Vaccines for dogs are divided into two groups, core and non-core. Core vaccines include distemper, parvovirus, hepatitis, and rabies and should be given to all dogs unless there are contraindications. Non-core vaccines include leptospirosis, coronavirus, and bordatella to name a few. These vaccines are recommended if the dog has risk factors for exposure. Consult your local veterinarian for advice.

Bordatella is a bacteria that causes respiratory tract infection and is major agent causing “kennel cough”. Vaccination should be given to dogs at risk for infection (boarding kennel, dog shows, obedience school). To provide maximum protection, vaccines should be given twice a year and/or two weeks prior to activities where exposure is more likely to occur.

Coronavirus affects primarily puppies and usually causes mild diarrhea that is short lived and resolves without treatment. In rare instances, some puppies may require fluid therapy for dehydration. Coronavirus may increase the severity of parvovirus infection. Older animals appear to develop natural resistance to coronavirus and there are differing opinions as to whether adult animals benefit from vaccination. Consult your veterinarian about your puppy’s risk factors to decide if coronavirus vaccine is indicated.

Leptospirosis is a bacteria that is shed in the urine of affected animals and wildlife reservoirs such as raccoons and skunks. Dogs are most commonly exposed to this bacteria when they drink water that has been contaminated by wildlife reservoirs. There are many different subtypes of leptospirosis called serovars, and resistance to one serovar does not cross protect against another. Additionally, leptospirosis is not found in all geographical locations; some veterinarians see cases frequently while others rarely diagnose a case in their practice area.

Unlike coronavirus, leptospirosis is a very serious infection. Infected dogs commonly develop liver and kidney disease, which may be fatal or cause permanent damage to these organs. Clinical signs include depression, poor appetite, vomiting and icterus (yellow color to skin and oral membranes). Leptospirosis responds to several different antibiotics and severely affected dogs will need to be hospitalized for supportive care. Finally, humans can also be infected with this bacteria since the bacteria is shed in the urine of infected dogs.

Vaccination against leptospirosis is recommended for any animal which may have exposure to potentially contaminated water or those that live in endemic areas.
Currently there are newer leptospirosis vaccines which protect against more serovars and cause less allergic reactions. Careful consideration about potential exposure and discussion with your veterinarian about the presence of leptospirosis in your area is the best way to decide if your dog needs this vaccine.

A decision about vaccination protocols and vaccine selection is best accomplished after consultation with a veterinarian who has examined your pet and has personal knowledge of the area in which you live. By discussing risks and benefits of vaccines you can make an informed decision about what is right for your pet.

This column is provided by the faculty of the OSU Boren Veterinary Medical Teaching Hospital.

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