



Keeping Animals & People Healthy at Fairs

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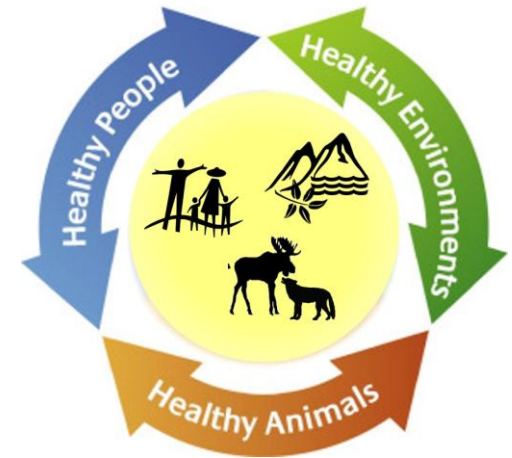
State Public Health Veterinarian

Topics

- Zoonotic diseases, and the importance of prevention with animals in public settings
- Animal in Public Settings WAC
- Fair preparation: facility design and maintenance, education, cleaning & disinfection, site action plan
- Available resources

One Health

The concept and understanding that **human health and animal health are interdependent** and bound to the health of the **ecosystems** in which they exist, requiring a **collaborative** global approach to understanding risks for human and animal health and ecosystem **health as a whole**.



Zoonotic & Vector borne Disease

- **60%** of pathogens that cause human disease originate from domestic animals or wildlife
- **75%** of emerging human pathogens are of animal origin

More than half of all infections that people can get are zoonotic (they can spread between animals and people).



Certain groups are at higher risk

Higher risk of becoming infected or a higher risk of having more serious outcomes

- Children, especially under age 5
- Older adults
- Pregnant women
- People with compromised immune systems (HIV/AIDS, cancer, transplant patients, certain medications)



Some diseases or exposures of concern

Enteric diseases: *E. coli*,
Campylobacter,
Salmonella,
Cryptosporidium

Zoonotic influenza

Q Fever

Rabies

Internal parasites

External parasites: fleas,
ticks, mites

Chlamydia psittaci

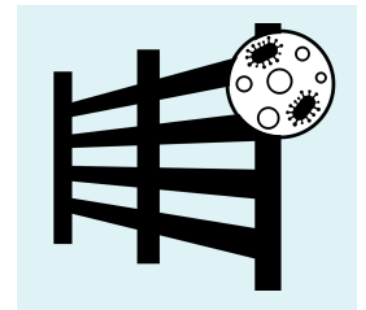
Skin infections: contagious
ecthyma, other
poxviruses, ringworm

Bites and scratches



How zoonotic diseases are spread between animals and people

- Direct contact with animal fluids/excretions: saliva, blood, urine, mucous, feces, or other body fluids of infected animals
- Contaminated surfaces or objects (e.g., plants, soil, animal habitats, fomites)
- Inhalation
- Eating or drinking something unsafe: unpasteurized milk, untreated water, undercooked meat, feces-contaminated food
- Vectors: being bitten by an insect or tick



