> **The changing global patterns of zoonoses reflect not only individual behaviours. They are the result of complex social and ecological changes.**
>
> *The Chickens Fight Back*
> David Waltner-Toews

Embedded in socio-ecological systems, drivers of zoonoses include ecosystem and environmental disruptions, land-use changes, agricultural and livestock systems, wildlife use and exploitation, urbanization, global mobility and trade, antimicrobial resistance, and climate change.

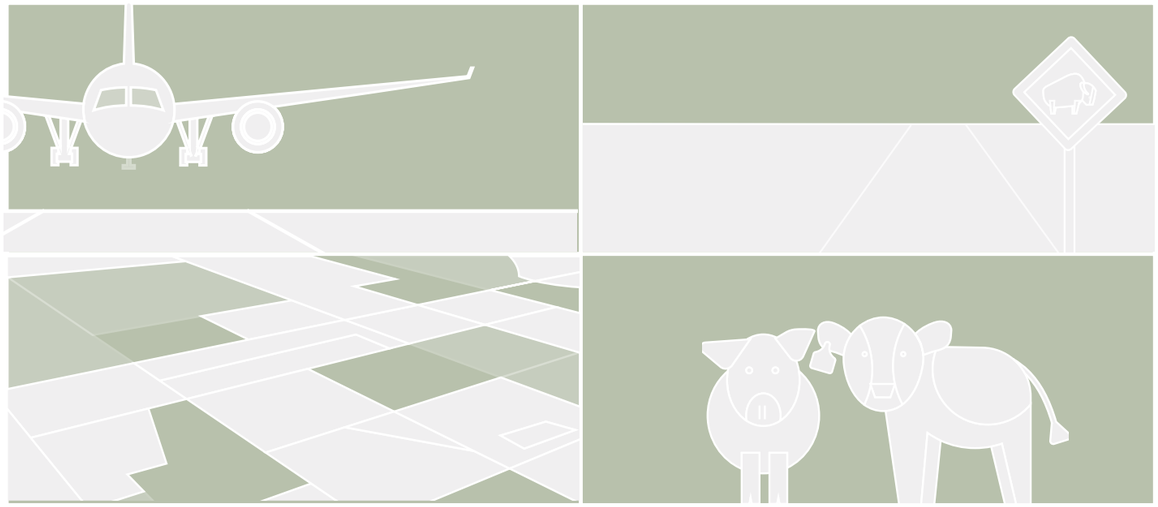
Ecosystem disruption, through habitat loss, climate change, or other anthropogenic activities, increases the risk of zoonoses. [19] [20]

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.

Drivers of Zoonotic Diseases



Environmental and Climate-Related Drivers
- Climate Change
- Global Warming

Agricultural and Livestock System Pressures
- Shifts in farming and livestock systems
- Unsustainable agricultural intensification
- Intensive animal husbandry practices
- Increasing human demand for animal protein
- Increasing animal food demand and related ecological disturbances
- Changes in food supply

Global Mobility and Trade
- Global Travel
- International Trade and Travel
- Increased Transportation

Land-Use Change and Ecosystem Disruption
- Deforestation
- Land-use change
- Extractive industries
- Unsustainable resource extraction
- Unsustainable utilization of natural resources accelerated by urbanization

Urbanization

Wildlife Use and Exploitation
- Wildlife exploitation
- Increased use and exploitation of wildlife

Antimicrobial Resistance (AMR)

These drivers have transformed the environments in which human and animal populations coexist, reshaping interactions at the human–animal-environment interface and increasing the potential for zoonotic disease spread. As examples, loss of natural habitats brings wildlife into closer contact with human settlements; ecological disruption displaces animal populations and alters their movement; and climate-driven shifts in wildlife and vector distributions change patterns of exposure. [17] [18]

Prairie Climate Centre
From Risk to Resilience
Public Health Agency of Canada
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