

BIOSECURITY FOR PET BREEDERS & ANIMAL SHELTERS



This is a guideline and is not intended to be a comprehensive document covering all aspects of biosecurity and infection control. Please consult your veterinarian for help with your specific kennel setup.

What is Biosecurity?

Biosecurity is the basis of disease control and refers to all the policies and procedures undertaken by an organization to minimize the risk of entry, emergence, and spread of transmissible infectious diseases throughout a facility.

Why is Biosecurity Important?

Keeping your kennel or shelter facility clear and free of pathogens will greatly reduce the chances of common diseases from entering, spreading within, or leaving your facility. This is particularly important regarding your whelping area as puppies do not yet have a fully developed immune system and are more at risk of developing transmissible diseases.

HOW DO I IMPLEMENT A BIOSECURITY PLAN?

- Post signs around your kennel area and at any entry point indicating this is an area of isolation and certain biosecurity procedures need to be followed prior to entry.
- Have a foot bath available at the threshold to your kennel facility. This should contain a disinfectant solution that can kill viruses and bacteria. There are several different products that can be used including bleach (1/2 cup of bleach per gallon of water), Synergize (Quaternary ammonium/glutaraldehyde), Performacide (Sodium Chlorite), etc. Foot baths should be changed daily or more frequently when debris is noted within the foot bath.
- Use dedicated footwear prior to entering the facility. Leave shoes worn to the facility on the outside of the facility and change into dedicated footwear in a manner that prevents contact with outside soil.
- Provide disposable plastic boot covers or booties to visitors.
- Limit the number of people who have access to your facility as well as any outside contact your animals may have.
- Wash hands frequently with anti-microbial hand soap, especially when handling puppies.
- Clean and disinfect all surfaces in the facility as needed. (Make sure there is enough ventilation when using cleaning products)
- Seal all porous surfaces to prevent viruses and bacteria from infiltrating into material. (Paint or seal wood and concrete) (Paint all rusted metal surfaces)
- Wash and sanitize bedding and other cloth materials as needed.
- Provide animals with a separate whelping area with solid barriers between litters.

- Have all new breeding animals brought into the facility tested for Canine Brucellosis. Animals should be isolated from all breeding animals until a negative test is received. Ideally, two canine brucellosis tests conducted 45 days apart should be conducted before new breeding animals are removed from isolation and moved into the facility.
- Have a separate secured isolation area for new animals and/or sick animals. (Make sure there can be no contact between isolated animals and all other animals). These animals are taken care of last, utilizing dedicated equipment.
- New animals should be kept in isolation for a minimum of three weeks or after conducting two negative canine brucellosis tests.
- Follow biosecurity protocols when moving between the isolation area and the rest of the facility. (Foot bath, separate shoes, wash hands, disinfect fully). The isolation area is visited last to minimize the spread of disease to the general population.
- Keep stray animals away from your facility and implement measures to keep physical contact from occurring between your animals and stray animals. (Fencing that will keep a physical barrier between your animals and stray animals to prevent nose to nose contact).

**EVERY FACILITY IS DIFFERENT AND MAY HAVE
ADDITIONAL BIOSECURITY CONCERS. CONSULT YOUR
VETERINARIAN OR YOUR ODAFF INSPECTOR FOR SPECIFIC
BIOSECURITY RECOMMENDATIONS**

WHAT DISEASES TO WATCH FOR?

Canine Brucellosis

Canine brucellosis is a highly contagious bacterial infection caused by the bacterium, *Brucella Canis*. This bacterial infection is highly contagious among dogs. Infected dogs usually develop an infection of the reproductive system. (Sexually Transmitted Disease.)

Large numbers of *B. Canis* bacteria are shed in the genital secretions of an infected dog. A smaller number of bacteria can also be shed in the dog's urine or saliva. After a female dog aborts a pregnancy because of Canine Brucellosis, she will continue to discharge fluids infected with the bacteria for 4-6 weeks after the aborted litter.

Dogs are exposed to the disease via contact with infected bodily fluids. Although the most common route of infection is from licking contaminated urine or discharges from the reproductive tract or licking or chewing placental material. Dogs can also pick up an infection through sexual transmission, inhalation (sniffing contaminated urine or other discharges), or through other mucous membranes such as the eyes or nose-to-nose contact.

Brucellosis is a zoonotic disease, or a disease that can be transmitted from animals to humans. There is no treatment for canine brucellosis and positive dogs should be humanely euthanized to prevent the spread of the disease within the facility.

Breeders and veterinarians exposed to the blood or other secretions of infected animals are at an increased risk of developing an infection.

People with compromised immune systems should avoid contact with a dog that is diagnosed with brucellosis.

Canine Parvovirus

Canine parvovirus is a highly contagious virus that can affect all dogs, but unvaccinated dogs and puppies younger than four months old are the most at risk.

The virus affects the gastrointestinal tract of dogs and is readily transmitted or spread by direct dog-to-dog contact and through contact with contaminated organic material (feces), environments, or people who have had contact with the virus.

The virus can also contaminate kennel surfaces, food and water bowls, collars and leashes, and the hands and clothing of people who handle infected dogs.

Parvo virus can survive in the environment for a long period of time. Even trace amounts of organic material (feces) from an infected dog may harbor the virus and infect other dogs that come into contact with the infected environment for many years. It is important to thoroughly clean and disinfect all areas, equipment, and clothing that have come into contact with a positive animal. Organic material (feces) can inactivate disinfectants, so it is important to clean with a detergent prior to using a disinfectant.

The virus is readily transmitted from place to place on the hair or feet of dogs or via contaminated cages, shoes, or other objects.

Some of the signs of parvovirus include lethargy, loss of appetite, abdominal pain and bloating, fever or low body temperature (hypothermia), vomiting, and severe, often bloody diarrhea.

Persistent vomiting and diarrhea can cause rapid dehydration and damage to the intestines and immune system can cause septic shock.

Fecal testing can confirm the diagnosis.

Canine Herpes-virus

Canine herpes-virus or CHV is a systemic, often fatal disease of puppies. CHV does not cause infection in humans. It may remain latent or hidden in tissues after a dog is infected and may be passed on to other dogs, particularly to fetuses developing in the mother's uterus. Stress or other illness may cause recurrence of illness in a dog that has previously been infected.

The incubation period in puppies is four to six days, after which clinical signs develop or sudden death occurs.

The most common clinical signs occur in puppies under four weeks of age. Since the herpes virus depends on a cooler body temperature in order to replicate, puppies in this age bracket are more vulnerable to infection.

In puppies, clinical signs include difficulty breathing, thick nasal discharge, loss of appetite, grayish-yellow or green soft odorless stools, persistent crying, seizures, and sudden death.

PCR testing for the virus is available.

Kennel Cough

Kennel Cough is a highly contagious respiratory disease potentially caused by several viruses and bacteria.

These include adenovirus type-2, parainfluenza virus, canine coronavirus, and the bacterium *Bordetella bronchiseptica*.

It is treatable in most dogs but can be more severe in puppies younger than six months of age.

Kennel Cough can spread from one dog to one another through airborne droplets, direct contact or from contaminated surfaces including water/food bowls.

The Symptoms of Kennel Cough include runny nose, sneezing, lethargy, loss of appetite, and low-grade fever.

FOR MORE INFORMATION, PLEASE CONTACT YOUR VETERINARIAN.