

Modes of Transmission and Exposure Risks

Zoonoses

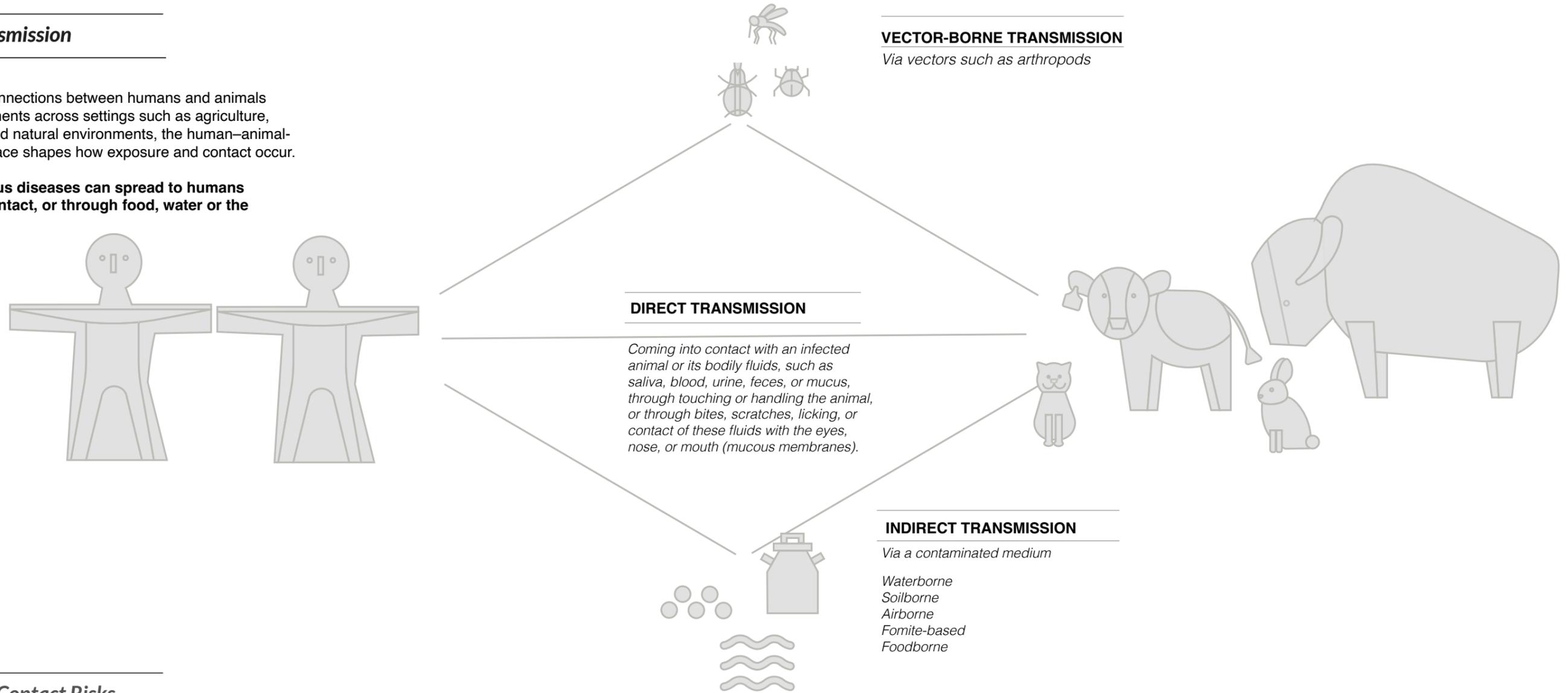
Zoonotic Infectious Diseases (ZIDs)

Diseases that spread between animals and humans, with causal agents being pathogenic microorganisms such as viruses, bacteria, fungi, or parasites.

Modes of Transmission

Given the close connections between humans and animals in shared environments across settings such as agriculture, companionship, and natural environments, the human–animal–environment interface shapes how exposure and contact occur.

Zoonotic Infectious diseases can spread to humans through direct contact, or through food, water or the environment. ⁴⁸



Exposure and Contact Risks

Exposure-related risk factors refer to activities, environments, or situations that increase the likelihood of encountering animals, vectors, or environments that serve as reservoirs or sources of zoonotic infectious agents. These factors shape opportunities for exposure and influence the probability of infection.

[Learn more about exposure risks](#)



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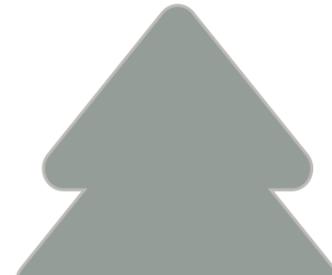
OCCUPATIONAL

Working in settings that involve frequent or close interactions, direct or indirect, with animals, their products, or their environments. (E.g. Agricultural and livestock work, veterinary practice, animal husbandry, meat processing, forestry, and other outdoor occupations, and wildlife management.)



TRAVEL-RELATED

Travel to regions where certain zoonoses are more prevalent. E.g. particularly in areas with endemic vector populations.



RECREATIONAL

Outdoor activities such as camping, hiking, fishing, hunting/ trapping, or visiting natural areas can bring people into contact with wildlife or vectors (e.g., ticks, mosquitoes) or contaminated environments capable of transmitting zoonotic pathogens.



WILDLIFE CONTACT

Direct or indirect contact with wild animals, whether through observation, feeding, capture, rehabilitation, or encroachment into wildlife habitats, can increase exposure to zoonotic agents.



COMPANION ANIMALS

Companion animals, including pets like cats and dogs, may act as carriers or sources of zoonotic pathogens, either through direct transmission or by bringing vectors such as ticks or fleas into household or by contaminating shared environments.

Resources to consult

Suggested resources providing information on zoonotic diseases.

Explore Resources to Consult for additional sources.



CCOHS Canadian Centre for Occupational and Safety | Zoonotic Diseases



Public Health Agency of Canada | Travel Health Notices



Government of Canada | Diseases and Conditions



Government of Canada | Public Health Notices



Worms and Germs blog | Centre for Public Health & Zoonoses | University of Guelph