

Animal bites

- Animal bites are not rare and can occur anywhere in the world.
- They can occur while:
 - walking in the street
 - jogging in the woods
 - bicycle riding in the countryside
 - or trekking in an unknown region of the world



Animal bites

- Animal bites can even occur in the workplace.
- Most animal bites are due to stray dogs or cats.
- Small children are frequent victims since they love to pet and hug animals that wander close to them.



Animal bites

- In some cases animal bites can be due to wild animals such as a squirrel, bat, fox, wolf or coyote.
- Any warm-blooded animal (including humans) can become infected and transmit the disease.



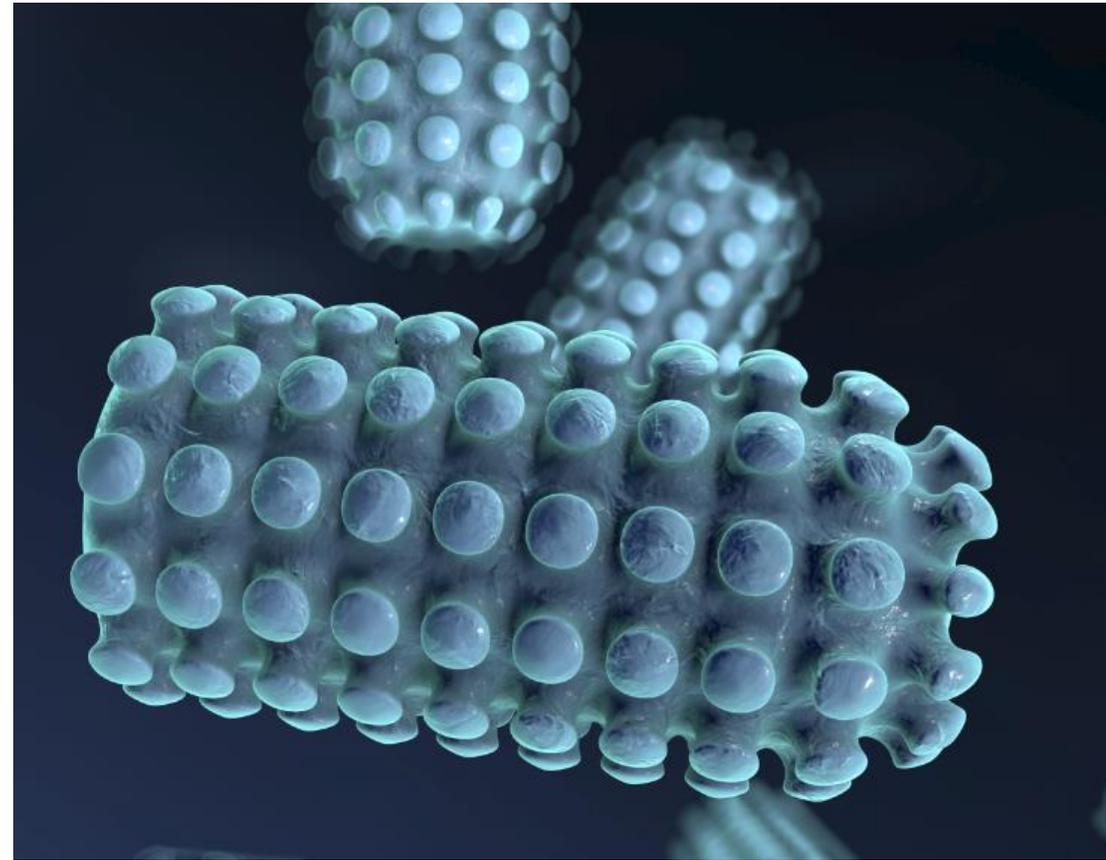
Animal bites

- Besides the scars and aesthetic problems linked to animal bites the greatest risk of any bite remains that of rabies.
- More than 25,000 people die worldwide each year from animal bites that were not treated.
- Rabies prevention is based on a vaccination which is safe and totally effective.



What is rabies?

- Rabies is an acute, infectious, viral disease transmitted by an animal's saliva.
- The virus invades the central nervous system provoking an inflammation of the brain, resulting in paralysis and finally death.