Significance of zoonotic diseases in public settings

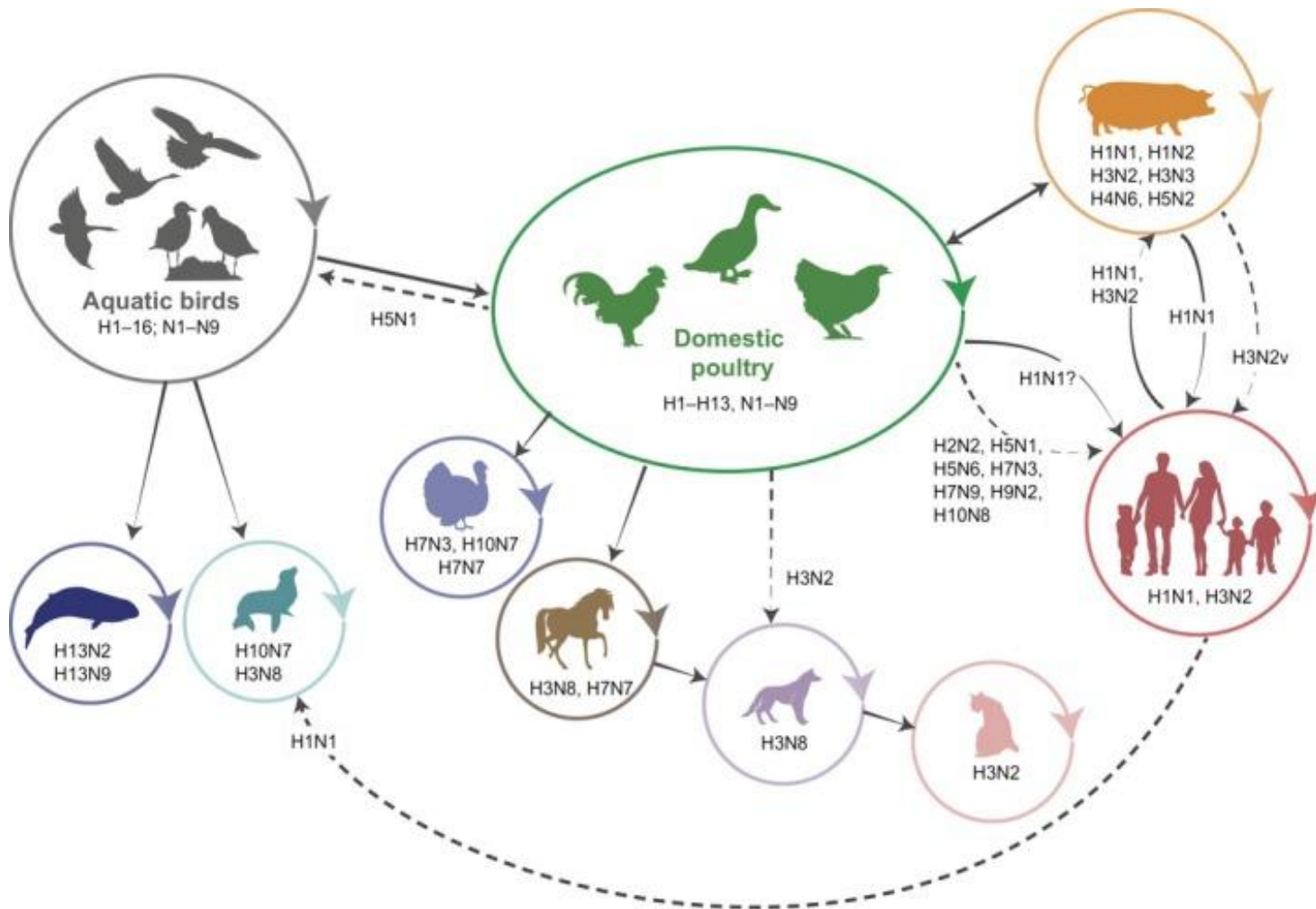
- For the 10-year period ending in 2020:
 - 156 human infectious disease outbreaks involving animals in public settings
 - Resulted in 6,388 illnesses, 1,233 hospitalizations and 10 deaths
- Substantial medical, public health, legal, and economic effects
- Not possible to completely eliminate risks from animal contact
- Best practice and research-driven ways to minimize risks
- Many jurisdictions have guidelines or regulations



Avian influenza A

- Wild aquatic birds and waterfowl are reservoirs for avian influenza A viruses
- Very contagious among birds
- Viruses can also infect other bird and animal species
- Don't normally infect humans – infrequent cases or outbreaks
- Illness ranges from mild to very severe (e.g., 40% case fatality in hospitalized patients)



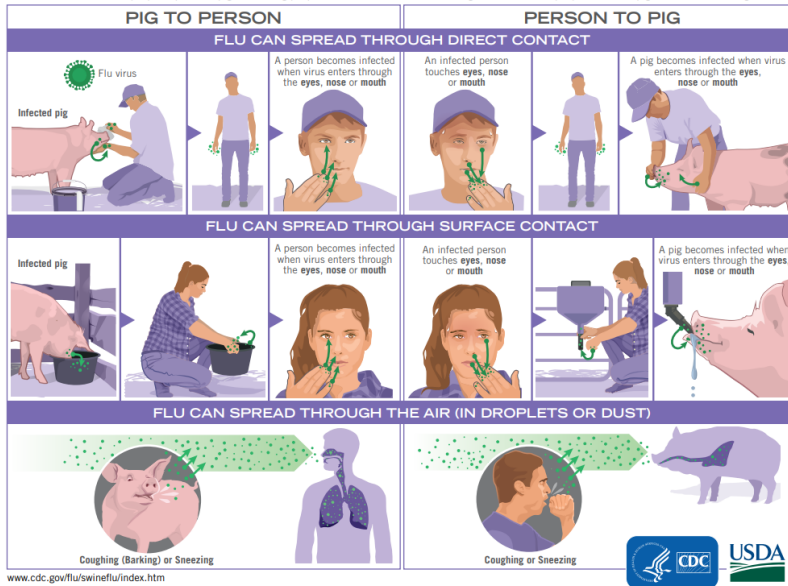


The ecology and adaptive evolution of influenza A interspecies transmission
[Influenza Resp Viruses, Volume: 11, Issue: 1, Pages: 74-84, First published: 18 July 2016, DOI: \(10.1111/irv.12412\)](#)

