

ANIMAL BITES

Q and A:

- 1. We have several dogs at home, and they have been vaccinated by the veterinarian. Can they still transmit the rabies virus? How can I protect my family?**

There have been reports of vaccinated dogs coming down with rabies. That is why their vaccination should be updated every year to ensure protection.

Families with pet dogs should be given rabies vaccine even before they are bitten. This is called pre-exposure prophylaxis and is especially recommended for children who may be unaware of the dangers of an animal bite.

- 2. My daughter was walking home from school when she was bitten by my neighbor's dog, what should I do?**

The first aid for bites is washing the wound with soap and water for at least 10 minutes, and then applying an antiseptic like povidone iodine or alcohol. Bringing your daughter to the doctor is a must for evaluation and rabies post-exposure vaccination.

- 3. What is the difference between pre-exposure and post-exposure rabies vaccinations?**

Pre-exposure prophylaxis is rabies vaccination given BEFORE a bite/exposure. It is given to high-risk individuals such as staff in rabies laboratories or hospitals handling rabies patients, veterinarians, animal handlers and field workers. The Rabies Act of 2007 mandates rabies immunization for children aged 5-14 years living in highly endemic areas. For normal/immunocompetent individuals, it consists of 2 doses given on days 0 and 7 using WHO prequalified vaccines.

Post-exposure prophylaxis is rabies vaccination given AFTER a bite/exposure. It includes wound care and administration of rabies vaccine with or without rabies immunoglobulin, depending on the severity/category of the exposure. Depending on the vaccine regimen, it can be given as 4 intramuscular doses day 0 (2 doses), day 7 (1 dose), and day 21 (1 dose) OR as 8 intradermal doses (2 doses of 0.1 ml each intradermally on both deltoids on days 0, 3, 7 and 28 or 30). If the dog is still alive after 14 days, vaccination on the 28th day may not be given.

- 4. Why does protection against rabies require many shots? Isn't there a single dose vaccine that is completely protective?**

Unfortunately, there is no single shot rabies vaccine that will offer sufficient protection. The multiple doses are needed to induce antibody development as early as possible in a patient who has been bitten. And since this is a 100% fatal disease, it is a must that protective antibody levels be developed.

- 5. While my daughter was playing with a stray cat, she was scratched on the face. What should I do?**

Bites and scratches by an animal's paw can transmit rabies. The same is true for licks on open wounds and on mucous membranes such as the eyes, mouth, and genitals. Exposures on the head, face and neck are especially dangerous.

Washing of the wound with soap and water for 10 minutes followed by application of an antiseptic are important first aid measures. She should receive Rabies Immunoglobulin and rabies vaccines as well as tetanus prophylaxis.

6. My 2-month-old baby woke up with a wound on her left big toe. I suspected it was a rat bite. Should I be worried? Does she need any vaccine?

Rabies vaccination is not routinely for rat bites since rats, mice, hamsters, guinea pigs and other members of the rodent family are not significant carriers of rabies. However, all animal bites are tetanus prone. Your daughter should receive tetanus immunization (in the form of DPT). Washing of the wound with soap and water is recommended.

7. What animals can transmit the rabies virus?

All mammals can theoretically transmit the rabies virus. However, the domestic dog is responsible for more than 98% of all human rabies cases. Rabies post-exposure prophylaxis is also required for bites of cats, other domestic animals (cows, pigs, horses, goats, etc.), bats and monkeys.

8. My son, who was bitten by a dog last year, had completed the full course of anti-rabies vaccine. He was bitten again a few days ago. Should he be given another course of vaccination, or will the previous vaccination suffice?

Even though your son has been previously vaccinated, he will still need rabies vaccine. However, since the previous vaccination has been completed, he will require only 2 booster doses, one on the day he was bitten, and another one 3 days later.

9. My 2-year-old boy loves to bite his playmates. Should his playmates receive any vaccine?

Unless he is infected by the rabies virus, your son cannot transmit rabies. Thus, his playmates do not need any rabies vaccine. In addition to local wound care and, though tetanus is a remote possibility, the vaccination history of the playmates in terms of tetanus-containing vaccines should be elicited from their parents.