Rabies virus

What is rabies?

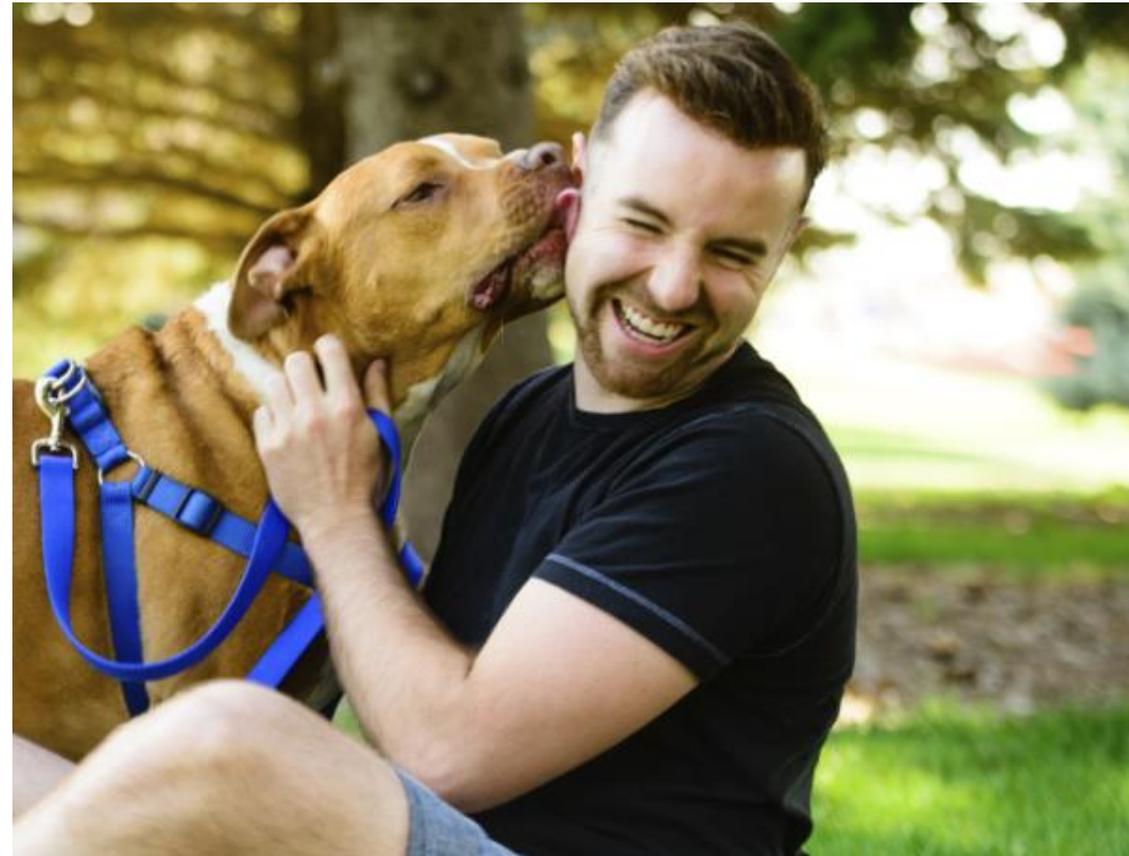
- Rabies is found all over the world.

- In Europe and North America, domestic animals are supposed to be vaccinated against rabies, however, not all animals are correctly immunized.
- In certain parts of the world (Africa, Asia, Middle East, CIS, South America) stray dogs and cats are a common part of the scenery.
- In some countries, up to 30% of the stray dogs are infected with the disease.



