

## 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. Infants <12 months of age traveling internationally should be vaccinated with an additional dose if at least 6 months of age.

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. Most imported cases originate in Asia and Europe and occur both among U.S. citizens traveling abroad and persons visiting the United States from other countries.

No cases of measles were reported in Virginia during 2012, a drop from both the 7 cases reported in 2011, and the previous five-year average of 2.4 cases per year. This marked the first year since 2007 in which no measles cases were reported. Prior to 2011, one case was reported each year in 2008 and 2009 and three cases were reported in 2010.

From 2001 through 2011, a median of 63 measles cases (range: 37–220) and four outbreaks, defined as three or more cases linked in time or place, were reported each year in the United States. Among the 162 cases reported nationally from 2004 through 2008, a total of 110 (68%) were known to have occurred in persons who declined vaccination because of a philosophical, religious, or personal objection. 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.