomiting, abdominal cramps, headache, malaise and low grade fever. Sick people usually recover without any specific treatment. Symptoms usually last 24-48 hours.

**Incubation period:**
1 - 2 days after contact with the virus.

**Infectious period:**
During the entire illness. The virus may be shed in the stool for 2 days or longer after the symptoms have stopped.

**How is it spread?**
Person-to-person especially in families and childcare through contact with the stool or vomit of a sick person or through contact with contaminated surfaces or food.

**How to prevent spread**
1) Wash hands after using the washroom and before preparing and eating food.
2) Use appropriate disinfectants approved for use against norovirus.

**Exclusion Recommendations**
Exclude food handlers, staff and students until symptom free for at least 48 hours. Good hand washing is very important. Longer exclusion may be required in outbreak situations.

### Otitis media (Ear Infection)

**What are the symptoms?**
Ear pain, fever and cold symptoms.

**Incubation period:**
Not applicable

**Infectious period:**
Not applicable

**How is it spread?**
Doesn't spread from person-to-person.

**How to prevent spread**
Not Applicable.

**Exclusion Recommendations**
Do not exclude unless too ill to take part in activities.

### Pink eye (Conjunctivitis)

**What are the symptoms?**
Redness, pain, swelling, tearing, itching and discharge from the eye. Discharge from the eye can make the eyelids sticky, especially during sleep. Fever and sensitivity to light may also occur.

**Incubation period:**
1 - 3 days after contact with the virus or bacteria.

**Infectious period:**
Bacterial pinkeye:
For the duration of infection or until 24 hours after the start of treatment.

Viral pinkeye:
Infectious as long as there is discharge from the eye.

**How is it spread?**
Person-to-person through contact with the tears or discharge from someone who is sick and then touching your eyes and through contact with surfaces and objects that have become contaminated with eye discharge. When pinkeye is caused by a cold virus, the droplets from a sneeze or cough can also spread the infection.

**How to prevent spread**
1) Advise parent to have their child seen by their healthcare provider as soon as possible.
2) Wipe eyes from the inside out, in one direction only. Use a clean part of the cloth each time. Do not re-use the cloth.
3) Clean your hands often, especially before and after contact with the child’s eyes or contaminated cloths.
4) Any objects that may have come in contact with eye discharge should be disposed of or cleaned and disinfected (if applicable) immediately after use.

**Exclusion Recommendations**
A person with pinkeye should be excluded until seen by their healthcare provider. Bacterial pinkeye: Exclude until 24 hours after the start of treatment. Viral pinkeye: May return to school with the approval of a healthcare provider.

*Indicates a reportable disease

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### Pinworm

**What are the symptoms?**
Pinworms are small, white, thread-like worms. They reside in the large intestine and crawl out of the anus at night to lay eggs on nearby skin. Severe itching around the anus, especially at night which may result in sleeplessness and irritability.

**Incubation period:**
1 - 2 months or longer from contact with eggs of the worms.

**Infectious period:**
As long as female worms are still present and laying eggs around the anal (bum) area.

**How is it spread?**
Person-to-person by scratching itchy area and touching own or another’s mouth or indirectly through objects that may have been contaminated with pinworm eggs such as toys, clothing or bedding. Eggs can survive for two weeks outside of the body.

**How to prevent spread**
1) Advise parents to have their child seen by their healthcare provider for a diagnosis and treatment. The infection should be treated with medication, usually in single doses 2 weeks apart.
2) Clean your hands with soap and warm water after using the toilet, changing diapers and before preparing and eating food.
3) Infected people should bathe in the morning to help remove a large number of eggs from the skin.
4) Change underclothes and bedding in the morning to prevent spreading the eggs in the environment. Eggs remain infective in the environment for 2 - 3 weeks. Do not shake out these items and place carefully in the washer and dryer to kill any eggs that may be there.
5) Cut fingernails frequently and try not to bite your nails.
6) Teach children the importance of washing hands to prevent infection. In institutions, day care centres, and schools, control of pinworm can be difficult, but mass use of medication during an outbreak can be successful.