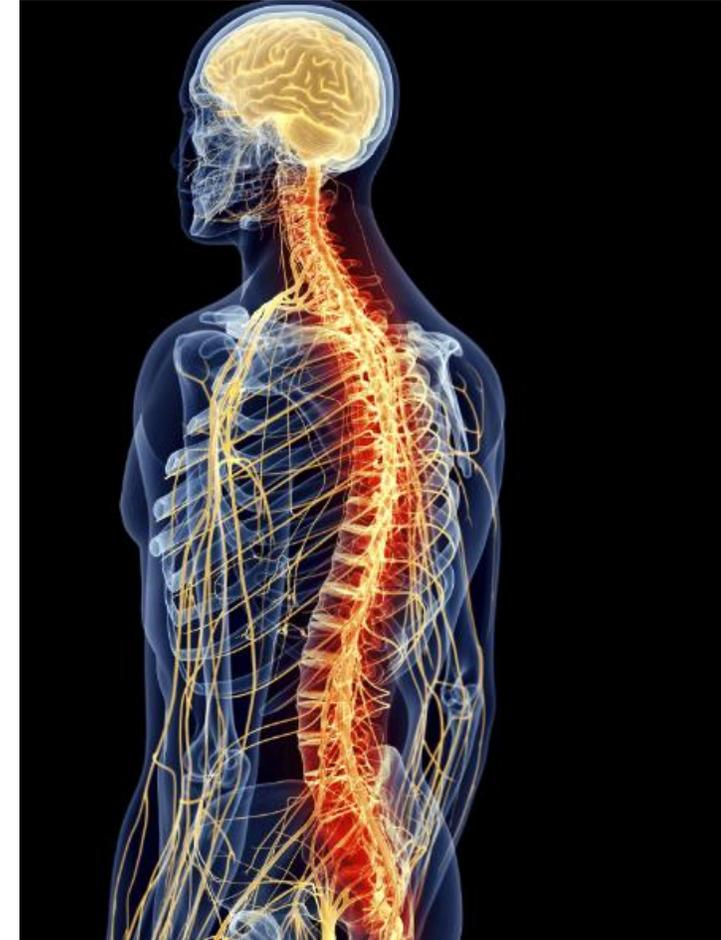
What is rabies?

- Transmission of rabies is often the result of an animal bite but may also occur if a contaminated animal licks a pre-existing open skin wound or scratch on a human.



What is rabies?

- The incubation period of rabies varies from a few days to over one year, with an average of 30-50 days before the first symptoms appear.
- The rabies virus travels to the brain by following the peripheral nerves.
- The incubation period depends on the depth of the wound and its location on the body.
- An animal bite of the face and hands is extremely serious.



What is rabies?

- The wound itself heals normally, although, at an advanced stage, severe pain or a burning sensation around the scar may appear, whereas the scar itself is totally anesthetized.



What is rabies?

- In the early stages of the disease, the symptoms of rabies include:
 - fever
 - headache
 - general weakness or discomfort



What is rabies?

■ As the disease progresses, and the virus attacks the brain provoking encephalitis, the following symptoms appear:

- insomnia, anxiety, confusion
- various degrees of paralysis
- excitation, hallucinations, agitation
- hypersalivation with difficulty in swallowing
- hydrophobia (fear of water) due to paralysis of the throat and jaw.



