

Serious diseases associated with animals include:

- **Histoplasmosis** – Histoplasmosis is a disease caused by the fungus *Histoplasma capsulatum*. The fungus lives in the environment, usually in association with large amounts of bird or bat droppings. Lung infection can occur after a person inhales airborne, microscopic fungal spores from the environment; however, many people who inhale the spores do not get sick. The symptoms of histoplasmosis are similar to pneumonia, and the infection can sometimes become serious if it is not treated.

Source of the materials : <http://www.cdc.gov/fungal/diseases/histoplasmosis/>

- **West Nile Virus** – West Nile virus (WNV) is most commonly transmitted to humans by mosquitoes. You can reduce your risk of being infected with WNV by using insect repellent and wearing protective clothing to prevent mosquito bites. There are no medications to treat or vaccines to prevent WNV infection. Fortunately, most people infected with WNV will have no symptoms. About 1 in 5 people who are infected will develop a fever with other symptoms. Less than 1% of infected people develop a serious, sometimes fatal, neurologic illness.

Source of the materials : <http://www.cdc.gov/westnile/>

- **Salmonellosis** – Every year, *Salmonella* is estimated to cause about 1.2 million illnesses in the United States, with about 23,000 hospitalizations and 450 deaths. Most persons infected with *Salmonella* develop diarrhea, fever, and abdominal cramps 12 to 72 hours after infection. Salmonellosis, the illness caused by the bacteria, usually lasts four to seven days. Although, most persons recover without treatment, in some persons, the diarrhea may be so severe that the patient needs to be hospitalized.

Source of the materials : <http://www.cdc.gov/salmonella/>

- **Candidiasis** – Candidiasis is a fungal infection caused by yeasts that belong to the genus *Candida*. There are over 20 species of *Candida* yeasts that can cause infection in humans, the most common of which is *Candida albicans*. *Candida* yeasts normally live on the skin and mucous membranes without causing infection; however, overgrowth of these organisms can cause symptoms to develop. Symptoms of candidiasis vary depending on the area of the body that is infected. **Cryptococcosis** – an illness that begins as a pulmonary disease and can later affect the central nervous system; caused by yeast found in the intestinal tract of pigeons and starlings.

Source of the materials : <http://www.cdc.gov/fungal/diseases/candidiasis/>

- **St. Louis Encephalitis** – Saint Louis encephalitis virus (SLEV) is transmitted to humans by the bite of an infected mosquito. Most cases of SLEV disease have occurred in eastern and central states (see map). Most

persons infected with SLEV have no apparent illness. Initial symptoms of those who become ill include fever, headache, nausea, vomiting, and tiredness. Severe neuroinvasive disease (often involving encephalitis, an inflammation of the brain) occurs more commonly in older adults. In rare cases, long-term disability or death can result. There is no specific treatment for SLEV infection; care is based on symptoms. You can reduce your risk of being infected with SLEV by using insect repellent, wearing protective clothing, and staying indoors while mosquitoes are most active. If you think you or a family member may have SLEV neuroinvasive disease, it is important to consult your healthcare provider for proper diagnosis. Besides being direct carriers of disease, pest birds are frequently associated with over 50 kinds of **ectoparasites**, which can work their way throughout structures to infest and bite humans:

Source of the materials : <http://www.cdc.gov/sle/>

- **Bed bugs** – Bed bugs (*Cimex lectularius*) are small, flat, parasitic insects that feed solely on the blood of people and animals while they sleep. Bed bugs are reddish-brown in color, wingless, range from 1mm to 7mm (roughly the size of Lincoln’s head on a penny), and can live several months without a blood meal.

Source of the materials : <http://www.cdc.gov/parasites/bedbugs/faqs.html>

- **Lyme Disease-** Lyme disease is caused by the bacterium *Borrelia burgdorferi* and is transmitted to humans through the bite of infected blacklegged ticks. Typical symptoms include fever, headache, fatigue, and a characteristic skin rash called erythema migrans. If left untreated, infection can spread to joints, the heart, and the nervous system. Lyme disease is diagnosed based on symptoms, physical findings (e.g., rash), and the possibility of exposure to infected ticks; laboratory testing is helpful if used correctly and performed with validated methods. Most cases of Lyme disease can be treated successfully with a few weeks of antibiotics. Steps to prevent Lyme disease include using insect repellent, removing ticks promptly, applying pesticides, and reducing tick habitat. The ticks that transmit Lyme disease can occasionally transmit other tickborne diseases as well.

Source of the materials : <http://www.cdc.gov/lyme/>