

Respiratory viruses 2017-2018

Regional Public Health of Nunavik

December 2017



The respiratory viruses

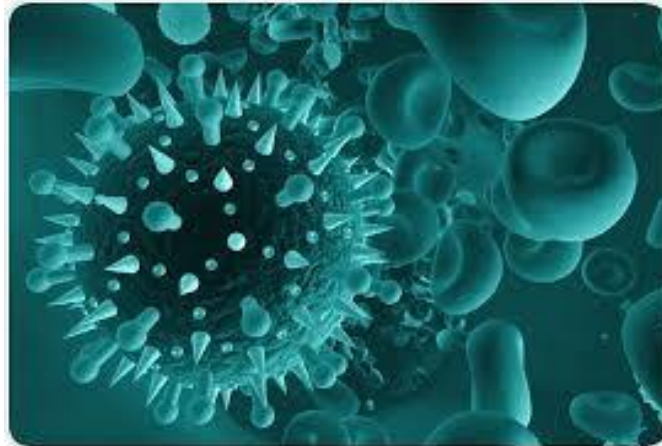
PLAN

- What are the type of viruses?
- How the virus spreads?
- What are the symptoms?
- What is the period of contagiousness?
- What are the complications?
- What to do if I am or my child is sick?
- When should I consult?
- What to do to protect myself and my family?
- Respiratory syncytial virus



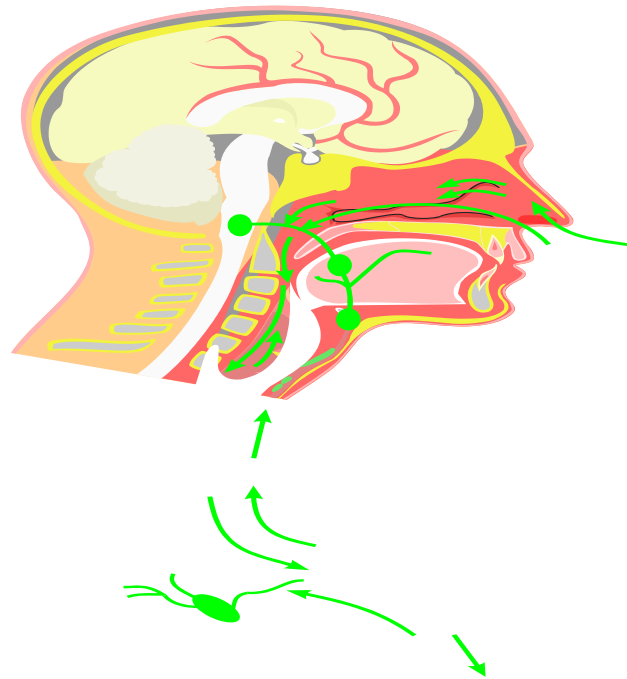
Respiratory viruses

- Many respiratory virus can infect a child or an adult
- The most common circulating viruses are:
 - Cold virus
 - Influenza virus
 - Respiratory syncytial virus (RSV)



Respiratory viruses

- According to the virus it infect
 - The nose, throat, sinuses
 - The lung or the breathing tubes



Respiratory viruses

- The viruses are circulating all year-round
- More frequently in the fall and winter when people are indoors and in close contact with each other
- A person may get infected during more than once during one year with different viruses

Respiratory viruses

- Not rare to see a young child having a cold after another before the age of two in the same winter (8 to 10 colds) because:
 - They are more than 100 different types of cold virus and or more than 4 types of flu virus
 - They haven't built up immunity (defenses)
- Once you have had a cold virus, you become protected (immune) to that specific germ. That's why children get fewer colds as they get older.
- The influenza viruses change often from year to year – reason why people don't stay protected for very long
- 100% of children are gone be infected by RSV before the age of two and may get infected more than once

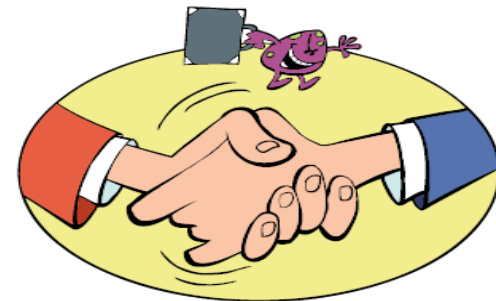
How the virus spreads?