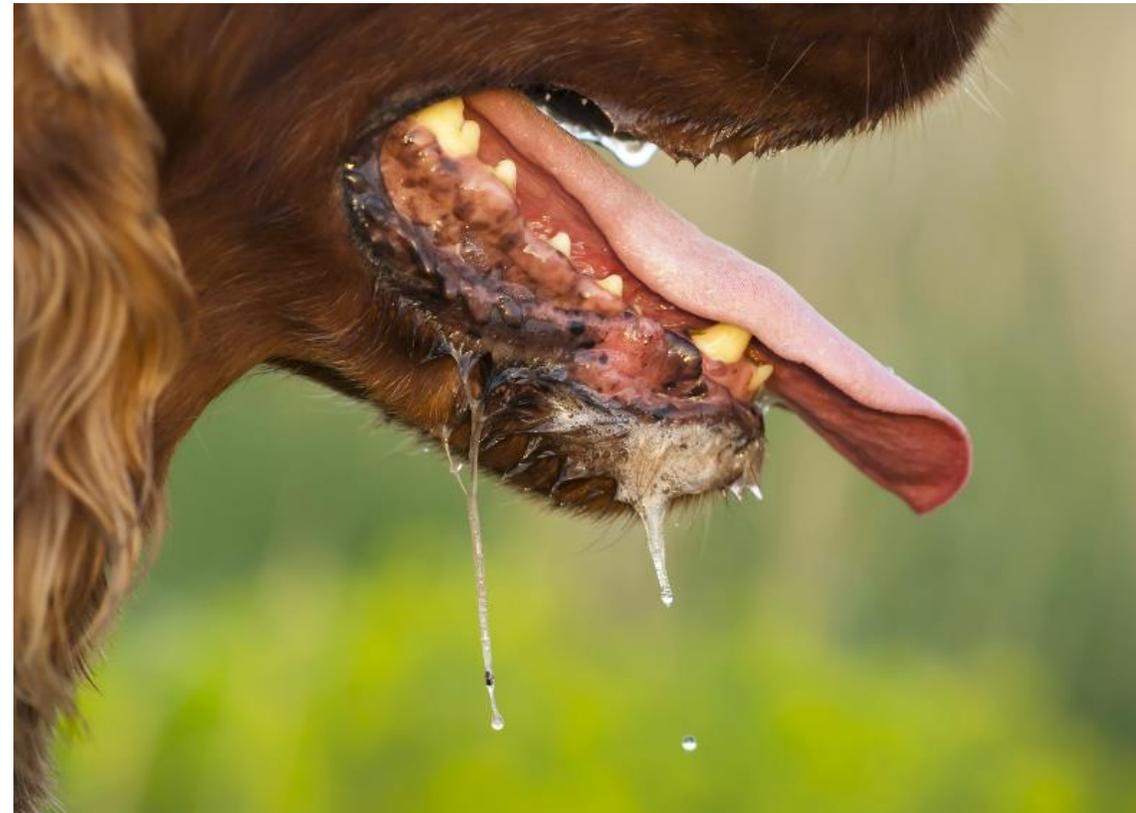
What is rabies?

- Once the rabies virus reaches the brain and symptoms begin to appear, death usually occurs within a few days due to respiratory failure.
- Since 2005, a very small number of people with declared rabies have survived with what is known as the “Milwaukee protocol” using an induced coma.



Can rabies be detected in an animal?

- A rabid dog is typically sad followed by an aggressive phase when he becomes hyperactive, sometimes violent, foaming at the mouth.
- A dog can be perfectly normal and affectionate and still be contaminated with rabies.
- The virus incubates in the dog's salivary glands at least 7 days before any objective symptoms appear.
- There is no way one can be 100% certain that a stray animal is not contaminated.



What to do when a person is bitten by an animal ?

- If possible, obtain the name and address of the owner and find out whether the animal is correctly vaccinated against rabies.
- If the animal's vaccination status cannot be determined, keep the animal under observation for 10 days, whenever possible.
- If the animal has been killed, keep the animal's body and call a veterinarian who will carry out lab tests in order to determine if the animal was rabid or not.



What to do when a person is bitten by an animal ?

- Thoroughly clean out the wound (bite, scratch, laceration) with soap and water for at least 5 minutes.
- If possible, an antiseptic such as Betadine® should be applied to the wound after washing.
- Exposed mucous membranes (eyes, nose, mouth) should be flushed with water.



What to do when a person is bitten by an animal ?

- Consult a doctor rapidly. The doctor will:
 - update the tetanus vaccination if it is outdated
 - prescribe an antibiotic to prevent other infections that could be transmitted by the animal's saliva
 - determine whether or not to perform the rabies immunization.
 - Antibiotics are not effective against the rabies virus.



What not to do when a person is bitten by an animal ?

