

Henlow Veterinary Hospital

LEPTOSPIROSIS & the L4 VACCINE

WHAT it is, WHY we vaccinate and why we RECOMMEND using the L4 Vaccine.

WHAT is Lepto?

Leptospirosis, or 'lepto', is a bacterial infection generally spread in the urine of infected animals, predominantly rats. Many mammals can contract the disease including dogs and humans (where the condition is known as Weil's disease).

Dogs tend to get infected after contact with contaminated water, urine or soil. Though working dogs, those that access wooded areas, farms or water are at most risk, even urban dogs with no access to wildlife or water courses have been diagnosed with lepto. The infection can cause severe damage to the liver and kidneys, but is also capable of affecting other organs such as the heart and eyes. Infection may eventually result in organ failure and death if not treated.



WHAT is the Difference Between L2 and L4 Vaccines?

The group of bacteria (*Leptospira*) causing lepto can be subdivided further into subgroups (known as serogroups). The traditional L2 vaccine covers the Canicola and Icterohaemorrhagiae subgroups. In recent years two new subgroups (Australis and Gryppotyphosa) have been found to be responsible for a number of cases across Europe.

Though Gryppotyphosa is only occasionally found in UK wildlife, it is a common cause of leptospirosis in Europe and with ever increasing numbers of dogs travelling to the UK from the continent and vice versa, there is a growing risk to UK pets. As such, the L4 vaccine was developed to also protect dogs against these two new subgroups.

VACCINATION

Vaccines are available for dogs for the disease. Leptospirosis has been classified by the BSAVA (British Small Animal Veterinary Association) as a core vaccine- one that all dogs should receive, regardless of circumstances or geographical location. Vaccines are only classified as core if they protect animals from severe, life-threatening diseases.

The primary course of vaccinations involves two injections, 3-4 weeks apart. After this, boosters are carried out annually. Vaccination against lepto does not prevent the risk of infection, but does greatly reduce the chance of infected dogs actually developing the disease.

The vaccine also prevents dogs becoming carriers of lepto and spreading the infection to humans and other animals.



WHY We Recommend the L4 Vaccine

We strongly advocate using the L4 vaccine as it protects your dog against all four of the subgroups as opposed to merely the two covered by the older L2 vaccine.

Despite anecdotal reports to the contrary, the risk of side effects occurring with the L4 vaccine is in fact very low, particularly in comparison to the risk of serious organ damage and even death in many unvaccinated dogs that become infected with Lepto.

For all medications, including vaccines, a database is kept by the VMD (Veterinary Medicines Directorate) which records the number of any suspected adverse events or side effects associated with their use. Adverse events can be anything from very mild side effects to fatal reactions.

For both the L2 and L4 vaccines the risk of adverse reactions is classified as rare (with adverse events occurring in less than 10 dogs per 10,000 dogs vaccinated). Specifically the risks are as follows:

- L2- 0.015% (less than 2 in 10,000)
- L4- 0.069% (less than 7 in 10,000)

These values represent all effects classed as adverse events, including those which are very mild. As such it's important to bear in mind that the risk of fatality associated with either vaccine will be even lower than this. The key point to remember is that the overall risk with either vaccine is very low.

Any marginal difference in risk is greatly outweighed by the additional protection the L4 vaccine provides to your dog against the extra strains of lepto that we are concerned about currently.



CONCLUSION

Lepto is a disease that can be life-threatening to you and your pets, but it is preventable. Vaccination is important to protect your dog from developing the disease and passing it on to your family and other pets.

The risk of side effects associated with vaccination for Lepto is statistically very low.

The L4 vaccine provides more comprehensive protection against Lepto than the L2 vaccine.

