

Varicella

The primary infection with this virus is commonly known as chickenpox. It manifests as a diffuse, itchy rash characterized as "dew drops on a rose petal". The lesions have a red base with a clear, fluid filled blister superimposed on top of the reddened skin. Typically, an unvaccinated person will have anywhere between 250 up to 500 lesions in varying stages of development. The lesions first blister and then scab over. Other symptoms include mild fever and generalized body aches. **Complications include bacterial superinfection of the skin lesions, pneumonia, and central nervous system involvement (encephalitis or inability to walk due to an unsteady gait) and other rare complications such as kidney involvement, arthritis, and liver involvement.** This disease tends to be more severe in adolescents, adults, and anyone who is immunocompromised. Reye syndrome can follow cases of chickenpox if aspirin is given during this illness.

After primary infection, this virus lays dormant in nerve roots and can be reactivated later in life. The reactivation of this disease is commonly known as shingles. Grouped vesicles appear in the distribution of the nerve root involved and is accompanied by pain in the localized area. Often post-herpetic nerve pain may last for weeks to months after resolution of the zoster rash.

Fetal infection during the first or second trimester of pregnancy occasionally results in death of the unborn fetus or severe birth defects.

Humans are the only source of infection for this highly contagious virus. This virus is spread when airborne droplets from the respiratory tract secretions or direct fluid from the vesicles come in contact with a susceptible host. In utero infections can occur resulting from the virus crossing the placenta. Children who acquire the infection in their home after becoming exposed to a sibling typically have more lesions than the index case. The incubation period is usually 14 to 16 days and occasionally as short as 10 days or as long as 21 days after contact. The severity of the disease may be lessened by antiviral therapy if given within the first 72 hours after onset of the rash.

In the pre-vaccine era, most cases of Varicella in the United States occurred in children younger than 10 years of age. Because of the implementation of immunization in young children, a greater number of cases are occurring among adolescents and adults.

The Varicella vaccine is a live, attenuated vaccine which was licensed in March of 1995 for FDA use in any healthy person 12 months or older. Currently, recommendations for this vaccine include a primary injection at the age of 12 months and a booster dose between ages 4 and 6 years of age. Side effects of the vaccine are generally mild and occur in 5 to 35% of children. Side effects include pain, redness, and swelling at the injection site. 3 to 5% of children will develop a localized rash, and an additional 3 to 5% will develop a generalized Varicella-like rash. These rashes typically consist of 2 to 5 lesions and may be red but not blistery. The rash usually appears 5 to 26 days following immunization.