**Exclusion Recommendations**
Do not exclude.

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### Ringworm

**What are the symptoms?**
Ring shaped raised rash which blister and ooze. Rash may occur on the scalp, body, groin or feet.

**Incubation period:**
4 - 14 days after contact with the fungus.

**Infectious period:**
While rash is present.

**How is it spread?**
Person-to-person through touching the rash of an infected person or animal. Also through contact with contaminated floors, shower stalls and benches.

**How to prevent spread**
While rash is present:
1) Avoid sharing combs, hairbrushes, towels.
2) Wear flip-flops in the locker room, shower or at the pool.

**Exclusion Recommendations**
Exclude until appropriate treatment has started.

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*Indicates a reportable disease
### Rotavirus

**What are the symptoms?**  
Fever, vomiting followed by watery diarrhea. Symptoms usually last four to six days.

**Incubation period:** 1 - 3 days after contact with the virus.  
**Infectious period:** 1 - 3 days before symptoms start to about 8 days after contact with the virus.

**How is it spread?**  
Person-to-person through contact with the stool of someone who is sick or through contact with surfaces that have become contaminated. May also spread through contact with respiratory secretions.

**How to prevent spread**  
1) Wash hands after using the washroom and before eating.  
2) Use appropriate disinfectants approved for use against rotavirus.

**Exclusion Recommendations**  
Exclude symptomatic staff and students until symptom free for at least 48 hours.

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### Rubella (German Measles)*

**What are the symptoms?**  
Low fever, swollen glands in the neck and behind the ears, mild runny nose, red eyes and a rash with small red spots. The rash often starts on the face and spreads to the body within 24 hours, lasting about 3 days. Infection is more serious in adults. Some people may have aches and pains and swelling of the joints. Rubella infection in the first 3 months of pregnancy can cause severe birth defects, miscarriage or stillbirth.

**Incubation period:** Usually 14 - 21 days from contact with the virus.  
**Infectious period:** 7 days before rash appears to at least 4 days after the rash appears.

**How is it spread?**  
Person-to-person through contact with fluids from the nose and throat of someone who is sick. It is spread through sneezing, coughing, kissing and sharing food, drinks or other items that have been in the infected person’s mouth.

**How to prevent spread**  
1) Stay up-to-date with immunizations.  
2) Contact the health unit immediately and be prepared to provide immunization records for all children and staff.  
3) Do not share anything that has been in another person’s mouth.  
4) Wash hands with soap and water or use alcohol based hand sanitizer.  
5) Cover coughs and sneezes and throw away used tissues into garbage followed by hand washing.

**Exclusion Recommendations**  
Exclude for 7 days from the onset of rash.

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### Salmonella*

**What are the symptoms?**  
Diarrhea, headache, stomach cramps, loss of appetite, and sometimes nausea and vomiting. Fever is common and loss of appetite and diarrhea can last for days. Symptoms may last for one or more weeks.

**Incubation period:** Symptoms usually start 6 - 72 hours after contact with the bacteria.  
**Infectious period:** While diarrhea is present. Can be several days to several weeks.

**How is it spread?**  
Through contact with the stool of person who is sick or animal and through eating contaminated food or drinking contaminated water.

**How to prevent spread**  
1) Wash hands after using the washroom, before preparing and eating food and after handling animals.  
2) Drink only pasteurized milk, wash fruit and vegetables carefully and thoroughly cook food products.

**Exclusion Recommendations**  
Exclude symptomatic food handlers, staff and students until symptom free for at least 24 hours. Extended exclusion may be required for some strains of salmonella.

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*Indicates a reportable disease
### Scabies

**What are the symptoms?**
Itchy rash of small, red, raised spots which usually appear on the fingers, elbows, armpits and abdomen. The itching tends to be worse at night. Rash is caused by insects called mites that burrow into the skin.

**Incubation period:** 2 - 6 weeks after contact with scabies for those with no previous exposure to scabies and 1 - 4 days in those that have had scabies in the past.

**Infectious period:** Until mites and eggs are destroyed by treatment. Usually after 1 or occasionally 2 courses of treatment a week apart.

**How is it spread?** Person-to-person through prolonged close contact with the skin. It is also spread by sharing clothing, towels or bed sheets. Mites can survive off of human skin for two-three days.

