

DISEASE PREVENTION: DIRECT CONTACT AND FOMITE TRANSMISSION



Direct contact transmission of pathogens requires the presence of a disease causing organism within an infected animal or in the environment. Exposure occurs when a pathogen directly touches open wounds, mucous membranes or the skin of a susceptible animal. Transmission can occur from contaminated blood or saliva, nose-to-nose contact, rubbing or biting.

It is important to note that direct contact transmission is possible between different species, including humans for some diseases. Ringworm is a common zoonotic shelter disease transmitted by direct contact.

Reproductive transmission is a specific type of direct contact transmission that involves transfer of pathogens during **breeding**, either naturally or artificially or **in-utero**, when the dam infects the offspring during pregnancy.

Fomites are any objects that can carry disease pathogens from one susceptible animal to another or from one area or location to another. Examples include carriers, leashes, bedding, bowls, brushes, or toys, as well as clothing or footwear. Vehicles or human foot traffic are also included.

There are ways to decrease the risk of the diseases spread by direct contact or fomite transmission.

■ Minimize Exposure

- Reduce the density or closeness of animals to each other or change housing layout so animals are optimally distanced from each other to prevent direct nose-to-nose or fur-to-fur contact
- Avoid overcrowding of animals
- Prevent contact between animals of differing age or immune status
- Isolate all sick animals immediately so they do not contact other susceptible animals

■ Cleaning and disinfection (C&D) of the environment and potential fomites

- When performed properly, C&D can reduce the incidence of most infectious diseases and control the transmission of pathogens by most routes
- Do not share equipment between areas of the facilities, especially those used for isolation areas or with known infectious animals
- If equipment must be shared, it should be washed with warm water and soap, rinsed, and disinfected before it is used elsewhere

■ Traffic Management

- Post signs with clear instructions regarding your policies for visitors (e.g., Do Not Enter, Authorized Personnel Only)
- Certain areas of the facility, such as isolation, should be restricted to a limited number of shelter staff only
- Clean clothing and footwear should be required and provided for ANYONE entering animal areas, especially isolation areas
- Clothing used as barrier protection (e.g, smocks, coveralls, scrubs), towels or blankets used in the shelter must be washed prior to reuse
- Animal transport carriers can serve as fomites and should be disinfected and cleaned on a regular basis

■ Personal Protection

- Shelter staff should take precautions, especially when zoonotic diseases are suspected
- Gloves, smocks, uniforms, coveralls, dedicated boots or disposable booties can help to minimize disease pathogen transfer and protect personnel
- When airborne infectious particles are suspected, glasses or masks may be required