

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 elimination has been maintained in the United States since it was declared in 2000. However, an estimated 20 million cases of measles occur each year worldwide, and cases continue to be imported into the United States. Most imported cases originate in Asia and Europe and occur both among U.S. residents traveling abroad and persons visiting the United States from other countries. Individuals planning international travel should be aware of their immune status and obtain a vaccination if necessary.

For the second consecutive year, no cases of measles were reported in Virginia. This is a drop from both the 7 cases reported in 2011 and the previous five-year average of 2.4 cases per year. Prior to 2011, one case was reported each year in 2008 and 2009, and three cases were reported in 2010.

Nationally, the U.S. experienced 11 outbreaks in 2013, three of which had more than 20 cases, including an outbreak in New York City with 58 cases. Additional large outbreaks occurred in North Carolina and Texas. The North Carolina outbreak of 23 cases occurred within a community of persons not vaccinated because of personal belief exemptions. Cases were primarily located in counties that border Virginia. In these three outbreaks, transmission occurred after introduction of measles into communities with pockets of persons unvaccinated because of philosophical or religious beliefs. This allowed for spread to occur, mainly in households and community gatherings, before public health interventions could be implemented. Despite progress in global measles control and elimination, measles importations are likely to continue posing risks of measles outbreaks in unvaccinated communities.