

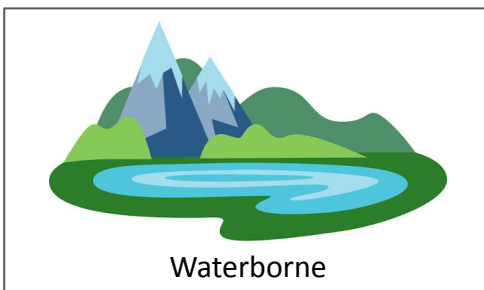
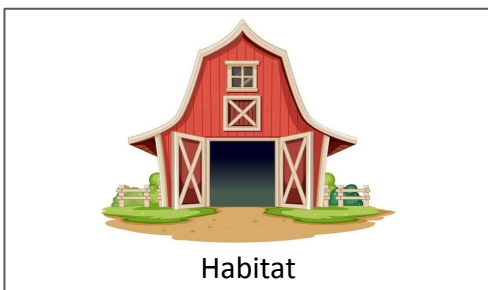
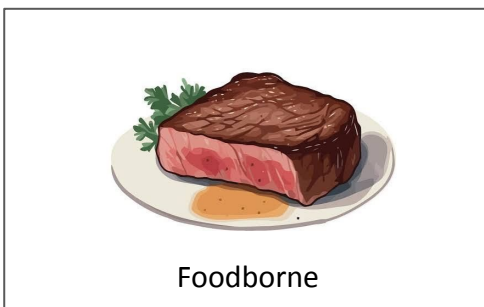
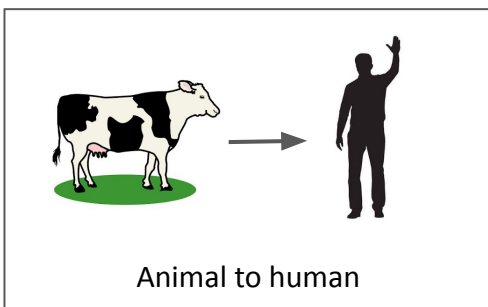


# Zoonotic Diseases

## What is a Zoonotic Disease?

Zoonotic diseases are diseases that transmit from animals to humans

- ❖ It is estimated that 6 out of 10 diseases can be transmitted from animal to human and vice versa
- ❖ Spread through several means



## Examples of Zoonotic Diseases

**Rabies\***  
**Salmonella\***  
Hantavirus  
Anthrax  
Tuberculosis  
Bubonic plague  
**Lyme disease\***  
**Alpha gal syndrome\***  
**Avian influenza\***  
Zika virus  
SARS  
Mad Cow disease  
**Botulism\***  
New world screwworm  
Chickenpox

\*present in Kentucky

## Prevention

- Preventing zoonotic diseases requires collaboration between human and animal sectors
- Includes:
  - Guidelines for animal care
  - Waste removal and clean water standards
  - Surface water protection in environment

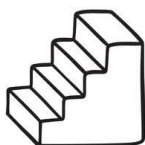
Example: preventing rabies requires availability of human vaccination, surveillance and response programs, animal population control

There are multiple ways of approaching zoonotic disease prevention. Some examples are



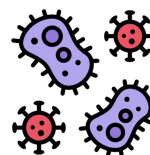
### **Umbrella Approach**

Surveillance, lab, treatment, legislation, prevention, education all at the same time. Used in Ethiopia for rabies control



### **Stepwise Approach**

Surveillance, then diagnosis, then treatment, then prevention. Used in DRC for Mpox control



### **Pathogen Discovery**

Generate knowledge on emerging pathogens. Used in Georgia to predict and combat new zoonotic diseases

## Other State and Federal Policies

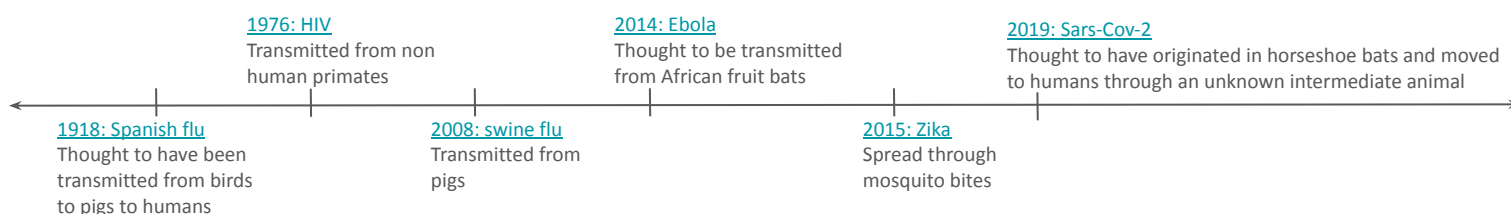
Each state has its own policy regarding precautions on prevention of zoonotic diseases. [FoodNet](#), a national collaboration, works with 10 state health departments, the CDC, the FDA, and USDA to track outbreaks of 8 different foodborne pathogens, including *cyclospora*.

**Reporting was made optional for most pathogens in 2025.**

- [Ohio](#) has Chronic Wasting Disease testing requirements on deer shot during hunting season
- [Florida](#) requires an Official Certificate of Veterinary Inspection on cattle coming into the state
- [Pennsylvania](#) requires horses to test negative for Equine Infectious Anemia before transferred

Many state departments assign a state veterinarian with tasks including:

- [Virginia](#): The state veterinarian may take necessary measures to prevent the spread of and eradicate contagious and infectious livestock and poultry diseases
- [New Mexico](#): general regulatory supervision of the livestock industry to protect the public from diseased meat
- [Utah](#): coordination of responsibilities for the promotion of animal health and the diagnosis, surveillance, and prevention of animal disease
- [Oregon](#): exercise general sanitary and disease control over livestock



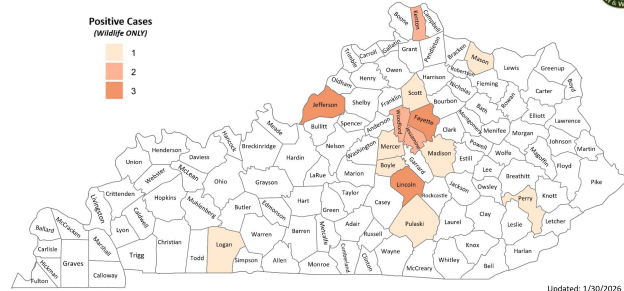
## Kentucky policy

A recent [amendment](#) to [KRS.39A.100](#) authorizes the commissioner of Agriculture to declare an animal health emergency and initiate requests for transportation waivers, animal quarantines, roadblocks to prevent transportation of quarantined animals, and request of emergency assistance for the protection of public health.

A [section](#) was added to KRS chapter 257 stating animal health care on farms will be implemented by the farmer or owner of the livestock and poultry, though this does not restrict any state or federal official from carrying out official duties.

### 2025 Rabies Cases in KY Wildlife

\*data obtained from University of Kentucky Veterinary Diagnostic Lab (UK VDL) & KY Dept. of Public Health (KDPH)



Kentucky regularly tests suspected wildlife for Rabies and has designated enhanced surveillance zones



This Science Note was prepared by Mira Fish on behalf of the Kentucky Academy of Science (KAS). The KAS provides nonpartisan research and information to members of the Kentucky Legislature. This Note is intended for informational purposes only and does not indicate support or opposition to a particular bill or policy approach.