**How to prevent spread**
1) Avoid close skin-to-skin contact and sharing personal items.
2) Close contacts and family members may also need treatment.

**Exclusion Recommendations**
Exclude until 24 hours after appropriate treatment is first applied.

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### Shigella*

**What are the symptoms?**
Diarrhea, fever, bloody and/or mucousy diarrhea and stomach cramps.

**Incubation period:** Symptoms usually start 1 - 3 days after contact with the bacteria.

**Infectious period:** While diarrhea is present and up to 4 weeks after symptoms start.

**How is it spread?** Through contact with the stool of person or animal who is sick or through eating/drinking contaminated food or water.

**How to prevent spread**
Washing hands is very important after using the washroom and before preparing and eating food.

**Exclusion Recommendations**
Exclude until symptom free for at least 24 hours. Extended exclusion may be required.

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### Shingles

**What are the symptoms?**
Itchy, painful rash which develop into fluid filled blisters and crusts over. Rash is usually on one side of the body.

**Incubation period:** Not applicable

**Infectious period:** Contagious to people who have not had chickenpox. Up to 1 week after rash develops. No longer infectious once all the blisters have crusted over.

**How is it spread?** Shingles is the reactivation of the chickenpox virus. If a person who has never had chickenpox touches the rash, they may develop chickenpox not shingles. The virus is not known to be transmitted through the air.

**How to prevent spread**
1) Keep blisters covered and avoid contact with infants, children, pregnant women and adults who have never had chickenpox.
2) Wash hands with soap and water or use alcohol based hand sanitizer.
3) Consider chickenpox vaccine if no history of chickenpox. Pregnant staff who haven’t had chickenpox and have had contact with someone with shingles should speak to their health care provider promptly.

**Exclusion Recommendations**
Do not exclude unless too ill to take part in activities, regardless of the state of the rash.

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*Indicates a reportable disease

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### Sixth Disease (Roseola)

**What are the symptoms?**
Respiratory symptoms, high fever and irritability for several days followed by a rash with small red spots that appear on the neck, face, arms and legs and last from a few hours to 2 days. Most common between 6 months and 2 years of age.

**Incubation period:** 9 - 10 days from contact with the virus.

**Infectious period:** While fever is present. Once the rash develops, the child is no longer contagious.

**How is it spread?**
Person-to-person through contact with fluids from the nose or throat of an infected person and then touching their mouth and through breathing in air contaminated from the virus when a sick person coughs, laughs or sneezes. The virus can be found in the saliva of many people even when no symptoms are present. It is contagious even if there is no rash.

**How to prevent spread**
1) Wash hands with soap and water or use alcohol based hand sanitizer.
2) Cover coughs and sneezes and throw away used tissues into garbage followed by hand washing.

**Exclusion Recommendations**
Do not exclude unless too ill to take part in activities.

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### Strep Throat/Scarlet Fever

**What are the symptoms?**
Strep Throat and Scarlet Fever are caused by the same bacteria.

**Strep Throat:** fever and sore throat.

**Scarlet Fever:** sand paper like rash on neck, chest, in folds of arm pit, elbow, groin and inner surface of thighs.

**Incubation period:**
1 - 3 days after contact with the bacteria.

**Infectious period:**
Until 24 hours after starting treatment. If untreated, contagious for 2 - 3 weeks from onset of symptoms.

**How is it spread?**
Person-to-person through contact with the nose or throat secretions of an infected person.

**How to prevent spread**
1) Wash hands with soap and water or use alcohol based hand sanitizer.
2) Don’t share anything that has been in the infected person’s mouth.

**Exclusion Recommendations**
Exclude until 24 hours after the start of antibiotic treatment and are feeling well enough to take part in activities.

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### Whooping Cough* (Pertussis)

**What are the symptoms?**
Runny nose, watery eyes, mild fever, coughing spells. High pitched gasp or “whoop” sound heard. Difficulty breathing and vomiting are common after coughing spell.

**Incubation period:**
7 - 10 days but can range from 5 - 21 days after contact with the bacteria.

**Infectious period:**
From the start of symptoms until 3 weeks after cough starts or 5 days after starting appropriate treatment.

