Leptospirosis Fact Sheet

1. **What is Leptospirosis?** - Leptospirosis is caused by a spiral-shaped bacterium of the family *Leptospira*. The disease is found worldwide and affects humans and a variety of animals including dogs, cattle, pigs, and rodents, and can be serious for both humans and animals.

2. **How is Leptospirosis transmitted to people and animals?** - The bacteria are spread through the urine of infected animals, which can contaminate water or moist soil for weeks to months. Infection of humans and animals occurs through contact with this infected urine, or contaminated water, or contaminated soil. Infected wild and domestic animals may act as reservoirs and continue to excrete the bacteria into their environment for several years. The bacteria may enter the body through wounds and abrasions on the skin, the mucous membranes (eyes, nose, and mouth), inhalation, and possibly through ingestion of contaminated food or water.

3. **What are the symptoms of Leptospirosis in humans?**
   a. In humans, Leptospirosis causes a wide range of symptoms, while some infected individuals show no symptoms. Illness usually begins abruptly with fever along with other symptoms: severe headache, chills, muscle aches, and vomiting, and may include jaundice (yellow skin and eyes), red eyes, abdominal pain, diarrhea, and/or a rash.
   b. If left untreated, Leptospirosis can cause kidney failure, liver failure, meningitis, respiratory distress, and death. The time between exposure to the bacteria and development of disease is usually 10 days, but may vary from 2 to 30 days.
   c. The disease is not known to spread from person to person.

4. **What are the symptoms of Leptospirosis in animals?** - The symptoms of Leptospirosis are dependent on the animal species, with some animals showing no symptoms. In dogs, signs include fever, vomiting, stiffness, muscle pain, decreased appetite, diarrhea, depression, abdominal pain, and kidney failure. The time between exposure to the bacteria and development of disease in animals is usually 5 to 14 days, but may range from 3 to 30 days.

5. **How is Leptospirosis diagnosed?** – There are blood tests available to diagnose this disease, but they are not widely available, and can be difficult to interpret. Multiple blood specimens are usually needed to observe changes in
immunity in response to infection. Sometimes the spiral-shaped organism can be visualized under the microscope in blood, spinal fluid, or in other body fluids or tissues.

6. **How is Leptospirosis treated?** - Leptospirosis is treated with antibiotics, which should be administered early to avoid severe organ damage, and allow a speedy recovery.

7. **How can Leptospirosis be prevented?** - Leptospirosis can be prevented by avoiding swimming or wading in contaminated water.

8. **How can I best protect myself from Leptospirosis?**
   a. There is no human vaccine for Leptospirosis.
   b. As a general rule, always wash your hands thoroughly with warm water and soap after handling animals or anything that may have been contaminated with urine or feces.
   c. Clean contaminated surfaces with either an antibacterial cleaning solution, or a solution of one part household bleach in ten parts water.
   d. Do not swim, or wade in water that may be contaminated with animal urine.
   e. Those with possible occupational exposure should always wear protective clothing, gloves, eye-wear, and footwear.

9. **How can I protect my pet from Leptospirosis?**
   a. Keep rodent populations under control as they can carry and spread the disease.
   b. Annually vaccinate your dog against Leptospirosis.

10. **For more information:**
    http://www.cdc.gov/ncidod/dbmd/diseaseinfo/leptospirosis_g.htm

    This fact sheet provides general information. Please contact your physician and/or veterinarian for specific clinical information related to you or your animal.

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