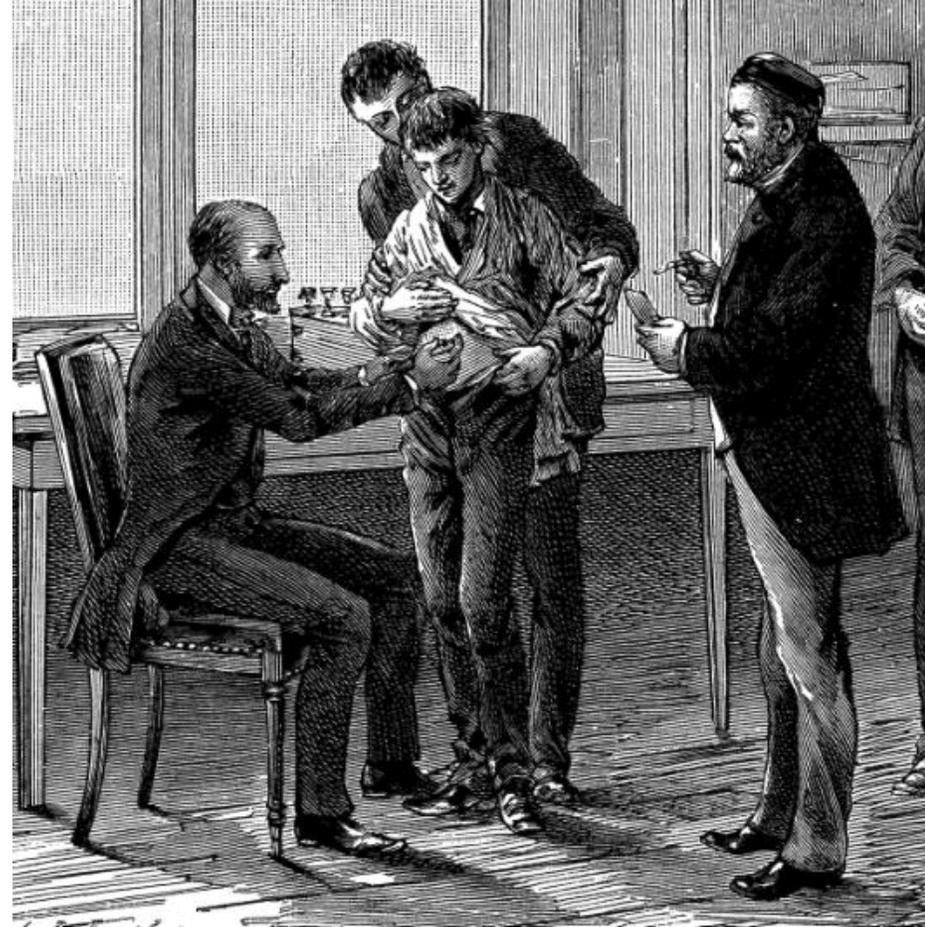
■ Do not:

- chase the animal away
- kill the animal
- have the animal vaccinated
- have the wound sutured – this could speed up the development of rabies
- wait for the symptoms of rabies to appear before seeing a doctor.



The rabies vaccination

- Louis Pasteur developed the rabies vaccination in 1884.
- It is highly recommended for children, and all people in general who will be travelling or living in remote, high risk areas where medical facilities are inadequate and where finding a rabies vaccine will be almost impossible.
- The vaccination is perfectly safe.
- It requires 3 shots within a 1-month period with a booster shot one year later and every 3 years thereafter.



The rabies vaccination

- **A vaccinated person** already has a certain degree of immunity to the disease.
- However, a vaccinated person bitten by an animal will still require two additional protective rabies shots performed in the days following the animal bite without any sense of urgency.



The rabies vaccination

- **A non-vaccinated person**, on the other hand, has no immunity at all against rabies.
- After an animal bite, they will not only require an anti-rabies serum (human rabies immune globulin) but also a series of 5 shots of the rabies vaccine over a 4 week period.
- This is an emergency situation since the serum and vaccine must be administered as soon as possible.
- Finding the serum and vaccine, correctly refrigerated and available is very difficult in many countries around the world.



The rabies vaccination

- If the animal is caught, confined and still in good health 10 days after the initial bite, there is no risk for the victim and nothing further needs to be done.
- If signs of rabies appear in the animal within the 10 day period, the victim will need to be vaccinated rapidly.
- If the animal cannot be found and kept under observation, it is safer to vaccinate the victim on the assumption that the animal had rabies.



Conclusion

- Animal bites are not rare.
- Avoid stray animals.
- Small children are particularly exposed as are people working or living in areas where stray animals, especially cats and dogs, abound.
- A preventive rabies vaccination should be considered before travelling to or living in a high risk country.
- Remember that if bitten by a stray animal that cannot be kept under observation for 10 days, a rabies shot is urgent and may often be extremely difficult to find locally.
- Rabies is almost always fatal!

