

## Leptospirosis and marine mammals

### **Q. What is leptospirosis?**

A. Leptospirosis is a disease caused by bacteria that can affect people, dogs, cattle, marine mammals, rodents and other wildlife. It occurs throughout the world.

### **Q. What are the clinical signs?**

A. In sea lions, clinical signs of leptospirosis include dehydration, increased drinking or urinating, vomiting, depression and a reluctance to use the hind flippers. Depending on the strain of the bacteria, clinical signs are usually the result of dysfunction of the kidneys and/or liver. Symptoms are similar in dogs and other mammals.

According to the Center for Disease Control, in people, symptoms of leptospirosis include high fever, severe headache, chills, muscle aches, and vomiting, and may include jaundice (yellow skin and eyes), red eyes, abdominal pain, diarrhea, or a rash. If the disease is not treated, the patient could develop kidney damage, meningitis (inflammation of the membrane around the brain and spinal cord), liver failure, and respiratory distress. In rare cases, death occurs.

### **Q. What are the effects on marine life in Oregon?**

A. Leptospirosis is periodically detected in California sea lions along the California and Oregon coast, usually every 2-4 years. It results in increased strandings and mortalities among sea lions. Young male sea lions in the fall appear to be the most susceptible to the disease. Other marine mammals that can be infected by the disease include the northern fur seal, elephant seal, and Pacific harbor seal.

### **Q. Am I or my pets at risk of acquiring leptospirosis from a stranded or dead sea lion?**

A. Although there has been no confirmed case of a person or pet being infected from a sea lion, leptospirosis is a *zoonotic* disease (meaning that people can get infected from animals and vice versa). The bacteria is mostly concentrated in urine and other body fluids and transmission usually occurs through abrasions or mucous membranes.

Typically, leptospirosis cases in pets and humans occur because of contact with standing water or fresh water during times of flooding in temperate regions. The bacteria do not thrive in extremely cold temperatures and water with high salinity. Nevertheless, it is recommended that you keep your pets on leash and stay away from sea lions or other animals if leptospirosis is suspected. (And pets should always be kept away from sea lions and other wildlife.)

### **Q. Should I have my dog vaccinated for leptospirosis**

A. Discuss your dog's risk of encountering the disease and vaccine recommendations with your veterinarian. There is a vaccine available, but it does not protect from all strains of the bacteria, and may result in a reaction in some breeds. Note the vaccine does not protect from acquiring the infection, or shedding the organism, but minimizes clinical signs.

### **Q. What if I suspect a person is infected?**

A. Further information about the disease and clinical signs in humans can be found on the CDC website at: <http://www.cdc.gov/nczved/divisions/dfbmd/diseases/leptospirosis/>

You can also contact your physician or Oregon Public Health Division 971-673-1222 .