- Viruses are found in the nose and the throat
- The virus is transmitted in **tiny drops** from the nose and mouth
- When an infected person sneezes or coughs, the **tiny drops** are sprayed into the air



How the virus spreads?

- Germs usually spread in, on of three ways
 - Direct contact with an infected person (kissing, touching or holding hands)
 - Indirect contact by touching a contaminated surface with the hands and then touching the nose, mouth or eyes
 - Through the air when a person cough or sneeze ; **tiny drops** from the cough or sneeze may reach another person's nose or mouth
- Germs such as flu, colds and diarrhea germs can stay on surfaces for many hours
 - 24 to 48 hours on a hard surface
 - 8 to 12 hours on cloths
 - 7 hours (for RSV)



How the virus spreads?

- The flu: don't pass it on

<https://www.canada.ca/en/public-health/services/video/the-flu-don-t-pass-it-on.html>

Source: Santé Canada

What are the symptoms ?

Symptoms

The common cold, which is a much more benign infection of the airways, is often mistaken for flu.

SYMPTOM SEVERITY

































Absent



Rare - Moderate



Present - Intense

SYMPTOMS	FLU	COLD
 Fever	 Usual. Temperature between 38°C and 40°C (between 100,4°F and 104°F). Sudden onset. Lasts 2 to 5 days	
 Cough	 Usual Lasts about 1 week	
 Headaches	 Usual, sometimes severe	
 Aches and pains	 Usual, sometimes severe	
 Fatigue	 Usual, intense Lasts a few days, occasionally longer	
 Nausea and vomiting	 Usual, especially in children	
 Nasal congestion and runny nose	 Rare	
 Sneezing	 Rare	
 Sore throat	 Rare	
 Chest pains	 Usual, sometimes severe	

Source: MSSS
(2009) Influenza A
(H1N1) Self-care
guide

What are the symptoms ?

- Symptoms appear 1 to 4 days after infection (can take up to 7 days)
- Last between 1 to 2 weeks



What is the period of contagiousness ?

- A infected person can be contagious :
 - Up to 24 hours before symptoms develop
 - Up to 7 days after symptoms becoming sick

What are the complications?

- Most healthy people recover without any serious problem
- For young children and people with chronic conditions (ex. chronic lung disease, heart disease, diabetes, immunosuppressed etc.) respiratory viruses can cause:
 - Lung infection
 - Respiratory failure
 - Ear infection (otitis)
 - Sinuses infection (sinusitis)
 - Death (flu or RSV)
- Influenza is more severe in children under 2 years of age and with people with chronic conditions
- RSV is more severe in young children less than 6 months of age

What to do if I am or my child is sick

- Take a rest
- Drink plenty of liquids (hot or cold);
- If fever or to reduce pain:
 - dress with lightweight clothing and keep the room temperature around 20°C;
 - use acetaminophen (Tylenol) giving the recommended dose;
- Gargling with warm water will relieve a sore throat
- Use saline nose drops or spray to clean the nose;
- Avoid alcohol, coffee and tea. They will make you urinate instead of hydrating you!

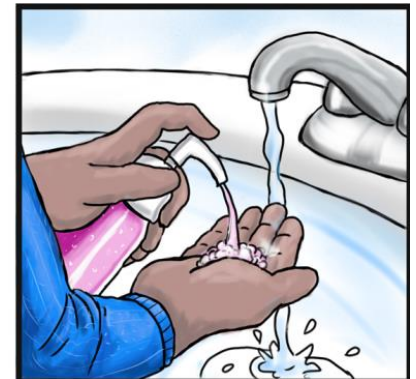
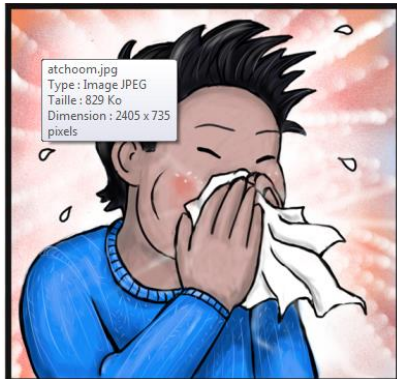


When should I consult ?

