

**1. Rabies**Infection with rabies virus characteristically produces an acute illness with rapidly progressive central nervous system manifestations, including anxiety, dysesthesia, hydrophobia, and dysautonomia. Illness almost invariably progresses to death. Three unimmunized people have recovered from clinical rabies. In the United States, human cases have decreased steadily since the 1950s, reflecting widespread immunization of dogs and the availability of effective prophylaxis after exposure to a rabid animal. Historically, 2 cases of human rabies were attributable to probable aerosol exposure in laboratories, and 2 unusual cases have been attributed to possible airborne exposures in caves inhabited by millions of bats. Transmission has also occurred by transplantation of organs from patients dying of undiagnosed rabies. Person-to-person transmission by bite has not been documented in the United States. Wildlife, including bats, raccoons, foxes, coyotes, and bobcats, are the most important potential sources of infection for humans and domestic animals in the United States. The virus is present in saliva and is transmitted by bites or, rarely, by contamination of mucosa or skin lesions by saliva or other potentially infectious material (eg, neural tissue). Worldwide, most rabies cases in humans result from dog bites in areas where canine rabies is enzootic. Most rabid dogs, cats, and ferrets shed virus for a few days before there are obvious signs of illness. Infection in animals can be diagnosed by demonstration of the presence of rabies virus antigen in brain tissue using a direct fluorescent antibody test. Suspected rabid animals should be euthanized in a manner that preserves brain tissue for appropriate laboratory diagnosis. Once symptoms develop, neither rabies vaccine nor rabies immune globulin is useful. There is no specific treatment. Ten people have survived rabies in association with incomplete rabies vaccine schedules.

**2. Choose the correct statement.**

- a. There are numerous ways of transmission of rabies infection
- b. The main ways of rabies transmission is airborne way
- c. The main way of rabies transmission is through blood transfusion
- d. The rabies is transmitted only through the bites of a rabid animal

**3. How can one diagnose rabies infection in an animal?**

- a. By demonstration of the presence of rabies virus antigen in urine
- b. By demonstration of the presence of rabies virus antigen in brain tissue
- c. By demonstration of the presence of rabies virus antigen in the blood
- d. By demonstration of the presence of rabies virus antigen in saliva

**4. Once the symptoms of rabies develop, if you use the vaccine as soon as possible there will be a higher possibility of a positive outcome.**

- a. False
- b. Not given
- c. True

**5. Rabies infection always leads to death.**

- a. Not given
- b. True
- c. False

**6. Rabies infection is almost always lethal.**

- a. Not given
- b. True
- c. False

**7. There is no specific treatment for rabies.**

- a. False
- b. Not given
- c. True

**8. What is the main source of rabies infection?**

- a. Droplets from the infected people
- b. The blood of rabid animals
- c. Tissues from patients dying of undiagnosed rabies
- d. Wild animals

9. What structure of the human body does the rabies virus affect most rapidly?

a. Central nervous system

b. Extremities

c. Mucous membranes

d. Peripheral nerves

10. Why has the number of human cases of rabies decreased?

a. Due to immunization of dogs and the prophylaxis after exposure to a rabid animal

b. Due to immunization of wild animals and the prophylaxis after exposure to a rabid animal

c. Due to immunization of rabid animals

d. Due to obligatory immunization of all people