Further information

The overall incidence of suspected adverse reactions for both L2 and L4 vaccine products is considered rare using the following standardised convention:

- very rare (less than 1 animal in 10,000 animals, including isolated reports)

- rare (more than 1 but less than 10 animals in 10,000 animals)

- uncommon (more than 1 but less than 10 animals in 1,000 animals)

- common (more than 1 but less than 10 animals in 100 animals)

- very common (more than 1 in 10 animals displaying adverse reaction(s) during the course of one treatment).

The majority of reported signs are linked to allergic type reactions which are well recognised potential side effects of any vaccine, and are presented on the product literature. Vets are advised to note that for some brands of L4 vaccines, administering a vaccine that is cold may cause local/systemic reactions, therefore please read the summary of product characteristics (SPC) for these products and ensure these vaccines are always used at room temperature.

The veterinary surgeon and the client should discuss and agree a vaccination programme for an individual animal. This should be based on the local epidemiological situation and risk of leptospirosis, balanced with the potential risks as outlined in the SPC. Careful consideration should be given to whether the additional protection provided by vaccines containing four strains of *Leptospira* versus those containing two is necessary in each individual dog, depending on their individual circumstances. Dogs that travel from the UK to mainland Europe where there is a known risk of infection with Bratislava and Grippotyphosa should be vaccinated with all four strains.

All suspected adverse events should be reported to the Marketing Authorisation Holder or the VMD. You can submit an interactive reporting form online via the gov.uk website at the following link: https://www.gov.uk/report-veterinary-medicine-problem.

To receive all the latest news and alerts from the VMD, please sign up to our RSS feed or email alerts at https://www.gov.uk/government/organisations/veterinary-medicines-directorate