

## Dog Vaccinations - the what and the why!

A puppy will have injections and as an adult, annual boosters, but there is generally little understanding of what we are protecting them against and why it is so important.

The vaccination programme covers five main diseases:

### Distemper

- This is a viral disease which affects dogs, ferrets, badgers and foxes. It is spread by direct contact with affected animals and the signs of the disease are variable. The disease can be fatal or leave dogs with permanent neurological changes or blindness. Having your dog vaccinated is a very effective way to protect them from the disease and as a result, the disease is well controlled in the UK although it is still occasionally seen.

### Infectious Canine Hepatitis

- This very resistant virus can survive for months in the environment. It causes severe and potentially fatal liver damage. Again, having your dog vaccinated is a very effective way to protect them from this disease as it is very well controlled in the UK though still occasionally seen.

### Parvovirus

- This virus, known as "parvo" is widespread in the UK and is highly contagious. It can contaminate the environment for months or even years. It is seen regularly across the country and unvaccinated dogs of any age can be affected. Symptoms include loss of appetite and depression which can rapidly progress to profuse vomiting and bloody diarrhoea. Dogs can and do deteriorate rapidly and succumb to dehydration, shock and secondary infections. Aggressive supportive and antiviral therapy can lead to recovery but the outcome cannot be guaranteed, especially in puppies. Regular vaccination is very effective at preventing this disease.

### Leptospirosis

- There are several strains of the bacteria that cause this disease, known as "serovars". The bacteria are carried and shed by a host of species, most commonly rats and other rodents, so is very common in the surrounding area. The bacteria can survive for some time in damp conditions and are easily spread to dogs in areas such as ditches and stagnant pools, either through drinking the water or directly through cuts and skin grazes. Leptospirosis mainly affects the liver and kidneys and can be very severe and even fatal. Again, aggressive supportive therapy and antibiotics can be successful in treating the disease but vaccination is very effective against the main strains of the disease.

### Kennel Cough

- This highly infectious upper respiratory disease of dogs covers a range of bacteria and viruses. Like the human cold or flu, it is highly contagious. However, the name is misleading as most dogs contract the disease through meeting other dogs or sniffing where they have been on walks and not from visiting a kennel. A honking cough often accompanied by a high temperature and tiredness are the main symptoms. The coughing can last for a good period of time and the disease can move to the chest, causing bronchitis. Vaccination protects against the two main causes of the disease so it is advisable to have your dog vaccinated if they go out and about. It is usually the case that most kennels would require your dog to have had this vaccination in order to board.

## The facts and the fiction!

Vaccination guidelines are regularly and independently reviewed and published. This guidance states that dogs should be vaccinated against the widespread and common "core" diseases. Puppies will need an initial course of at least two vaccinations to kick start and maintain the immunity process and boosters will then be required annually to maintain the protection.



It is a misconception that a dog will not need another vaccination after the initial course. Vaccinations stimulate the dog's own immune system into producing antibodies and it is these antibodies, not the vaccine itself, that protects your dog against infection.

Your dog's immune system will respond differently to different types of vaccine and is only capable of a certain level of response. The protection created by the leptospirosis and kennel cough is relatively short lived and your dog will need an annual booster to maintain their immunity.

A viral vaccine stimulates a longer lasting response and as such is repeated at the first booster and then every third year which provides on-going protection.

Another misconception is that after a dog has had several years of vaccinations, they will have "built up" enough immunity. This is not the case and just like humans, as they get older, their immune system is likely to be less robust so they are more likely to need regular vaccinations rather than less.

There is a feeling in some circles, that vets "over vaccinate" dogs. Going back many years, dogs were routinely vaccinated with the viral element on an annual basis. However, since that time updated research has indicated that every third year ensures that a dog is adequately protected without over vaccinating so although your dog may receive a vaccination each year, it will not be a vaccine for all the the core diseases.

The importance of vaccination cannot be stressed enough. It is a simple preventative treatment for a possibly fatal disease in your dog. By maintaining immunity across the UK dog population the incidents of these diseases is reduced and in turn lowers the risk of infection.

Unfortunately, as these diseases occur less often, people can become complacent and do not bother or choose not to vaccinate their dog. An unvaccinated dog may be lucky and escape infection but this is only due to the historic and current vaccination of other dogs across the county. If this practice continued then it would lead to the resurgence of these serious infections that are currently considered uncommon. No-one who has treated, nursed or lost a dog to parvovirus would ever consider not vaccinating their dog.

## TITER Testing

There is an alternative to vaccination if you still have concerns. This is a test called a titer test (pronounced TIGHT er). A titer test provides a "snapshot" look at whether your dog has adequate levels of antibodies to a disease but does not provide information as to how long these levels will last. It involves taking a blood sample from your dog, sending it to a laboratory and measuring the existence and level of antibodies to a disease in the blood. If the levels are adequate then vaccination may not be required. However, this test does not measure levels for Leptospirosis or Kennel Cough.

