Vaccination Schedule for Dogs: Core and Non-core Vaccines

Dog Vaccine	Initial Puppy Vaccination (at or under 16 weeks)	Initial Adult Dog Vaccination (over 16 weeks)	Booster Recommendation	Comments
Rabies 1-year	Can be administered in one dose, as early as 3 months of age. States regulate the age at which it is first administered.	Single dose	Annual boosters are required.	Core dog vaccine. Rabies is 100% fatal to dogs, with no treatment available. Prevention is key.
Rabies 3-year	Can be administered as one dose, as early as 3 months of age. States regulate the age at which it is first administered.	Single dose	A second vaccination is recommended after 1 year, then boosters every 3 years.	Core dog vaccine.
Distemper	At least 3 doses, given between 6 and 16 weeks of age	2 doses, given 3-4 weeks apart	Puppies need a booster 1 year after completing their initial series, then all dogs need a booster every 3 years or more often.	Core dog vaccine. Caused by an airborne virus, distemper is a severe disease that, among other problems, may cause permanent brain damage.
Parvovirus	At least 3 doses, given between 6 and 16 weeks of age	2 doses, 3-4 weeks apart	Puppies need a booster 1 year after completing the initial series, then all dogs need a booster every 3 years or more often.	Core dog vaccine. Canine "parvo" is contagious, and can cause severe vomiting and bloody diarrhea. Parvo is usually fatal if untreated.
Adenovirus, type 1 (CAV-1, canine hepatitis)	At least 3 doses, between 6 and 16 weeks of age	2 doses, 3-4 weeks apart	Puppies need a booster 1 year after completing the initial series, then all dogs need a booster every 3 years or more often.	Core dog vaccine. Spread via infected urine and feces; canine hepatitis can lead to severe liver damage, and death.
Adenovirus, type 2 (CAV-2, kennel cough)	At least 3 doses, between 6 and 16 weeks of age	2 doses, 3-4 weeks apart	Puppies need a booster 1 year after completing the initial series, then all dogs need a booster every 3 years or more often.	Core dog vaccine. Spread via coughs and sneezes.
Parainfluenza	Administered at 6-8 weeks of age, then every 3-4 weeks until 12-14 weeks old	1 dose	A booster may be necessary after 1 year, depending on manufacturer recommendations; revaccination every 3 years is considered protective.	Non-core dog vaccine. Parainfluenza infection (not the same as canine influenza) results in cough, fever. It may be associated with Bordetella infection.
Bordetella bronchiseptica (kennel cough)	Depends on the vaccine type; 2 doses are usually needed for protection	1 dose of the intranasal or oral product, or 2 doses of the injected product	Annual or 6-month boosters may be recommended for dogs in high-risk environments.	Non-core dog vaccine. Not usually a serious condition, although it can be dangerous in young puppies. It is usually seen after activities like boarding or showing.
Lyme disease	1 dose, administered as early as 9 weeks, with a second dose 2-4 weeks later	2 doses, 2-4 weeks apart	May be needed annually, prior to the start of tick season	Non-core dog vaccine. Generally recommended only for dogs with a high risk for exposure to Lyme disease-carrying ticks.
Leptospirosis	First dose as early as 8 weeks, with a second dose 2-4 weeks later	2 doses, 2-4 weeks apart	At least once yearly for dogs in high-risk areas	Non-core dog vaccine. Vaccination is generally restricted to established risk areas. Exposure to rodents and standing water can lead to a leptospirosis infection.
Canine influenza	First dose as early as 6-8 weeks; second dose 2-4 weeks later	2 doses, 2-4 weeks apart	Yearly	Non-core dog vaccine. Similar to bordetella.