How does zoonotic influenza spread

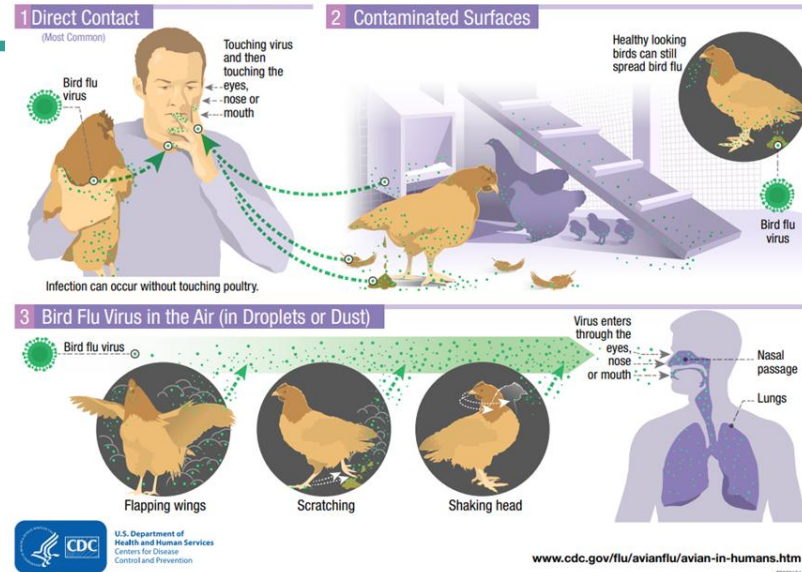
FLU CAN SPREAD BETWEEN PIGS AND PEOPLE

Information for people exposed to pigs, including people who enter the swine barns at agricultural fairs or people who raise pigs for show or farming

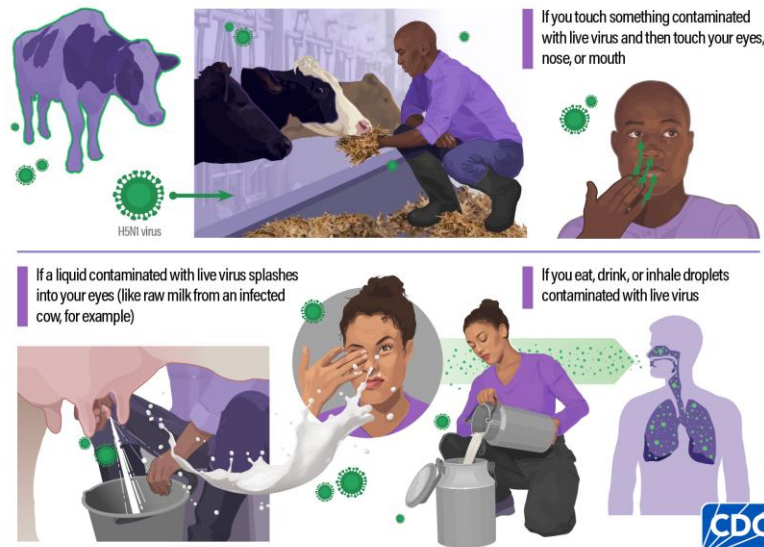


How Infected Backyard Poultry Could Spread Bird Flu to People

Human Infections with Bird Flu Viruses Rare But Possible



H5N1 Bird Flu Might Spread from Cows to People in Several Ways



Public health considerations for HPAI

- Exposure to infected animals - main risk factor for the infection of humans with animal influenza A viruses
- Monitor animals daily for signs of illness, isolate and contact vet right away
- Exhibitors: handwashing, avoid eating/drinking near animals, keep animals at fair for least amount of time, stay home if sick, know signs of illness in animals and report to manager
- Anyone at higher risk of serious flu complications planning to attend a fair where influenza virus-infected or potentially infected animals will be present should avoid those animals and their enclosures at the fair



WACs to address zoonotic diseases

- Relevant legislation for animals in public settings:
 - [WAC 246-100-197](#) Rabies
 - [WAC 246-100-201](#) Psittacosis
 - [WAC 246-100-191](#) Animals- General measures to prevent human disease (ban on small turtle sales, Salmonella, anthrax)
 - [WAC 246-100-192](#) Animals in Public Settings: Measures to prevent human disease

WAC 246-100-192

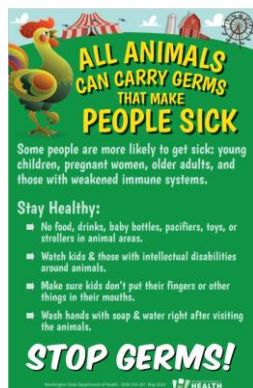
An animal venue operator shall provide a **handwashing station** - or alternative hand sanitizing method - and post a **prominent sign** in a simple and easy-to-understand format for visitors to see **before they enter** the animal exhibit area which warns that:

- Animals can carry germs that can make people sick, even animals that appear healthy.
- Eating, drinking, or putting things in a person's mouth in animal areas could cause illness.
- Older adults, pregnant women, immunocompromised people, and young children are more likely to become ill from contact with animals.

