Vaccines

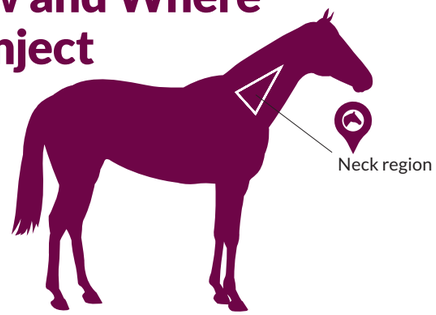
Check with Your Veterinarian

Regular vaccination protection is vital to your horse's health and life. Just as important is administering the correct product at the right time. Along with this brochure, your veterinarian can help you in making the right choices. A good time to discuss this with your veterinarian might be during your horse's annual medical check-up.

CHECK with YOUR VET

BE SURE IT'S RIGHT FOR YOU.

How and Where to Inject



Injection sites include specific areas wherein there is sufficient muscle mass to receive the needle and little chance of accidentally hitting bone or puncturing a nerve, tendon, or major blood vessel.

Neck Region

Most frequently used. Extreme care necessary to hit safe "triangle" of muscle—neither too high in the neck into the large ligament (ligamentum nuchae), nor too low in the neck close to the cervical vertebrae (neck bones). Avoid the jugular area.

Please Note

- Make sure horse is healthy and has a normal temperature before vaccinating
- All vaccines must be handled properly
- Keep vaccines at appropriate storage temperatures per label recommendation
- Use vaccines before expiration date

Step-By-Step Injection Guide

1. Use 20–22 gauge, 1.5-inch needle.
2. Use new, sterile needle for each dose of vaccine and for each horse.
3. Keep needle sheathed until immediately before use.
4. Disinfect skin with alcohol. Tap skin a few times and advance needle in quickly, deep into muscle, straight in and all the way to the hub.
5. Carefully attach syringe to inserted needle. Pull back plunger slightly to insure you are not in a blood vessel. Blood will appear if you are. If so, withdraw needle and try again.
6. After withdrawing needle, massage site for 30 seconds after injection to distribute vaccine.
7. Allow horse to rest and get free exercise for 2 to 3 days following vaccination, during which time your horse may experience slight soreness and lethargy.

RET-4037-After Market Equine Brochure US/MUL/0419/0020a

MERCK Animal Health

Horses

Get Vaccinating Right

The Importance of Vaccines

Properly administered vaccinations represent the most economical tools available to help prevent infectious diseases. Illness can take an enormous toll on your horse's well-being and performance, and may even jeopardize its life.

Risks Are Everywhere

Any horse can get sick at any time. However, horses that are on the move—to horse shows, rodeos, the racetrack, the breeding shed, trail rides, etc.—are especially susceptible to diseases spread by other horses. In addition, travel stress can weaken the immune system horses use to naturally fend off illness.

Preventative Treatment

Vaccinating your horse at the right time, well before exposure to viral and bacterial diseases is extremely important. Your veterinarian remains the best source for advice on an appropriate immunization program and other aspects of your horse's health.

Checkpoint: A New Choice

For years horse owners have trusted Merck Animal Health's safe and effective line of equine vaccines as part of their veterinarians' recommended total healthcare program for horses. These products earn high marks for consistent quality, effectiveness and reliability as well as ease of administration.

Healthier Animals Checkpoint, from Merck Animal Health, is designed to assist horse owners who choose to vaccinate their own horses. Checkpoint gives vaccine choices and administration timing tips.

This brochure will help you select the products that best fit your horse's needs. Remember, no single vaccination program fits all horses.

Considerations

Vaccination programs may vary depending upon needs specific to your horse. Factors to consider might include:

- Environment
- Age
- Use
- Travel
- Gender
- Other

Based on these factors, make sure you consult with your veterinarian concerning the appropriate vaccination program for your animal. Keep in mind that the program should be re-examined as time and circumstances change.

Know the Diseases

The diseases to which horses are vulnerable vary widely. Some are blatant; others pose hidden threats. Some target younger horses while others affect all ages. The key to good health for your horse is in knowing when, how and where these enemies might strike—and how to best prevent them. To follow are brief descriptions of the more common equine diseases. Consult your veterinarian for more extensive information.

