Lyme Disease

Causes: Tick bites- (a bacteria called *Borrelia burgdorferi*)

Prevention:

- Wear light-colored clothes to see ticks more easily
- Wear long sleeves, long pants, and high boots or closed shoes that cover your feet completely
- Tuck pant legs into socks or boots
- Wear a hat
- Use tick repellants, but not on your face
- Examine your body for ticks after work
- Shower after work
- Wash and dry your clothes at a high temperature
- Be especially wary in spring and summer or during warm weather
- Remove leaves, tall grass and brush from work or residential areas

If you find an embedded tick:

- Remove with tweezers by grasping close to the point of attachment and pull straight up
- Wash the skin with soap and water and cleanse with rubbing alcohol
- Save the tick in an empty container so that it can be given to a physician should the victim develop symptoms.
- If the head becomes detached during removal or the tick can't be removed, seek medical attention

Do NOT:

• Remove tick with petroleum jelly, a hot match, nail polish, or other chemical agents

Symptoms:

- "Bulls-eye" rash may appear within three days to several weeks
- Flu-like symptoms such as fever, lymph node swelling, neck stiffness, fatigue, headaches, muscle aches, migrating joint aches
- Flue-like symptoms may disappear if not treated
- If untreated neurological abnormalities may develop and become chronic. Joint and muscle pain and arthritis may occur within six months.

Additional Information:

• www.osha.gov/oshdoc/data_lymefacts/lymefac.pdf

West Nile Virus

Causes: Mosquito bites (virus)

Prevention:

- Apply insect repellant with DEET to exposed skin and clothing
- Wear long sleeves, long pants, and socks
- Be extra wary at dawn and dusk- stay indoors if possible
- Empty standing water or replace it weekly

If you contract West Nile Virus:

- West Nile Virus will improve on its own in most cases.
- West Nile Virus is not spread by touching
- If the victim has especially severe symptoms, such as severe headaches or confusion, seek medical attention.

Symptoms:

- Most people show no symptoms at all
- Some people develop fever, headache, body aches, nausea, vomiting, and swollen lymph glands, or a skin rash on the chest, stomach, and back.
- Few people develop severe illness including, high fever, headache, neck stiffness, stupor, disorientation, coma, tremors, convulsions, muscle weakness, vision loss, numbness, and paralysis
- Symptoms develop within three to fourteen days

Reporting Dead Birds:

- Birds are vectors for West Nile Virus and dead birds can indicate that WNV is present in the area
- Reports of dead birds may not be collected during certain seasons.
- Report dead birds to the local or state health department at http://westnile.ca.gov/ or by phone at 1-877-WNV-BIRD (1-877-968-2473)
- Do not touch dead birds with bare hands

Additional Information:

- http://www.cdc.gov/ncidod/dvbid/westnile/index.htm
- http://westnile.ca.gov/

Plague

Causes: Fleas from infected rodents (bacteria called Yersinia pestis)

Prevention:

- Eliminate sources of food and nesting places for rodents around homes, work, and recreation areas
- Remove brush, rock piles, junk, cluttered firewood, and pet and wild animal food.
- Rodent-proof your home.
- Apply insect repellent to clothing and skin
- Wear gloves when handling potentially infected rodents
- Treat pets for flea control regularly
- Report any sick or dead animals to the local health department or law enforcement officials.

If you are exposed to plague:

- Antibiotics are recommended for people likely to be exposed to plague
- People at high risk of plague exposure include people exposed to potentially infected rodent fleas during a plague outbreak, people handling animals known to be infected, or people with infected pets.
- Antibiotics will protect a person for 2-3 weeks.

Symptoms:

- Swollen, tender lymph gland
- Fever, chills, pain, headache, and extreme exhaustion
- Symptoms occur 2-6 days after infection
- Pneumonic plague includes high fever, chills, cough, breathing difficulty, and bloody sputum
- Can cause death if untreated.