- I consult at the CLSC if :
 - Pain that increases or persists when I breathe
 - Fever for a child less than 12 months old
 - Fever for more than 5 days for an adult
 - Symptoms that have gotten worse or have not improved after seven days
- **I consult immediately if**
 - Fever in a baby under 3 months
 - Difficulty breathing
 - Intense headache that persists or worsens
 - Feeling more sleepy, convulsions
 - No urine for 12 hours
 - Fever in a child who seems very sick, refusing to drink, vomiting, lacks energy and refuses to play

What can I do to protect myself and my family?

- Washing your hands with soap and water **is the most important way to reduce the spread of germs**
- Wash your hands after:
 - Coughing, sneezing or wiping your nose or your child nose;
 - After being in contact with someone who has a respiratory infection
- When water and soap are not available, use an alcohol-based sanitizer or pre-moistened hand wipes
- Cover your nose and mouth with tissues when sneezing or coughing, or to cough into the upper sleeve or elbow



What can I do to protect myself and my family?

- Keep babies under 6 months old away from people with respiratory infection and if possible try to avoid close contact with sick person
- If you or your child is sick, stay home for at least 24 hours after the fever is gone except to get medical care or for other necessities
- Breastfeed your babies. Breast milk contains antibodies and other immune factors (defense) that help prevent and fight off illness



What can I do to protect myself and my family?

- Don't smoke. Make sure that children are not around cigarette or cannabis smoke.
- Keep common surfaces and items that are frequently touched by hands clean and disinfected
- Avoid sharing cups, utensils or towels until they have been washed.
- Avoid touching your eyes, nose and mouth.



Respiratory syncytial virus (RSV)

- Since last year a preventive treatment is offer in Nunavik to all healthy babies less than 6 months old to prevent RSV infection
- Why?
 - For young children, RSV infection can lead to serious complications such as severe lungs infection.
 - This virus could be responsible for more than 40 % of hospitalizations
 - 16 % of children hospitalized for RSV infection require a stay in intensive care

What can I do to protect myself and my family?

- Get vaccinated against the flu each year and make sure your child receives all recommended vaccines
- Vaccines won't prevent colds. They help prevent some of the complications such as bacterial infections or the ears or lungs.
- Flu vaccine protects against the flu but not against other respiratory viruses
- Synagis, the medication given for prevention of RSV only protect against this disease



Respiratory syncytial virus (RSV)

Respiratory syncytial virus (RSV)

- Infects mostly children under two years of age, particularly very young babies
- RSV can spread through tiny drops containing the virus
- Seasonal illness: begins in December-January and lasts 4-5 months (varies from year to year)
- Symptoms: Cough, runny nose and/or nasal congestion, fever, irritability, decrease of appetite and energy, difficulty breathing, wheezing

Respiratory syncytial virus (RSV)

- Palivizumab (Synagis) is the medication given by injection to prevent RSV infection
- Is it a new treatment?
 - No. The medication, Synagis, is used for babies and at high risk (eg. premature, or presenting heart or lung problem) since more than 10 years.
- Is it a vaccine?
 - No. The medication given by injection contain antibodies (defense). A vaccine on it's side, helps the body to develop is own antibodies (defense).
 - The antibodies included in Synagis decreased with the time and give a protection for approximately 30 days. That's why the baby have to receive it each month during the RSV season (january to may)
 - Protects against RSV complications and reduces the risk for baby getting very sick even if he or she is in contact with or develops RSV

Palivizumab (Synagis)

- What are the potential side effects of Synagis
 - Skin rash
 - Moderate fever
 - Redness, irritation at the injection site
 - Allergic reaction (rare)
 - It is recommended to remain on at the clinic for at least 15 minutes after the injection, since allergic reactions to the medication normally occur within minutes of administration

Références

- MSSS. Protocole d'immunisation du Québec (2013)
- Influenza (Flu) Immunization: Myths and Facts. HealthLinkBC File Number: 12c [Influenza \(Flu\) Series](#)
- MSSS (2009) Influenza A (H1N1) Self-care guide
- Canadian paediatric Society. Caring for kids
- Flu protection: www.gov.nu.ca/health/information/influenza
- The flu: don't pass it on. <https://www.canada.ca/en/public-health/services/video/the-flu-don-t-pass-it-on.html>