COLD, FLU, ORRSV

What is the difference between the common cold, the flu, and RSV?

- The common cold is caused by the rhinovirus and comes with milder symptoms.
- The flu is caused by the influenza virus and leads to high fevers, coughing, body aches and other respiratory symptoms.
- RSV is a result of the respiratory syncytial virus, which can affect the respiratory system, including the nose, throat and lungs. It usually presents like a cold but in some it can be dangerous.

Transmission – viruses spread by:

1. Direct contact

- spreads via hands
- can stay alive on skin for 2 hours

2. Indirect contact

- survive on surfaces for several hours
- spreads by touching the surface, then the mouth, nose, or eyes

3. Inhaling viral particles

- droplets containing viral particles are breathed, coughed, or sneezed into the air
- transmitted to others when a person is standing close, and droplets touch the person's eye, nose, or mouth.



THE COMMON COLD



Refers to a minor upper respiratory infection that is self-limited.

Colds are caused by many viruses, which cause similar symptoms.

The average person has two or three colds a year.

Cold Transmission:

1. Persons with colds shed viruses the most on the second day of illness, however, low levels of viral shedding may persist for up to two weeks. 2. Saliva generally does not spread the common cold virus as most people with a cold have no detectable virus in their saliva.



3. Recirculated air versus fresh air ventilation shows no difference in the number of colds contracted.

Risk Factors

There are some factors that can increase the risk and severity of illness with a cold. There is no scientific basis for the belief that a cold climate increases susceptibility to getting a respiratory illness.



Increased Risk with:

1. Psychological stress

- 2. Lack of sleep or sleep disturbances
- 3. Exposure to children in daycare settings





Increased Severity with:

- 1. Underlying chronic diseases
- 2. Immunodeficiency disorders
- 3. Malnutrition
- 4. Cigarette smoking

Symptoms

- ✓ Rhinitis and runny nose the most common symptoms,
- ✓ Sore throat, sneezing, and cough.
- Purulent (colored, thick, containing pus) drainage can be seen with both a cold and sinus infection.





Incubation Period

 From the time of contact until onset of symptoms is generally 24 to 72 hours but can be as early as 10 to 12 hours after exposure.

Duration

• Symptoms usually last 3 to 10 days but can last up to two weeks in some people.

Complications

- Acute sinus infections are a rare complication in adults with colds.
- Viral sinusitis occurs more frequently than secondary bacterial sinusitis.
- Viral sinusitis will resolve within 3 weeks without antibiotic treatment.



- Acute asthma attacks occur with colds thought to be due to changes in airway reactivity which can last up to four weeks following an infection.
- Because colds cause problems with drainage and pressure regulation of the middle ear, an acute ear infection (otitis media) can occur.



Treatment of Colds:

Therapy is aimed at treating symptoms for those with moderate to severe illness.

- 1. Analgesics: acetaminophen & NSAIDS are effective for treating headaches, muscles aches, etc.
- 2. Cromolyn sodium may relieve runny nose, cough, and sneezing.
- 3. Intranasal ipratropium bromide may improve symptoms of runny nose and sneezing though has no effect on congestion.

Therapies with Minimal or Uncertain Benefit:

- 1. Dextromethorphan-minimally effective in controlling cough.
- 2. Oral decongestants may provide a small decrease in symptoms.
- 3. Decongestant nasal sprays may show some benefit but must be limited to 2-3 days of use due to "rebound syndrome". Several side effects including nosebleeds, agitation, and insomnia associated with use.
- 4. Expectorants such as Mucinex may provide some relief.







Ineffective Therapies

- 1. Antibiotic therapy is not indicated nor appropriate as antibiotics do not treat viruses.
- 2. Antihistamine use alone is of minimal benefit and frequently results in troublesome side effects such as sedation and dryness.
- 3. Antiviral therapies show that they may help in the case of rhinovirus but not other causes of the common cold and there are side effects associated with use.

Home Remedies

 Vitamin C is often touted as a natural remedy for the common cold however research shows that it has little, if any, effect on symptoms.



- Although codeine is effective in suppressing chronic cough, trials in patients with acute cough due to the common cold have found no consistent benefit of codeine compared with placebo
- The use of heated, humidified air has not been shown to be very effective in management of the common cold.

More on Home Remedies:

- Honey studies have shown that this can reduce cough frequency and severity.
- Zinc-may reduce some symptoms if taken at a dose higher than 75 mg daily but has side effects of nausea and having a bad taste in the mouth.
- Intra nasal zinc (Zicam) associated with a high risk of permanent loss of sense of smell.

Common Cold Prevention:

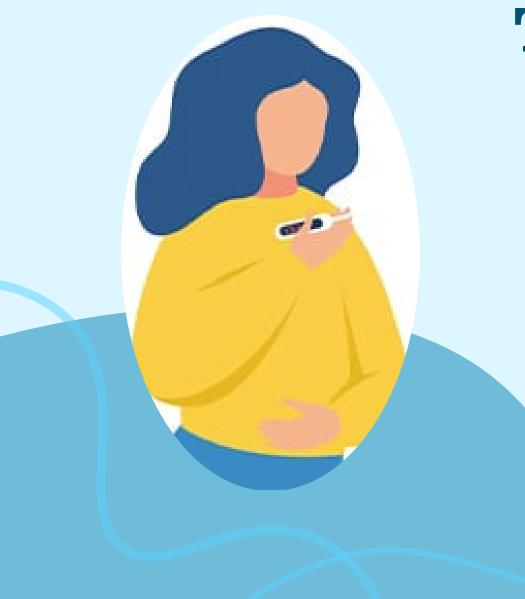
 Practice good hand hygiene.
 Avoid touching eyes, nose, and mouth.

