

virus multiplies in muscle cells and is spread through neural pathways without stimulating a protective host immune response.

Approximately 91% of rabies cases are transmitted by wild animals and 9% from domestic animals ([Weant and Baker, 2013](#)). Carnivorous wild animals such as skunks, raccoons, foxes, and bats are the animals most often infected with rabies and the cause of most indigenous cases of human rabies in the United States ([Weant and Baker, 2013](#)). The likelihood of human exposure to a rabid domestic animal has decreased greatly. The circumstances of a biting incident are important. An unprovoked attack is more likely than a provoked attack to indicate a rabid animal. Bites inflicted on a child attempting to feed or handle an apparently healthy animal can generally be regarded as provoked. Any child bitten by a wild animal is assumed to be exposed to rabies.

### Nursing Alert

Unusual behavior in an animal is cause for suspicion; children should be warned to beware of wild animals that appear to be friendly.

Although rabies is common among wildlife species, human rabies is rarely acquired. The highest incidence occurs in children younger than 15 years old. The incubation period usually ranges from 1 to 3 months but may be as short as 5 days or longer than 6 months ([Willoughby, 2016](#)). Modern-day prophylaxis is nearly 100% successful. Only 10% to 15% of persons bitten develop the disease, but when symptoms are present, rabies progresses to a fatal outcome. In the United States, human fatalities associated with rabies occur in people who fail to seek medical attention, usually because they are unaware of their exposure.

The disease is characterized by a period of nonspecific symptoms, including general malaise, fever, headache, and weakness, followed by typical symptoms of severe encephalitis, including agitation, changes in LOC, and seizures. Attempts at swallowing may cause such severe spasm of the pharynx, neck, and diaphragm muscles that apnea, cyanosis, and anoxia are produced—the characteristics from which the term *hydrophobia* was derived.

Diagnosis is made on the basis of history and clinical features.