

Environmental Health Testing | Forensic Chemistry | Medical Microbiology

Diseases Fact Sheet - Common Viral Respiratory Diseases

South Dakota Department of Health

Office of Disease Prevention Services - 605-773-3737 -(1-800-592-1861 in South Dakota only)

This material is provided for informational purposes only and is not a substitute for medical care. We are not able to answer personal medical questions. Please see your health care provider concerning appropriate care, treatment or other medical advice.

What is it?

Common viral respiratory diseases are caused by a variety of viruses, such as the flu and RSV, with similar traits and affect the upper respiratory tract.

What are common viral respiratory diseases?

Common viral respiratory diseases are illnesses caused by a variety of viruses that have similar traits and affect the upper respiratory tract. The viruses involved may be the <u>influenza viruses</u>, <u>respiratory syncytial virus (RSV)</u>, <u>parainfluenza viruses</u> or <u>respiratory adenoviruses</u>.

How are the respiratory viruses spread?

The viruses are spread directly by droplets coughed or sneezed into the air which are then inhaled, or indirectly by contaminated hands, handkerchiefs, toys, etc. which come in contact with the nose or eyes.

What are the symptoms?

Common viral respiratory diseases can be characterized by fever and one or more cold symptoms such as chills, headache, body ache, weakness, and loss of appetite. Infants may experience vomiting and diarrhea. Infection with viruses in the respiratory tract can cause complications such as tonsillitis, laryngitis, bronchitis and pneumonia.

Some of the viruses can cause more severe illness or more commonly affect certain age groups. RSV is the most common cause of respiratory tract illness in children under 2 years of age; it is the major cause of bronchiolitis, pneumonia, croup, bronchitis and otitis media.

The influenza viruses are highly contagious and can cause large epidemics. Influenza can cause severe complications in the elderly and chronically ill, and is associated with excess mortality among those persons.

Parainfluenza viruses are the major cause of croup in young children and can cause bronchitis, pneumonia and bronchiolitis.



Environmental Health Testing | Forensic Chemistry | Medical Microbiology

Adenoviruses invade primarily the respiratory and gastrointestinal tracts, and the conjunctiva of the eyes. The adenoviruses can cause a variety of illnesses from pharyngitis to pneumonia, conjunctivitis and diarrhea.

How soon after exposure do symptoms appear?

Symptoms can appear from 1-10 days after exposure to the viruses.

What is the treatment for common respiratory viral disease?

Infection without complications will usually subside in 2-5 days. Bacterial complications such as otitis media, pneumonia, and sinusitis may require antibiotics. Children with RSV may be given ribavirin. Amantadine is effective in the treatment of influenza A, but not B. Both amantadine and ribavirin are antiviral agents and must be administered early in the infection to be effective.

How can infection with common viral respiratory diseases be prevented?

Good personal hygiene, such as covering the mouth when coughing and sneezing, sanitary disposal of discharges from mouth and nose, and frequent hand-washing will help prevent transmission.

Vaccines for influenza are developed each year in accordance to the three predominant subtypes anticipated. It is difficult to construct a vaccine for a constantly changing virus. Currently available vaccines do, however, significantly reduce the risk of influenza infection and are specifically recommended each year for persons who are at greatest risk for life threatening complications (the elderly and all persons with chronic underlying health conditions of the heart, lungs or kidneys).

Adenovirus vaccines are effective against some types of adenoviruses. Because of the major disruption and economic impact of epidemics in military recruits, vaccines are targeted at this group but are not recommended for the general population.