

Disease	Transmission	Causes	Clinical Signs	Diagnosis	Treatment	Prevention	Zoonotic
Equine Influenza	Multiplies in epithelial cells of upper respiratory tract. Dispersed by aerosol droplets when coughs or exhales	Two viruses: equine-1 (H7N7) and equine (H3N8)	Incubation period of 1 to 3 days. Fever of 102.5- 105.0 F). A frequent dry cough for several weeks. 'drippy' nose w/ discharge, secondary bacterial infection.	Clinical signs, isolation of influenza virus from nasopharyngeal and/ or large rise in antibody titer in equine-1 or 2 serum	Stall rest. For each day a horse has an elevated temp it should be rested for one week. Keep in dust-free environment	Vaccine- two primary injections 2 to 4 weeks apart then booster w/in 6 months, intervals of 12 months.	No
Equine Rhinopneumonitis (EHV-1, EHV-4)	Inhale virus, contact with abortion fluids	Equid herpesvirus 1, Equid herpesvirus 4	Secondary bacterial infection, Abortion, Fever of 106, clear nasal discharge, cough, rare signs: incoordination, neurological signs	Clinical signs, tissue culture and demonstration of a four-fold rise in antibody titer, virus isolation (nasal swab plus tissue)	No antiviral treatment, antibiotics given for secondary bacteria infection.	Vaccine and good management. Virus can be killed by disinfectants	No
Strangles Common disease of young horses < 5 yrs	-Contagious among horses - contact with shared food and water buckets	<i>Streptococcus equi</i>	2to 14 days incubation. Fever (104 F), depression, loss of appetite, unwilling to swallow. Enlarged, hot, painful lymph nodes (abscesses). Will stand with neck stretched and head pointed forward	Clinical signs, high titer of <i>S. equi</i> antibodies	Treatment depends on stage of disease in animal. Early diagnosis- antimicrobial treatment. Isolation from other non-infected animals and proper cleaning of common tools -Lymph node abscesses, drain + flush, antibiotic		No
Equine Viral Arteritis Can be a problem in race horse industry	Airborne respiratory tract secretion, indirect contact with virus-contaminated objects	Equine arteritis virus (EAV) ²	3-14 days incubation period. Respiratory illness, fever (up 106 F), limb edema esp. hind limbs, depression, anorexia, swelling around eye, nasal/ ocular discharge, skin rash, swelling of scrotum and prepuce in stallion.	Clinical signs, virus isolation and/or corroborative serological or histopathological data. Nasopharyngeal, conjunctival swabs, citrated blood samples, semen	No antiviral treatment, symptomatic treatment, rest	Vaccine , Only Kentucky and New York have implemented measures to control spread in thoroughbred population	No

<p>Eastern, Western, and Venezuelan Encephalomyelitis</p> <ul style="list-style-type: none"> -inflammation of the brain -recovery of unvaccinated animals is rare 	<p>Insect contact</p> <p>Rodents, birds and reptiles act as reservoir host (living quarters)</p> <ul style="list-style-type: none"> -mainly mosquitos 	<p>Group of viruses called Togaviradae</p>	<ul style="list-style-type: none"> -Incubation of 1- 3 days -High morbidity and mortality WEE and EEE: Mild to severe fever, poor appetite, stiffness -Depression, aggression, excitability, head pressing, blindness, circling, head tilt, facial fasciculation, paralysis of pharynx, larynx, tongue, recumbency, death. VEE: diarrhea, severe depression, recumbency, death before neurological signs 	<p>Clinical signs, presence of associated epidemiologic features. Serology (serum antibodies), necropsy</p>	<p>No treatment</p>	<ul style="list-style-type: none"> -Insecticides, repellents, getting rid of standing water, in an endemic area environmental insecticide application and screened stalls -vaccination 	<p>Zoonotic but is rarely spread from horse to human</p>
<p>Equine Infectious Anemia</p> <ul style="list-style-type: none"> -Life time infection -Severity depends on the dose and virulence of virus -Acute and Chronic -Can affect donkeys and mules 	<p>Carried by horseflies, horse to horse and hypodermic needles</p>	<p>Virus</p>	<ul style="list-style-type: none"> -Fever, anemia, jaundice, depression, edema, and chronic weightloss - Internally: damage to kidney, liver, spleen, lymph nodes, bone marrow and brain 	<p>Clinical signs, Coggins test to detect antibodies</p>	<ul style="list-style-type: none"> -No treatment -Positive animals are a danger to other horses -Positive animals in most states must be euthanized -No vaccine 	<ul style="list-style-type: none"> -Control of protecting negative animals from infected animal -Negative Coggins test to enter all states for either show or trade -Positive animals must be reported to state and federal agencies. 	<p>No</p>
<p>Tetanus</p>	<p>Deep puncture wounds</p>	<p>Bacteria <i>Clostridium tetani</i> (gram positive) found in the soil</p>	<ul style="list-style-type: none"> -2 days to 1 month incubation -Hyperresponsiveness to light, touch or sounds, prolapsed of third eyelid, gait stiffness, neck stiffness, fever, elevation in heart rate, elevation of respiratory rate, muscle spasms, 	<p>Clinical signs, No laboratory blood work, Based only on wound history and clinical signs</p>	<ul style="list-style-type: none"> -Treatment right away, Penicillin to destroy vegetative form of bacteria, antitoxin to get immediate passive immunity lasting 7-14 days. 	<ul style="list-style-type: none"> -Vaccination 	<p>No</p>