Additional Information:

http://www.cdc.gov/ncidod/dvbid/plague/index.htm

Avian Influenza

Causes: Secretions from infected birds (virus)

Prevention:

- Observe wildlife from a distance to prevent exposure
- Avoid touching wildlife
- If in contact with wildlife do not rub eyes, eat, drink, or smoke before washing hands with soap and water
- Do not pick up diseased or dead wildlife
- Wear rubber or latex gloves while handling and cleaning game
- Clean knives, equipment, and surfaces that come in contact with game
- Do not eat, drink, or smoke while handling animals
- Cook all game thoroughly.

If you contract Avian Influenza:

- Seek medical attention
- Some studies found prescription medicines for human influenza are effective in treating some strains of avian influenza
- There is no vaccine currently available to specifically treat avian influenza

Symptoms:

- Typical influenza-like symptoms including fever, cough, sore throat, and muscle aches
- Other, more serious symptoms include eye infections, pneumonia, severe respiratory diseases, and other complications

Reporting sick or dead birds:

• Contact your state, tribal, or federal natural resource agency if a sick or dead animal is found.

Additional Information:

- http://www.cdc.gov/flu/avian/index.htm
- http://www.usda.gov/wps/portal/usdahome

Hanta Virus

Causes: Aerosolized rodent droppings (virus)

Prevention:

- Minimize contact with rodents, their droppings, urine, saliva, or nests
- Seal holes and gaps in your home, workplace, or garage
- Keep your home, workplace, and/or campsite clean
- Keep a tight-fitting lid on garbage
- Clear brush, grass, and junk or other nesting material from around building foundations
- Use metal flashing around the base of buildings to provide barriers
- Elevate hay, woodpiles, and garbage cans and locate them 100 feet or more from buildings
- Encourage the presence of natural predators such as snakes, owls, and hawks

Clean-up of infested areas:

- Put on latex gloves before cleaning
- Thoroughly wet contaminated areas with detergent or liquid
- Wipe up contaminated materials with a damp towel and mop or sponge the area with a disinfectant
- Spray dead rodents with disinfectant, then double-bag with cleaning materials
- Bury all waste, or dispose of as recommended by the local or state health department
- Disinfect gloves before taking them off
- Thoroughly wash hands with soap and water after removing gloves
- Air out areas that have been closed up for at least thirty minutes, leaving the area while it ventilates

Treatment for Hanta Virus infection (HPS):

- There is no specific cure
- Contact a doctor immediately and tell them you've been around rodents
- Infected individuals should be taken to intensive care and be given oxygen therapy as soon as possible

Symptoms:

- Early: fatigue, fever, and muscle aches of large muscle groups
- Also may be headaches, dizziness, chills, and abdominal problems
- Late (4-10 days after start): coughing, shortness of breath, sensation of suffocation
- Symptoms start to appear 1-5 weeks after exposure to rodent droppings, urine, or saliva

Additional Information:

• http://www.cdc.gov/ncidod/diseases/hanta/hps/index.htm

Rabies

Causes: Saliva of infected mammals (virus)

Prevention:

- Avoid wild animals that have lost their fear of humans or are abnormally aggressive animals, domestic or wild (only about 0.5% of mammals contract it).
- Keep pets vaccinations up-to-date.
- Never adopt wild animals or allow them into your home.
- If a pet is bitten by a wild animal, seek veterinary assistance.
- If you are in a high-risk area or job, there is a pre-exposure vaccine available.

If bitten by a rabid animal:

- Wash the area thoroughly with soap and water.
- Seek medical attention and gather the following information, if possible:
 - The location of the incident
 - o The type of animal involved
 - How exposure occurred
 - o The vaccination status of the animal
 - Whether the animal can be safely captured and tested for rabies (which requires killing the animal to examine its brain).
- There is an effective vaccine available following exposure, but no cure once symptoms develop.

Symptoms:

- Early: fever, headache, and general malaise
- Neurological symptoms: insomnia, anxiety, confusion, partial paralysis, excitation, hallucinations, agitation, hypersalivation, difficulty swallowing, and hydrophobia.
- Death can occur within days of the onset, but should be preventable if medical attention is acquired promptly.

If you see a rabid animal:

• Report rabid animals to your local animal control.

Additional Information:

• http://www.cdc.gov/ncidod/dvrd/rabies/default.htm