Dogs are vaccinated against these four main diseases:

- **Canine parvovirus**
  
  **Transmission**
  Caught by contact with faeces from infected dogs. The virus can survive in the environment for up to nine months.
  
  **Symptoms**
  Mainly affects puppies between six weeks and six months of age, but can also affect older dogs which are unvaccinated or have not had regular boosters. Puppies affected at a very young age can suffer from heart problems and often die.
  
  The most common symptoms are severe vomiting and diarrhoea, which can be extremely bloody (haemorrhagic gastroenteritis). Affected puppies often become dehydrated. The virus also causes the white blood cell count to drop, leaving the puppy susceptible to other infections.
  
  **Treatment**
  There is no specific treatment; however an infected dog may be put on a drip, giving antibiotics to prevent any secondary infections, and given medication to try to prevent vomiting.
  
  Without any treatment about 80% of dogs with parvovirus will die. With treatment about 85% will survive.

- **Canine distemper virus**
  
  **Transmission**
  Spread by all bodily secretions, e.g. saliva. It doesn’t last long in the environment so is more commonly spread by direct contact with an infected animal. Distemper can affect other species such as ferrets.
  
  **Symptoms**
  Dogs of all ages can be affected. Symptoms vary from fever and depression, to coughing, vomiting and diarrhoea, discharge from eyes and mouth and coughing.
  
  Dogs with very severe symptoms often die, mildly affected dogs will recover, but some will go on to have neurological problems in later life, known as ‘old dog encephalitis’. Symptoms can include muscle tics, difficulty walking or walking in circles and seizures. Other long term symptoms are eye problems and thickening of the skin on the nose and pads. This is why distemper is sometimes known as ‘hard pad’.
  
  **Treatment**
  There is no specific treatment; however intravenous fluids can be given to prevent dehydration and medication can help to control seizures.
Vaccinating your dog

- **Leptospirosis**

  **Transmission**
  Leptospirosis (lepto) is a disease caused by a bacterium. The main source of infection is via infected urine, or by contaminated water, so dogs are at risk if they swim or drink from stagnant water or canals, especially in areas with high numbers of rats.

  The disease affects many different species, with different strains associated with different host species. In the UK the two major strains of lepto are carried by dogs and rats; however it can also cause well’s disease in humans.

  **Symptoms**
  Lepto causes fever, lethargy, increased thirst, vomiting, bloody diarrhoea and jaundice. In severe infections dogs develop kidney and/or liver failure and will often die.

  **Treatment**
  Treatment involves antibiotics, intravenous fluids and supportive treatment. Less severely affected dogs can recover, but will carry the bacteria for months afterwards, and their urine is an infection risk both to other animals and to humans. Leptospirosis in humans can be fatal.

- **Infectious canine hepatitis ICH**
  (Also know as canine adenovirus)

  **Transmission**
  Spread by contact with the saliva, urine, faeces, blood or nasal discharge of infected dogs. The urine of an infected dog can be infectious for up to a year, and the virus can survive in the environment for many months.

  **Symptoms**
  There are two versions of this virus - one causes a kennel cough type infection, the other causes hepatitis (an infection of the liver).

  Symptoms include lethargy, coughing, fever, vomiting and diarrhoea, jaundice and abdominal pain. The symptoms can be very similar to those of parvovirus.

  **Treatment**
  There is no specific treatment; however the symptoms themselves can be treated. Deaths can occur but most dogs will recover.