			erect ear, trismus(lock jaw)				
Potomac Horses Fever (Related to horses that dwell within 5 miles from a river)	Insect (tick) or arthropod to horse, not horse to horse	Bacteria <i>Ehrlichia risticii</i>	-Profuse, watery diarrhea, low grade fever, depression, shock, and laminitis	Clinical signs, Blood test, look for high antibodies, short term diagnosis is best made on the basis of response to treatment with Tetracycline	- Tetracycline (antimicrobial) to kill the infection and supportive treatments IV fluids and anti-inflammatory drugs for laminitis	-Vaccination esp. for horses in endemic areas -Vaccinate once then vaccinated twice afterwards, 3 to 4 weeks apart -Booster every spring and mid-summer each year after	No
Borreliosis (Lyme Disease) (Seen in summer in the Northeast, Midwest and Northwest regions of the US)	Deer tick (<i>Ixodes</i>) bites, the longer the tick feeds on the host the greater the probability the infection will be transmitted.	Bacteria <i>Borrelia burgdorferi</i>	-Lameness, arthritis, joint swelling neurological disease, uveitis (an eye disorder), dermatitis, death of foals. -Arthritis is the most commonly reported clinical sign	-Clinical signs and blood test to look for elevated antibody titer. However this test only indicated that the horse has been exposed to <i>Borrelia burgdorferi</i> -Rule out other diseases	-Treat with antibiotics, some animals might need prolonged therapy. -Tetracycline and ampicillin may be the best antibiotics -Length of treatment is guided by clinical response (10 to 30 days)	-No vaccine -Avoid tick infested areas such as woods and high grass, careful grooming	No but ticks can cause Lyme disease in humans as well
Equine Salmonellosis (Most common cause of infectious enterocolitis in adult horses)	-Fecal-oral route from contaminated feed (soil or feces contaminated) -Risk factors: transportation, change in diet, antimicrobial treatment, surgery. -Hard to find source of infection	Bacterial species of <i>Salmonella</i> -Will grow in GI (Colon and Cecum most common) tract, invade the intestinal epithelium	-Diarrhea most common, due to malabsorption, leakage of fluids between intestinal cells. Green to black feces. -Colic, lethargy, anorexia - Can develop without diarrhea	-Clinical signs, Low white blood cell count, Microbiologic culture of feces, tissue or body fluids, Polymerase chain reaction (PCR).	-Supportive care, fluids (electrolyte and water) -Flunixin meglumine (Banamine, Scheing Plogugh) -Dietary management of diarrheic horse.	-No vaccine, id source of infection, sick horse should be kept isolated from other. Humans should wear boot covers, gloves, masks and protective clothes to control the spread of infection. -Removal of feces, disinfection of foaling areas	Yes, can be spread between horses and people
West Nile Encephalitis	-Mosquito-borne	-Virus, infects the central	-Encephalitis, loss of appetite, depression,	-Clinical signs, but rule out other disease	-No treatment, weakened and	-Vaccine (series of two doses given 23	-Not shown

<p>-Infected birds are the reservoir host of West Nile, Mosquitoes feed on these birds, then infect a horse by biting it.</p>		<p>nervous system -Incubation is about 5 to 15 days</p>	<p>fever, weakness of hind limbs, paralysis of hind limbs, impaired vision, ataxia, head pressing, head tilt, aimless, wandering, convulsion, inability to swallow, circling, hyper excitability, or coma</p>	<p>first such as rabies, botulism, Equine protozoal myeloencephalitis (EPM), Eastern, Western, and Venezuelan equine encephalitis. - Postive diagnosis of West Nile can only be made by examination of blood</p>	<p>impaired horse should be protected from injuring themselves, Fluids and nutrient supportive therapy may also be required.</p>	<p>to 4 weeks apart). Horses vaccinated against Eastern, Western and Venezuelan equine encephalitis are not protected -Important to implementing pest control measures such as keeping horses stable during dusk and dawn, prohibiting birds from roosting in stables, examine property for dead birds (crow esp.), get rid of breeding growing for mosquitoes, cleaning water troughs twice a week</p>	<p>but use caution with handling blood, spinal fluid, or nervous tissue from suspect animals</p>
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Common Horse Disease