

requiring these precautions include diphtheria, varicella-zoster virus (VZV; chickenpox), measles, tuberculosis, adenovirus, *Haemophilus influenzae* type b (Hib), influenza, mumps, *Neisseria meningitidis*, *Mycoplasma pneumoniae* infection, pertussis, plague, rhinovirus, Group A streptococcal pharyngitis, severe acute respiratory syndrome (SARS), pneumonia, or scarlet fever ([American Academy of Pediatrics, 2015](#)).

Prevent Complications

Although most children recover without difficulty, certain groups are at risk for serious, even fatal, complications from communicable diseases—especially the viral diseases chickenpox and erythema infectiosum (fifth disease) caused by **human parvovirus B19**.

Children with immunodeficiency—those receiving steroid or other immunosuppressive therapy, those with a generalized malignancy such as leukemia or lymphoma, or those with an immunologic disorder—are at risk for viremia from replication of the **varicella-zoster virus (VZV)*** in the blood. VZV is so named because it causes two distinct diseases: **varicella (chickenpox)** and **zoster (herpes zoster or shingles)**. Varicella occurs primarily in children younger than 15 years old. However, it leaves the threat of herpes zoster, an intensely painful varicella that is localized to a single **dermatome** (body area innervated by a particular segment of the spinal cord). In children, the dermatomes most likely affected by herpes zoster are the cervical and sacral dermatomes ([Leung, Robson, and Leong, 2006](#)). Immunocompromised patients and healthy infants younger than 1 year old (who also have reduced immunity) are at a higher risk for reactivation of VZV causing herpes zoster, probably as a result of a deficiency in cellular immunity ([American Academy of Pediatrics, 2015](#); [Galea, Sweet, Beninger, et al, 2008](#)). Complications of herpes zoster virus in children include secondary bacterial infection, depigmentation, and scarring. Postherpetic neuralgia in children is uncommon ([Leung, Robson, and Leong, 2006](#)).

The use of varicella-zoster immune globulin or intravenous immune globulin (IVIG) is recommended for children who are immunocompromised, who have no previous history of varicella, and who are likely to contract the disease and have complications as a result ([American Academy of Pediatrics, 2015](#)). The antiviral