

On Farm Vaccination For your Small Animal Companions

Why Vaccinate?

The perfect barn dog is one that is a protector. One that is independent and self-sufficient all while still providing us companionship. A welcome barn cat is one that keeps unwanted rodents out of our barns. Both dogs and cats provide services to ensure our farms run efficiently and safely. With all this said, these small animal companions need routine veterinary care just like our livestock. Additionally, keeping healthy pets on our farms is critical for the safety of our families. We can provide this by initiating a preventative care program with your herd health veterinarian which includes routine vaccination.

Routine vaccination not only keeps our dogs and cats healthy, but it also helps keep unwanted disease out of our barn that may be contagious to our livestock species, mainly, Rabies¹ and Leptospirosis². Additionally, dogs and cats that are immunosuppressed due to preventable viruses are more likely to harbor and shed different protozoa such as Neospora³ and Sarcocystis⁴, both of which are detrimental to our livestock species.



Core Dog Vaccines and Schedule

Disease	Transmission	Schedule
Rabies¹	Through saliva and/or a bite from an infected animal	16 weeks – initial One year - booster Then every 3 years thereafter
DA2PP (Distemper, Adenovirus (Hepatitis), Parvovirus, Parainfluenza Virus)	Airborne, <i>contact with nasal or eye secretions</i> , and contact with the feces or urine of infected dogs or wildlife	8 weeks – initial 12 weeks – booster 16 weeks – booster One year - booster Then every 3 years thereafter
Leptospirosis²	Water contaminated with infected urine through wildlife, such as stagnant water like puddles, ponds or even on moist grass	12 weeks – initial 16 weeks – booster One year – booster Then yearly thereafter

Core Cat Vaccines and Schedule

Disease	Transmission	Schedule
Rabies	Through saliva and/or a bite from an infected animal	16 weeks – initial One year - booster Then every 3 years thereafter
FVRCP (Feline Viral Rhinotracheitis, Calicivirus, and Panleukopenia)	Airborne, <i>contact with nasal or eye secretions.</i>	8 weeks – initial 12 weeks – booster 16 weeks – booster One year - booster Then every 3 years thereafter
FeLV (Feline Leukemia)	Primarily through saliva between cats	12 weeks – initial 16 weeks – booster One year – booster Then yearly thereafter

1 - Rabies

Rabies is a reportable disease in Ontario. The virus is transmitted through contact with saliva or brain tissue from an infected animal. It can be transmitted through broken skin or mucous membranes in the eyes, nose, or mouth. Transmission to people is usually through getting bit from a rabid animal.

Livestock can encounter the rabies virus via multiple modalities. Wildlife is the more common route of transmission; however, companion animals can also transmit the deadly virus to our cattle. While the last confirmed case of rabies in Ontario was in 2018, rabies in livestock is most reported in bovines.

2- Leptospirosis

Leptospirosis is a bacterium that is transmitted through the urine of wild animals. Dogs can become infected with this disease by drinking stagnant water such as water in ponds, creeks etc. While leptospirosis strains are adapted to their “maintenance hosts” they can cause disease in any species regardless of the strain. This means, dogs and cattle have their own adapted strains, but they can each become infected with each other’s strain.

Leptospirosis can induce significant economic losses caused by reproductive disorders in cattle herds. This bacterium causes abortions in the last trimester. Leptospirosis is also a zoonotic pathogen meaning it can be transferred to humans via urine or milk from infected dams.

3 – Neosporosis

Neospora caninum is a protozoal organism that is shed in the feces of infected dogs. The dog is the “definitive host” of this parasite meaning it must live in the dog to develop and shed. Dogs that are young and unvaccinated, or infected with co-morbidities such as viral agents are more likely to develop detrimental infections and shed.

While there is no vaccine for this organism, keeping dogs with strong immune systems is an important part to control. It is important to know that even healthy dogs can spread this organism so most importantly it is important to keep dogs out of access to feedstuffs. Neospora is a highly detrimental to cattle reproduction as it causes high rates of abortion in animals 5-6 months pregnant.

4 – Sarcocystosis

Sarcosystis is a very similar protozoal agent to Neospora. This is another protozoon that dogs acquire due to ingestion of infected meat (from consuming livestock or wildlife). After acquisition of the protozoa, the cysts are passed through feces where they can infect our livestock. Clinical signs associated with sarcosystis in cattle can include fever, decreased milk yield, diarrhea, muscle spasms, anemia, and weakness. Infection during pregnancy can lead to abortion and stillbirths.

Dogs and cats infected with severe infections are frequently young, unvaccinated or have concurrent morbidities such as underlying viral causes. As above, all dogs are susceptible but dogs with stronger immune systems are more likely to fight off infections.

Ask your herd health veterinarian about vaccinating your farm companion animals today!

Dr. Brooke Galloway, DVM
