

Measles

Agent: Measles virus

Mode of Transmission: Primarily person-to-person transmission by inhalation of respiratory droplets or direct contact with nasal or throat secretions of infected people; however, airborne transmission via aerosolized droplet nuclei has been documented.

Signs/Symptoms: Fever, cough, conjunctivitis, coryza, and a typical rash on the third to seventh day after onset of symptoms.

Prevention: Measles vaccine should be given as part of the measles, mumps, and rubella (MMR) series beginning at 12-15 months of age followed by a second dose at age 4-6 years.

Other Important Information: Measles is highly communicable, with secondary attack rates greater than 90% among susceptible people who have close contact with the infected person. Measles was declared eliminated from the United States in 2000. Nonetheless, because measles remains endemic in much of the world, importations continue to result in sporadic cases and outbreaks in the United States, which can be costly to control.

Three cases of measles were reported in Virginia during 2010, representing a significant increase from the previous five-year average of 0.4 cases per year. Prior to 2010, one case was reported each year in 2008 and 2009. Before 2008, the last reported case in Virginia occurred in 2001.

Among the 2010 cases, the highest incidence occurred in the 1-9 year age group (0.2 per 100,000), with two cases. The remaining case occurred in the 20-29 year age group (0.1 per 100,000). Race was reported as white for two cases, and 'other' for the third case. Of the three cases, two were female. All cases occurred in the northern region.

Two of the cases were infected with measles while traveling internationally. The third was infected by one of these cases upon that person's return to the U.S. None of the cases had received age appropriate doses of measles vaccine. These data illustrate that importations of measles into the United States continue to occur, posing risks for measles among unvaccinated persons. Individuals planning international travel should be aware of their immune status and obtain a vaccination if necessary.