What is adenovirus infection?

Adenoviruses are common viruses that can cause illness in humans. Most adenovirus infections cause mild respiratory illness, such as the common cold. Some infections can cause other illnesses, such as bronchitis (inflammation of the windpipe and main airways), pneumonia (inflammation of the lungs), skin rash, conjunctivitis (pink eye), bladder infection, or bowel infection.

Who gets adenovirus infection?

Anyone can be infected by adenoviruses. Most infections are mild. Serious illness can occur in infants, those with weakened immune systems, or those with existing lung or heart disease. Outbreaks can occur where people are in close quarters.

How is adenovirus infection spread?

Adenoviruses spread very easily from one person to another and can survive for a long time on objects. The virus can spread through contact with droplets from the nose and throat of an infected person (e.g., during coughing or sneezing) or by touching hands, an object, or surface with the virus on it and then touching the mouth, nose, or eyes before hand washing. Some adenoviruses can spread through an infected person’s stool (e.g., during diaper changing). Adenoviruses can also spread through the water, such as swimming pools, but this is less common.

What are the symptoms of adenovirus infection?

The symptoms of adenovirus infection depend on the site of infection. Adenoviruses most often infect the airways leading to cold-like symptoms, including sore throat, sneezing, runny nose, cough, headache, chills, or symptoms of croup or bronchitis. Some people might also get a fever. Illness usually lasts three to five days, but serious infections can last for weeks. Complications can include ear infections, pneumonia, or meningitis (inflammation of the brain and spinal cord). Some adenoviruses cause other illnesses, such as skin rash, conjunctivitis (pink eye), bladder infection, or bowel infection (e.g., diarrhea).

How soon after exposure do symptoms appear?

For respiratory infections, symptoms usually appear 2-14 days after exposure to the virus. For intestinal tract infections, symptoms usually appear 3-10 days after exposure to the virus.

How is adenovirus infection diagnosed?

Doctors usually diagnose adenovirus infection based on the patient’s symptoms. Laboratory tests are also available to identify the virus in the blood or other body fluids.
What is the treatment for adenovirus infection?

Treatment usually involves measures to relieve the symptoms. Doctors might recommend rest, drinking plenty of fluids, use of over-the-counter medicines to manage fever or discomfort, or use of a cool-mist humidifier. Ill persons should see a doctor if fever continues for more than a few days, symptoms worsen, breathing problems occur, or not enough fluids are being taken. Those with serious illness or weak immune systems might need additional treatment or hospitalization. Antibiotics are not used to treat adenovirus infections.

How can adenovirus infection be prevented?

There is no vaccine generally available to prevent adenovirus infection. Good health habits can help prevent adenovirus infection. These include covering the mouth and nose when coughing or sneezing; washing hands often with soap and water; avoiding touching the eyes, nose or mouth; avoiding sharing cups and eating utensils; staying home from work, school, and errands if sick; and avoiding close contact with people who are sick. Keeping adequate levels of chlorine in swimming pools is important to prevent outbreaks of conjunctivitis caused by adenovirus.

How long can an infected person carry adenovirus?

Adenovirus infections are most contagious during the first few days of symptoms. Some people, especially those with weakened immune systems, can carry the virus in their tonsils, adenoids, or intestines for weeks or longer. These people might not have any symptoms, but are still be able to spread the virus to others.

How can I get more information about adenovirus infection?

- If you have concerns about adenovirus infection, contact your healthcare provider.
- Call your local health department. A directory of local health departments is located at the VDH Local Health Districts page.
- Visit the Centers for Disease Control and Prevention website at the CDC's page on adenoviruses.

August 2018