WAC 246-100-192

- Young children and individuals with intellectual disabilities should be supervised in animal exhibit areas.
- Strollers, baby bottles, pacifiers, and children's toys are not recommended in animal exhibit areas.

Animal venue operators must also post a **prominent sign at each exit** of the animal exhibit area reminding visitors to **wash their hands**.





Washington State Fairs Zoonotic Disease Prevention Guide

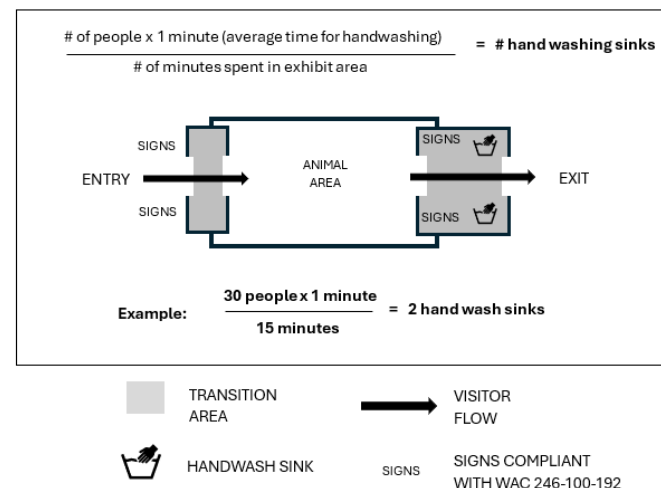
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Facility design and maintenance

- Handwashing – location, supply, use
- Animal, transition, & non-animal areas
- In animal areas:
 - No risky items such as strollers, toys, sippy cups, pacifiers, any food/drink
 - Don't allow kids to sit on ground
 - Control visitor traffic
- Barriers, contaminated surfaces
- Adequate ventilation
- Waste protocols



Handwash Sink Calculation Example



Education

- Awareness of risk is protective against outbreaks
- Managers/operators, staff, volunteers, exhibitors, public
- Handwashing, discourage hand-to-mouth contact, touching contaminated surfaces, etc.
- Multiple modalities:
 - Verbal reminders/education – staff or volunteers, handwashing ambassadors
 - Signage, handouts, stickers



Cleaning and disinfection

- Before, during, and after event
- Barns and other animal venues can't be cleaned to food safety or non-animal event standards
- Avoid dry cleaning that can stir up dust, such as vacuuming or leaf blowing
- Remove organic debris, wash with water and detergent, rinse, dry
- Use appropriate disinfectant following label instructions, contact time, rinse, dry



Plan development and implementation

- Site Action Plan
 - Site map
 - Handwashing station locations and action plan for servicing them
 - Cleaning and disinfection protocols
 - Supporting documents: pre-event checklist, service record logs, cleaning records and a corrective action log
- Monitor plan implementation during event
- Evaluate implementation after event



Additional resources

- Washington State Department of Health, Animals in Public Settings – includes posters/signs and details of WAC 246-100-192: [Animal Venue Operator Requirements | Washington State Department of Health](#)
- [Compendium of Measures to Prevent Disease Associated with Animals in Public Settings](#)
- Center for Food Security of Public Health Cleaning and Disinfection – valuable resource for the C&D process, including a guide on reading disinfectant labels: [Cleaning and disinfection in animal settings - CFSPH \(iastate.edu\)](#)
- International Association of Fairs and Expositions – access to resources like consumer protection programs and disease prevention toolkits for members: <https://fairsandexpos.com/>
- [Tips for Staying Healthy at Animal Exhibits | Healthy Pets, Healthy People | CDC](#)

Additional resources

- [Recommendations to Minimize Influenza Transmission at Dairy Cattle Livestock Exhibitions \(usda.gov\)](#)
- [Considerations and Information for Fair Exhibitors to Help Prevent Influenza | Seasonal Influenza \(Flu\) | CDC](#)
- [Considerations and Information for Fair Organizers to Help Prevent Influenza | Seasonal Influenza \(Flu\) | CDC](#)
- [Swine Diseases of Concern at Fairs and Exhibitions from the State Veterinarian](#)
- [Issues for Fair Organizers to Consider When Planning Fairs | CDC](#)
- [Microsoft Word - Measures to Minimize Influenza Transmission at Swine Exhibitions June 2014.docx \(nasphv.org\)](#)
- [Minimizing Influenza Transmission during Exhibitions - Checklist for Protecting Guests, Exhibitors, and Pigs](#)



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