Core Vaccines

The American Association of Equine Practitioners (AAEP) has created a category of vaccinations called core vaccinations. Core vaccines have clearly demonstrated efficacy and safety, with a high-enough level of patient benefit—and low-enough level of risk—to justify their use in all horses. These are vaccines against diseases that:

- Are endemic to a region
- Are virulent/highly contagious
- Pose a risk of severe disease
- Have potential public health significance and/or are required by law

Eastern/Western Equine Encephalomyelitis (EEE/WEE) EEE/WEE are viral infections of the horse's brain and spinal cord. The virus is maintained in reservoirs (primarily birds and rodents) and transmitted to the horse by the bite of an infected mosquito. The disease is fatal in 50-90 percent of cases. Venezuelan Equine Encephalomyelitis (VEE) is a risk-based disease. VEE vaccine is available in combination with EEE/WEE vaccine for use when indicated.

Tetanus Also known as "lockjaw", this disease stems from exposure to *Clostridium tetani* bacteria. Tetanus toxins cause muscles to spasm and go rigid, and respiratory paralysis and dehydration can lead to death.

West Nile Virus West Nile virus affects horses, humans and birds. Spread only by mosquitoes, it is not directly contagious from a sick animal. Symptoms vary widely and generally include neurological signs such as ataxia (wobbliness) and muscle twitching (especially in the lips, neck and chest). Most horses will also have a fever, lethargy and decreased appetite. Some horses show no symptoms at all. Mortality may be as high as 30 percent. Vaccination is strongly recommended for all horses regardless of location.

Rabies Occurs through transmission of the virus from saliva of an infected (rabid) animal, usually through a bite. The virus migrates via nerves to the brain where it initiates rapidly progressive encephalitis. Always fatal.

Risk-Based Vaccines

According to the AAEP, risk-based vaccines are administered on the basis of a risk assessment performed by your veterinarian. Criteria can include your horse's age, exposure level and geography. Use of these vaccines may vary among individuals, populations and/or geographic regions.

Flu *Equine Influenza*, the flu, has symptoms which include fever, dry cough, runny nose, dehydration, poor appetite, lethargy, and sometimes secondary pneumonia. Death is rare and most horses recover, but the flu is highly infectious and results in lost time and money. Vaccination recommendations vary depending upon disease risk assessment.

Rhinopneumonitis *Equine Herpesvirus (EHV)*, sometimes called "rhino", has two main types: EHV-1 and EHV-4. EHV-1 is most virulent and can cause respiratory disease, abortion, foal death and neurologic disease. EHV-4 is more common in young horses and usually only causes respiratory problems. Vaccination recommendations vary depending upon disease risk assessment. Pregnant mares need specifically labeled EHV-1 vaccinations as an aid in the prevention of EHV-1 induced abortions.

Other Diseases Other common diseases seen in North America include Potomac Horse Fever, Botulism, Strangles, Anthrax, Leptospirosis and Equine Viral Arteritis. Consult your veterinarian on the risks in your area.