**How is it spread?**
Person-to-person through coughing and sneezing and contact with fluids from the nose and throat of someone who is sick.

**How to prevent spread**
1) Stay up-to-date with immunizations.
2) Wash hands with soap and water or use alcohol based hand sanitizer.
3) Cover coughs and sneezes and throw used tissue into the garbage.

**Exclusion Recommendations**
Exclude until 5 days after the start of treatment or three weeks from onset of “whooping” cough if no treatment is given.

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*Indicates a reportable disease

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How to Report a Reportable Disease

Call your local health unit as soon as you notice a problem. Your quick response will help to prevent more children and staff from getting sick. Don’t worry about making a mistake…we would rather hear from you than not.

For reportable diseases, please be prepared to give the following information:

- Name of the school or child care program
- Name of person reporting
- Child’s first and last name
- Child’s date of birth
- Child’s phone number and address
- Name of the disease
- Symptoms
- Date of symptom onset

Reporting Outbreaks

By law, you must report outbreaks to your local public health unit (HPPA, R.S.O 1990, C.H 7). Call as soon as you suspect an outbreak or when you see an increase in absent/ill children.

Contact Us

Elgin St. Thomas Public Health
Communicable Disease Team
519-631-9900
www.elginhealth.on.ca

Middlesex-London Health Unit
Infectious Disease Control Team
519-663-5317 ext. 2330
www.healthunit.com

Oxford County Public Health
Infectious Disease Control Team
519-539-9800 ext. 3500
www.oxfordcounty.ca/health
If a principal of a school or an operator of an institution, such as a day care, has knowledge of, or suspects that a child in their school or day care has a reportable disease, they must monitor and report to the local public health unit.

- Acquired Immunodeficiency Syndrome (AIDS)
- Acute Flaccid Paralysis
- Amebiasis
- Anthrax
- Botulism
- Brucellosis
- Campylobacter enteritis
- Chancroid
- Chickenpox (Varicella)
- Chlamydia trachomatis infections
- Cholera
- *Clostridium difficile* associated disease (CDAD) outbreaks in public hospitals
- Creutzfeldt-Jakob Disease, all types
- Cryptosporidiosis
- Cyclosporiasis
- Diphtheria
- Encephalitis, including,
  - i. Primary, viral
  - ii. Post-infectious
  - iii. Vaccine-related
  - iv. Subacute sclerosing panencephalitis
  - v. Unspecified
- Food poisoning, all causes
- Gastroenteritis, institutional outbreaks
- Giardiasis, except asymptomatic cases
- Gonorrhoea
- Group A Streptococcal disease, invasive
- Group B Streptococcal disease, neonatal
- Haemophilus influenzae b disease, invasive
- Hantavirus pulmonary syndrome
- Hemorrhagic fevers, including,
  - i. Ebola virus disease
  - ii. Marburg virus disease
  - iii. Other viral causes
- Hepatitis, viral,
  - i. Hepatitis A
  - ii. Hepatitis B
  - iii. Hepatitis C
- Influenza
- Lassa Fever
- Legionellosis
- Leprosy
- Listeriosis
- Lyme Disease
- Malaria
- Measles
- Meningitis, acute,
  - i. bacterial
  - ii. viral
  - iii. other
- Meningococcal disease, invasive
- Mumps
- Ophthalmia neonatorum
- Paralytic Shellfish Poisoning
- Paratyphoid Fever
- Pertussis (Whooping Cough)
- Plague
- Pneumococcal disease, invasive
- Poliomyelitis, acute
- Psittacosis/Ornithosis
- Q Fever
- Rabies
- Respiratory infection outbreaks in institutions
- Rubella
- Rubella, congenital syndrome
- Salmonellosis
- Severe Acute Respiratory Syndrome (SARS)
- Shigellosis
- Smallpox
- Syphilis
- Tetanus
- Trichinosis
- Tuberculosis
- Tularemia
- Typhoid Fever
- Verotoxin-producing E. coli infection indicator conditions, including Haemolytic Uraemic Syndrome (HUS)
- West Nile Virus Illness
- Yellow Fever
- Yersiniosis
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