Knowledge is the key to disease prevention. Infectious diseases are those diseases that horses can get from each other, or via a vector, such as a mosquito, which may transmit the disease from horse to horse. Horse owners can vaccinate their horses against many of these diseases, or their veterinarian may administer the vaccinations.

Some vaccines are considered "core" vaccines that cover diseases that all horses need to be immunized against. Some horses may need to be immunized only when there is significant risk that they will be exposed to the disease in their natural environment, or if they may be exposed when traveling, showing, or competing. In addition, horses must be vaccinated at different life stages. Most vaccines need to be given annually.

**Tetanus (lockjaw)** Tetanus is caused by the bacteria Clostridium tetani. The spores of this bacteria are normally found in the soil. The bacteria need a decreased oxygen supply to multiply and produce a neurotoxin, so any area where there is a deep puncture wound or where a wound has healed over (such as the navel stump of a newborn foal) is an area where tetanus can thrive. Symptoms of tetanus include a protrusion of the third eyelid and stiff neck, progressing to overall muscle stiffness causing a 'sawhorse' stance. Tetanus is often fatal, but a yearly vaccine can prevent it, and the vaccine is a good idea because small cuts can go unnoticed and become infected.

**Equine Encephalomyelitis (sleeping sickness)** This is a disease that affects the nervous system, and can be caused by equine encephalomyelitis viruses (Eastern, Western, and Venezuelan), which are carried by mosquitoes. Signs include depression and a high fever, followed by a period when the horse appears blind, nervous and uncoordinated, with muscle tremors, and eventually, complete paralysis. Proper vaccination and good mosquito control are important to help prevent this disease.

**Equine Influenza** This viral disease is spread by inhalation of drops of infective material. Signs include a dry, hacking cough, sudden onset of fever, watery nasal discharge, weakness, loss of appetite and depression. Infection with equine influenza is rarely fatal but can cause problems such as emphysema, pneumonia or bronchitis.

**Equine Herpesvirus (rhinopneumonitis, rhino, viral abortion)** There are 2 types of equine herpesvirus: EHV-1, which causes respiratory disease (fever, cough, nasal discharge), reproductive problems (abortion, stillbirth), and neurological problems (hindlimb weakness, difficulty walking, sometimes paralysis); and EHV-4, which is usually limited to respiratory problems. Once a horse has been infected with EHV-1 or EHV-4, he will always be a carrier, and may shed the virus during times of stress.

**West Nile Virus** Horses get WNV by being bitten by an infected mosquito; some
horses do not show any signs and recover on their own, but in some horses the infection affects the central nervous system and causes signs including fever, weakness or paralysis of the hind limbs, impaired vision, lack of coordination, head pressing, convulsions, inability to swallow, and coma.

**Rabies** This is a viral infection of the central nervous system, and although it is not common in horses, rabies can be transmitted to horses by the bite of an infected animal such as a skunk, raccoon, fox, dog or bat. Rabies is fatal. Rabies can be transmitted to people. We recommend that you check with your veterinarian regarding recommendations for rabies vaccination for your horse.

**Strangles** This contagious respiratory disease is caused by a bacterial infection. Signs include a fever, thick, yellow, nasal discharge and swollen, abscessed lymph nodes under the jaws. The infection is spread by infected material from nasal discharge or abscesses contaminating stalls, feed troughs, pastures, etc. Young horses are the most susceptible to strangles.

**Potomac Horse Fever** This disease is a bacterial infection of the blood and tissues. It is much more common in spring, summer and early fall and is only found in certain areas of the country. Signs include a fever, depression, decreased gut sounds, and a profuse, watery diarrhea that can lead to laminitis, colic, dehydration, shock, and death.

*Another common condition affecting horses are worms, although not technically a disease, they are parasites. Please see our common internal parasites article for more details about worms.*