Flu Strains

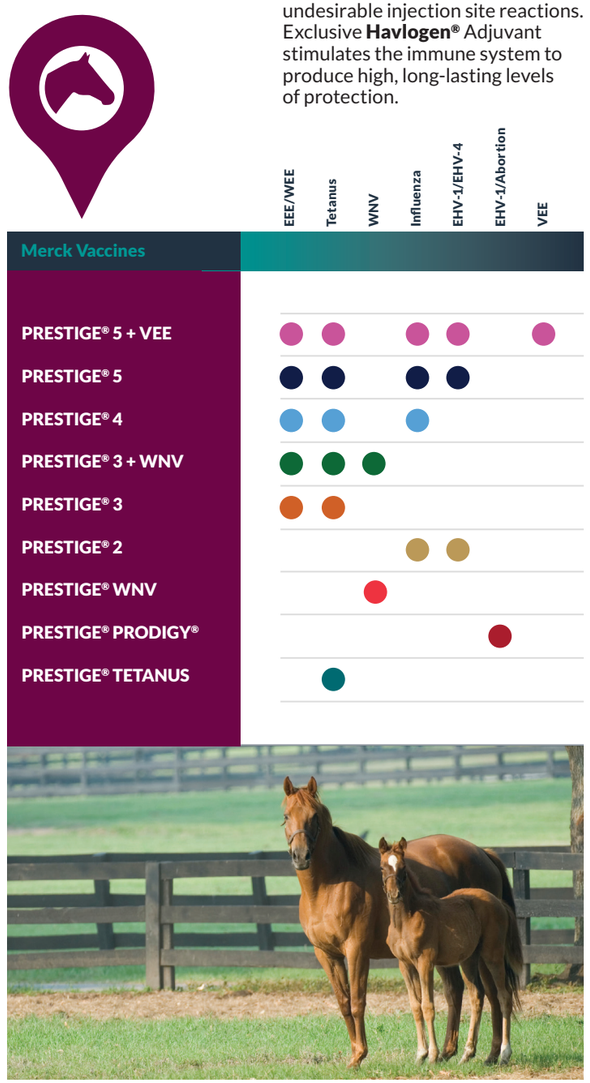
Equine influenza (EIV) is caused by highly variable strains of the influenza A (H3N8) virus. It spreads rapidly with clinical signs appearing within 24 to 48 hours following exposure and can be transmitted more than 50 yards through the air by a coughing horse. In an unvaccinated horse population that has never been exposed to the virus with updated flu, EIV has a nearly 100% infection rate.

New Prestige® vaccines with updated flu strains are based on data collected in the ongoing Equine Respiratory Biosurveillance Study co-sponsored by Merck Animal Health and University of California, Davis, School of Veterinary Medicine.

Updated influenza strains include Florida '13 Clade 1, Richmond '07 Clade 2 and Kentucky '02 strains. These new strains meet the World Organization for Animal Health (OIE) and American Association of Equine Practitioners (AAEP) guidelines for Clade 1 & 2 influenza protection.

Know the Antigens

Antigen Purification System™ (APS) reduces the debris that can cause undesirable injection site reactions. Exclusive **Havlogen®** Adjuvant stimulates the immune system to produce high, long-lasting levels of protection.



Know the Vaccines

PRESTIGE® 5 + VEE — Horse 5-way + VEE
Effective Against: Eastern/Western/Venezuelan Equine Encephalomyelitis (EEE/WEE/VEE), Equine Influenza (EIV), Equine Herpesvirus types 1&4 (EHV-1&4) respiratory and Tetanus

PRESTIGE® 5 — Horse 5-way
Effective Against: Eastern/Western Equine Encephalomyelitis (EEE/WEE), Equine Influenza (EIV), Equine Herpesvirus types 1&4 (EHV-1&4) respiratory and Tetanus

PRESTIGE® 4 — Horse 4-way
Effective Against: Eastern/Western Equine Encephalomyelitis (EEE/WEE), Equine Influenza (EIV) and Tetanus

PRESTIGE® 3 + WNV — Horse 3-way + WNV
Effective Against: Eastern/Western Equine Encephalomyelitis (EEE/WEE), Tetanus and West Nile Virus

PRESTIGE® 3 — Horse 3-way
Effective Against: Eastern/Western Equine Encephalomyelitis (EEE/WEE) and Tetanus

PRESTIGE® 2 — Horse Flu/EHV (Rhino)
Effective Against: Equine Influenza (EIV) and Equine Herpesvirus types 1&4 (EHV-1&4) respiratory

PRESTIGE® WNV — Horse WNV
Effective Against: West Nile Virus

PRESTIGE® PRODIGY® — Equine Herpesvirus Type 1 (EHV-1)
Effective Against: Abortion and respiratory disease caused by EHV-1 (Administer to Pregnant Mares in the 5th, 7th, and 9th months of pregnancy)

PRESTIGE® TETANUS — Tetanus Toxoid
Effective Against: Tetanus

For More Information

More descriptions and information can be found at **www.getvaccinatingright.com**.