



QUESTIONS

Q & A

FOR PARENTS ANSWERS

**RABIES VACCINE**

ACVIP : 2020 - 2021

### What is Rabies?

Rabies is a disease that is transmitted to humans by bites of affected animals (mammals). It almost always results in death of the affected individual.

### Which animal bites can cause Rabies and require anti-Rabies vaccines?

Rabies can be transmitted to humans by mammalian bites. Over 90% are caused by dog bites, followed by cat bites and bites by monkeys, horses, cows and other large mammals. Domestic rodent (rat) bites and bites by small mammals (e.g. rabbits, squirrels) usually do not cause Rabies and do not warrant rabies vaccination. Any bites by known or unknown animals in the wild can cause Rabies. In India, exposure to bats have not been reported to cause Rabies.

### What steps are essential, at home, for wound management, following an exposure to an animal?

1. Clean the wound under running tap water, with soap, for at least 15 minutes.
2. After wound washing, apply ointment that can kill viruses e.g. Povidone Iodine
3. The wound should not be covered with any bandage, unless profusely bleeding

Consult your doctor for vaccination advice as soon as possible.

### What types of exposure need anti-Rabies vaccine?

1. Touching or feeding animals, animal licks on intact skin (no exposure): no vaccines
2. Nibbling of uncovered skin, minor scratches or abrasions without bleeding (exposure): only anti-Rabies vaccine
3. Single or multiple bites or scratches (with blood oozing), contamination of mucous membrane or broken skin with saliva from animal licks: anti-Rabies vaccine and the Rabies immunoglobulin / monoclonal antibody preparations, which is injected at the site of the bite (exposure).

### What is the schedule for the anti-Rabies vaccine?

- ✦ For those who have never received any anti-Rabies vaccine in the past [Post-exposure prophylaxis (PEP)], the schedule consists of 4 doses on day 0-3-7-14 to 28 days, day 0 is the day the 1<sup>st</sup> dose of the vaccine is administered.
- ✦ For those who have received the full schedule of PEP, anytime in the past and if the exposure has occurred more than 3 months after the completion of the schedule, 2 doses on days 0-3 is recommended. If the re-exposure has occurred within 3 months, vaccine is not necessary.
- ✦ In the Govt. sector, anti-Rabies vaccine is administered within the layers of the skin (intradermal) in a different schedule. This is also equally effective.

### Are the anti-Rabies vaccines safe?

The anti-Rabies vaccines presently in use have been shown to be safe and well tolerated. Minor and transient erythema, pain and/or swelling may occur at the site of injection.

### Is it correct to just observe the biting dog or cat for 10 days without starting treatment justified?

No. In a country like India, where rabies is prevalent in a large population of dogs and cats, it is necessary to start treatment and keep the biting dog/cat under observation for 10 days.

### Can you receive the vaccine before exposure and what is the schedule?

- ✦ Yes. The vaccine can be given before exposure: pre-exposure prophylaxis (PrEP), in select groups e.g. people at high risk of exposure to rabies, such as veterinarians, animal handlers, rabies laboratory workers and rabies biologics production workers. The Indian Academy of Pediatrics also recommends PrEP to children at high risk of rabies exposure e.g residents in boarding schools, children with pets at home.

✦ The schedule is 2 doses on 0-7 days.

**Should my child receive the vaccine if bitten by a vaccinated, pet dog?**

Vaccinated animals may also transmit Rabies, if the vaccination of the animal was ineffective due to any reason. A history of rabies vaccination in an animal is not always a guarantee that the biting animal is not rabid. Animal vaccine failures may occur because of improper administration, improper storage with a consequent sub-optimal immune response of the vaccine or poor health status of the animal. Hence, the category of bite, should be the decisive factor, in deciding the treatment schedule.

**Who should not receive the anti-rabies vaccine?**

Anti-rabies vaccine is a necessity after exposure to mammalian bites. Everyone should receive it, young and old, ill and healthy and pregnant women as well.

**For more information, please contact your doctor.**

