**Canine Distemper**

*What it does* Protects against this variably fatal viral illness which is spread through airborne droplets. The course of the disease may vary from days to months and causes fever, discharge from the eyes and nose, cough, diarrhea, muscle wasting and seizures.

*When recommended* The first dose at 8 weeks of age; then every 3 to 4 weeks until 4 months old.

*Booster recommendations* Once yearly.

*Potential side effects* Mild transient reactions include lethargy, loss of appetite, lameness, fever, and tenderness at the injection site. Rarely, life-threatening allergic reactions can occur.

**Infectious Canine Hepatitis (Canine Adenovirus Infection)**

*What it does* Protects against an occasionally fatal viral disease that causes fever, poor appetite, conjunctivitis, nasal discharge and less commonly vomiting. The virus is transmitted by ingestion of contaminated body fluids (urine, feces, or saliva) from an infected dog. Damage to the kidneys and eyes can occur.

*When recommended* The first dose at 8 weeks of age; then every 3 to 4 weeks until 4 months old, usually in combination with the canine distemper vaccine.

*Booster recommendations* Once yearly.

*Potential side effects* The same as the canine distemper vaccine, with the addition a very uncommon inflammatory disorder of the interior of the eyes.

**Rabies**

*What it does* Protects against this routinely fatal disease, which has the potential to be transmitted to humans. Once contracted, treatment is ineffective in dogs. Rabies is passed from other infected mammals through bite wounds.

*When recommended* The first dose is given at 4 months of age. The rabies vaccine is required by law in California.

*Booster recommendations* One year after primary vaccination, then every three years.

*Potential side effects* Inflammatory reactions are commonly seen at the site of injection; usually a transient small, firm, nonpainful lump. Fever, soreness at the injection site and rarely, a small localized area of permanent hair loss or thin skin may develop. The most serious, but fortunately very rare, adverse event that can occur is a life-threatening allergic reaction, called anaphylaxis.

**Canine Parvovirus**

*What it does* Protects against this viral disease which is a leading cause of death in puppies. The virus is shed in the feces of infected dogs leading to watery diarrhea, vomiting, dehydration and secondary bacterial infections.

*When recommended* The first dose at 8 weeks of age; then every 3 to 4 weeks until 4 months old. Doberman Pinschers, Rottweilers and Pit Bull Terriers may require additional boosters.

*Booster recommendations* Once yearly.

*Potential side effects* Mild transient reactions include lethargy, loss of appetite, fever, or tenderness at the injection site. The vaccine has been implicated in stimulating immune system diseases but this has not been reliably confirmed. Rarely, life-threatening allergic reactions can occur.

**Infectious Tracheobronchitis (Bordetella Kennel Cough)**

*What it does* Protects against bronchitis-type respiratory disease caused by Bordetella bacteria. The disease is transmitted through airborne transfer of bacteria. Fever, dry hacking cough and lethargy are some of the consequences of infection. Rarely, a secondary pneumonia may develop.

*When recommended* The first dose 12 to 16 weeks of age followed by a second dose in 3 to 4 weeks.

*Booster recommendations* Once or twice yearly depending on the specific vaccine utilized.

*Potential side effects* Mild transient discomfort at the injection site, coughing (with intranasal product)

**Canine Lyme Borreliosis**

*What it does* Protects against tick-transmitted disease that can result in lameness, arthritis and fever.

*When recommended* The first dose 12 to 16 weeks of age followed by a second dose in 3 to 4 weeks.

*Booster recommendations* Once yearly.

*Potential side effects* Possible soreness at the injection site and lameness.

**Rattlesnake Vaccine**

*What it does* Vaccination can reduce the overall effects of snakebite, reduce or eliminate the need for antivenom, and other treatment because antibodies made by your dog in response to the vaccine start neutralizing venom immediately.

*When recommended* If your dog works or plays where rattlesnakes live, you should consider vaccination. The first year vaccine is given, two doses are spaced one month apart.

*Booster recommendations* Boosters are recommended annually in the Spring, or about a month before you take your dog into rattlesnake habitat.

*Potential side effects* Occasional mild swelling at the injection site. Rarely, mild instances of vomiting, diarrhea or lethargy for one to two days after vaccination. Cases of life-threatening allergic reaction to the vaccine are extremely rare.