

# What vaccines do my pets need?

Vaccines have revolutionised health care for pets, so that diseases that in previous times occurred in epidemics killing large numbers of pets are now uncommon. However, there is a current revolution in the way that we vaccinate our pets, for a number of reasons.

## Vaccine risks

Recent studies of vaccination show that the procedure is not always risk-free – possible links to autoimmune haemolytic anaemia, and local fibrosarcomas (tumours at the vaccine site) have been suggested. It must be remembered that these risks are extremely small, and do not outweigh the benefits of giving the most important vaccines. It does become an important issue in countries such as the United States where pets receive vaccination against a large number of diseases as compared to the New Zealand situation, where we are lucky to have fewer infectious diseases.

## Vaccine frequency

Most importantly, recent research has shown that vaccines have a longer term of effectiveness against disease than previously thought. This varies depending on the particular vaccine, but for some vaccines vets are now suggesting two or even three-year intervals after the initial shots and a 12-month booster.

## Core and Non-Core vaccines

Most owners realise that vaccines are an important part of health care, but they want to be well informed and give their pets only those vaccines that they require. This has led to the important concept of 'core' and 'non-core' vaccines. Core vaccines are those against very important and fatal diseases that should be given to every pet. Non-core vaccines are recommended only for certain pets depending on factors such as: age, breed, health status of the pet, the potential exposure of the pet to an animal that has the disease, the type of vaccine and how common the disease is in the geographical area where the pet lives or may visit. This is all in line with current veterinary medicine – tailoring health care programmes to suit individual pets.

## Dog Core Vaccines

**Distemper:** Thanks to vaccination, distemper is no longer as common as it used to be. The main source of infection is inhalation during close dog-to-dog contact. The virus causes gastrointestinal and then nervous disease, and without intensive care many dogs die.

**Parvovirus:** Canine parvovirus is a small but extremely hardy virus that can survive in the environment for long periods. Although we no longer see epidemics of parvo, the disease still

occurs in unvaccinated dogs, many of which die from severe gastroenteritis.

**Canine hepatitis:** Canine Adenovirus 1 Infection may cause acute fatal inflammation of the liver or may result in chronic liver disease. Vaccination using canine adenovirus type 2 stimulates immunity against infectious canine hepatitis and the adenovirus involved in kennel cough. Canine parainfluenza virus, another of the agents that causes tracheobronchitis (kennel cough) is also included in the core vaccine.

These core vaccines (which are included together in one injection) are recommended for all dogs, as the diseases they protect against are widespread and often fatal. Vaccination is required at six, nine and 12 weeks of age, and an annual booster. This vaccine has been found to give long term immunity, so re-vaccination intervals after this time may be every two or three years.

## Dog Non-Core Vaccines

**Kennel cough:** Kennel cough is a contagious upper respiratory tract disease usually occurring where dogs are in close contact – such as at boarding kennels and shows. A variety of infectious agents may be involved including several viruses and the bacterium *Bordetella bronchiseptica*. The usual symptom is a persistent dry cough, although some dogs become more unwell, and in rare cases the disease may progress to pneumonia. While vaccines offering protection against all infectious agents involved in kennel cough are not available, dogs can be protected from the most common causes.

Injectable and intranasal *Bordetella* vaccines are available, and boosters will be recommended yearly or more often to at-risk dogs (going into kennels or dog shows).

**Leptospirosis:** The leptospiral bacteria that dogs are susceptible to, which can also be passed to humans, is carried by rat populations and spread via contact with infected urine. The liver and kidneys are the main organs affected. If not treated in the early stages, leptospirosis in dogs is usually fatal. Leptospirosis in dogs is most frequently seen in the upper North Island, though it is thought the bacteria may be spreading south. Vaccination is recommended for all dogs that live or travel in this region, especially to farms, rivers and other places where rats occur.

**Dental bacteria:** A new vaccine that helps in the fight against periodontitis may be recommended for at-risk dogs. Refer to our Dental Focus on page 20.

## Cat Core Vaccines

**Feline Panleukopaenia (Enteritis) Virus:** Panleukopaenia is caused by a feline parvovirus and spreads rapidly, causing a severe enteritis with a high mortality rate, especially in younger cats. Kittens are vaccinated at 9 and 12 weeks of age, then after a one-year booster vaccination is recommended every two-to-three years.

**Feline Calicivirus and Herpes (Rhinitracheitis) Virus:** These viruses cause the majority of upper respiratory infections, or 'snuffles', and can be spread by carrier cats. Vaccination will not provide total clinical immunity to the diseases, but will minimize the severity of upper respiratory infection. Re-vaccination intervals depend on risk factors (such as going into communal catteries).

## Cat Non-Core Vaccines

**Feline Immunodeficiency Virus (FIV):** Feline AIDS is caused by infection with feline immunodeficiency virus (FIV). The prevalence of FIV in New Zealand is relatively high - studies suggest that 14% of cats, and up to 27% of unwell cats are infected with the virus. The primary route of virus transmission is through a bite wound from an infected cat. The outdoor life that many New Zealand cats lead puts them more at risk of cat fight wounds and contracting the virus. The virus acts by suppressing the immune system. Refer to our article on FIV in Paws issue 27 for more information. A

relatively new vaccine, FIV may be considered a core vaccine in some areas and for some cat lifestyles.

**Feline Chlamydia:** This disease is part of the respiratory tract complex, and may be recommended for some cats (especially in cattery situations).

**Feline Leukaemia Virus (FeLV):** The virus causes both neoplastic and non-neoplastic disorders. The immune system is depressed predisposing affected cats to other infections. FeLV is recognised as the most important infectious cause of mortality in cats worldwide. New Zealand is therefore something of an exception, as it is still uncommon here.

**By discussing the lifestyle and locality of your pets with your vet, and so considering the risks that they face, you can work out a vaccination plan that protects them while not giving them vaccines that they do not require. Remember that vaccination visits are also important as your pets receive a thorough health check, which will be scheduled at least once or twice yearly whether or not vaccines are required.**