Stay home if sick.



• Avoid contact with sick people. • Wear face masks. o Sanitize environment once you are better.

INFLUENZA



The Flu

- The flu is an infection that can cause fever, cough, body aches, and other symptoms.
- It is often difficult to differentiate flu symptoms from symptoms caused by the common cold.
- There are two forms of seasonal flu: Type A and Type B.
- All forms of flu are caused by viruses therefore transmission is the same as for the common cold.

COLD SYMPTOMS





sneezing

loss of appelite





cough

runny nose



lacrimation s



COLD or FLU?





heat

weakness





headache

drowsiness





increased sweating mus

muscle pain

COLD OR FLU?

Flu Severity

The flu affects people in different ways.

- Most people recover in 1 to 2 weeks.
- Some require hospitalization
- Some may die from it.
- People at higher risk of getting very sick from the flu include:
 - People 65 or older
 - Young children (under 5 years and especially under 2)
 - Pregnant people
 - People with certain medical problems



Treating the Flu:



Treating symptoms can help someone feel better but will not make it go away faster.

- Rest until the flu is fully resolved, especially if the illness has been severe.
- Drink enough fluids to prevent dehydration.
- Take acetaminophen to relieve fever, headache, and muscle aches.

Antiviral medications can reduce the severity of symptoms and can reduce the duration of symptoms by about one day.

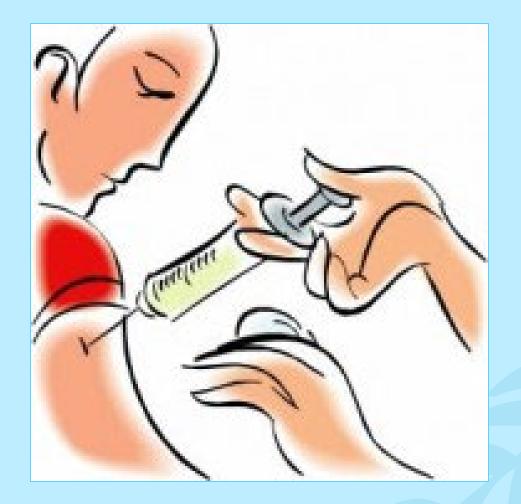
• Those with severe illness and/or have risk factors for developing complications of influenza, are usually treated with an antiviral agent.

Flu Prevention

The most effective way to prevent influenza (flu) is:

- 1. by getting a yearly flu shot.
- 2. practicing good hand hygiene.

Antiviral medicines can also help prevent infection after exposure.





RSV = respiratory syncytial virus

RSV causes infections of the lungs and respiratory tract. It is common; most people have been infected by age 2. It causes seasonal outbreaks from October through May in North America. Healthy adults are infected with RSV repeatedly throughout their lives.

RSV Risk Factors

RSV generally causes a self-limited upper respiratory infection; however, some people have an increased risk for developing a severe lower respiratory tract infection (pneumonia).

Increased risk is seen in those with:

Down's Syndrome
Immunocompromise
Persistent asthma
Cardiopulmonary disease



 Increased risk is also seen in older adults who are institutionalized or have a chronic functional disability.

RSV Symptoms

Upper respiratory tract:

✓ Cough

- ✓ Rhinitis and runny nose
- ✓ Conjunctivitis

Lower respiratory tract:

- ✓ Bronchitis
- ✓ Pneumonia
- ✓ Wheezing
- ✓ Shortness of breath
- ✓ Asthma exacerbation
- ✓ COPD exacerbation

RSV vs. Flu

SYMPTOMS

- Runny nose
- Coughing
- Fever
- Appetite decrease
- Dehydration

SYMPTOMS.....

- Fever or chills
- Cough
- Sore throat
- Runny or stuffy nose
- Muscle or body aches
- Headaches
- Fatigue (tiredness)
- Vomiting and diarrhea



RSV VS FLU

FLU



Incubation Period

• Symptoms usually develop within 4 to 6 days after contact.

Duration

• People usually recover within one to two weeks.

Treating RSV:

- Mild symptoms will resolve in a week or two.
- OTC fever reducers and pain relievers will help manage symptoms.
- Rest is important to help the body fight the illness. rink enough fluids to prevent dehydration.
- Mechanical ventilation may be required in patients with severe respiratory symptoms and/or apnea due to RSV.



STRENGT



RSV Prevention



- The usual measures for preventing transmission of viruses apply such as hand hygiene, covering a cough, etc.
- A respiratory syncytial virus vaccine, or RSV vaccine, is a vaccine that protects against respiratory syncytial virus.
- The CDC recommends that adults aged 65 and older get an RSV vaccine.

Cold, Flu, or RSV

Thank you Jean Justad, MD, Medical Director, DDP

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