Alaska Department of Health. Section of Epidemiology, 3601 C Street, Suite 540 Anchorage, Tel: 907-269-8000

Alaska Department of Environmental Conservation. Office of the State Veterinarian, 5251 Dr. Martin Luther King Jr. Avenue, Anchorage, Tel: 907-375-8215

Alaska Department of Fish and Game. Wildlife Health and Veterinary Services, 1300 College Road, Fairbanks, Tel: 907-459-7257

Alaska Native Tribal Health Consortium. Center for Climate and Health, 4500 Diplomacy Drive Anchorage, Tel: 907-729-1882



Avian Influenza (H5N1) in Alaska

Highly Pathogenic Avian Influenza (HPAI) H5N1, a strain of the influenza A virus, commonly known as avian influenza or bird flu, primarily affects birds, especially wild waterfowl like ducks and geese. It can also spread to domestic poultry and, rarely, to mammals, including humans.

For the current circulating strain of HPAI H5N1, cases of infection in humans are extremely rare. There have been no reported cases among Alaska residents. Globally, in 2023, only twelve cases were recorded. From 1997 through 2023, a total of 902 human cases occurred worldwide, with 88% occurring in Southeast Asia and Africa. These cases were predominantly caused by contact with sick or dead poultry or by visiting live poultry markets. There have been no documented reports of human-to-human transmission of H5N1, and the current strain of H5N1 detected in birds does not currently possess any known mutations that would enhance its ability to spread into or between humans.

In April 2022, the first case of HPAI (H5N1) in Alaska was confirmed in a non-commercial backyard flock of chickens and ducks in the Matanuska-Susitna Borough. Since then, there have been confirmed cases in domestic poultry and in wild birds, including eagles and other raptors, seabirds, shorebirds, waterfowl, as well as in other wildlife across Alaska. As of May 2024, H5N1 infection has also been detected in one black bear, one brown bear, and three red foxes. For further details on these detections, please refer to the <u>DEC website</u>.

Since April 2024, the US Department of Agriculture (USDA) has detected HPAI H5N1 in dairy cattle in some areas of the US. The USDA is working with its partners to actively look for the disease in both poultry and dairy operations, live bird markets, and in migratory wild bird populations. In Alaska, representatives from local, state, federal, and tribal organizations meet regularly to communicate recent detections and to discuss any ongoing risk for both humans and animals. Risk of H5N1 to the human population in Alaska remains low.

Below are FAQs addressing a range of topics.

Additional information on avian influenza:

- US Fish and Wildlife Service: Avian Influenza
- US Fish and Wildlife Service: Alaska Bird FAQ: if it's sick, abandoned, injured or dead
- Alaska Department of Health: Avian Influenza
- Alaska Public Health Alert Network: Avian Influenza Health Advisory
- Centers for Disease Control and Prevention: Information on Bird Flu

- USDA-APHIS: Detections of Highly Pathogenic Avian Influenza in Wild Birds
- USDA-APHIS: <u>Detection of Highly Pathogenic Avian Influenza in Mammals</u>
- USDA-APHIS: <u>Detection of Highly Pathogenic Avian Influenza in Poultry</u>
- USDA-APHIS: Detection of Highly Pathogenic Avian Influenza in Livestock
- Alaska Department of Environmental Conservation/State Veterinarian: <u>Avian Influenza</u> Confirmed Cases in Alaska









Can we get avian influenza from the animals we hunt?

The chance of people getting avian influenza from hunting birds is low. To be safe hunters should take steps to protect themselves when handling and preparing wild birds.

- 1. Wearing Protective Gear: Always wear gloves when handling wild birds to prevent direct contact with bird droppings, fluids, or feathers, which may carry the virus.
- 2. Minimizing Contact: Try to avoid touching your face, especially your mouth, nose, and eyes, while handling or processing wild birds.
- 3. Thorough Cooking: Ensure that meat from wild birds is cooked thoroughly to an internal temperature of at least 165°F to kill any potential viruses and bacteria.
- 4. Avoiding Sick Birds: Do not harvest or handle wild birds that appear sick or are found dead.
- 5. Hand Hygiene: Wash your hands with soap and water immediately after handling game, carcasses, or any equipment used during hunting. If soap and water are unavailable, use an alcohol-based hand sanitizer.
- 6. No Eating or Drinking: Refrain from consuming food, drinks, or putting anything in your mouth while cleaning, processing, or handling birds.

Because avian influenza infection remains uncommon in mammals, the risk of H5N1 exposure while handling mammals is also lower. However, practicing proper hygiene, like wearing protective gear (e.g., gloves, mask) and washing hands thoroughly after handling potentially infected mammals, can reduce the risk. Never harvest a sick mammal or a mammal you have found dead.

What if we don't have protective gear?

If protective gear like gloves isn't available, it's crucial to avoid touching your mouth or face while handling animals. Never put any parts of the animal in your mouth. After cleaning animals, be sure to thoroughly wash your hands and knife with soap and water. This simple hygiene practice can help reduce the risk of exposure to H5N1 and other germs.

Can we get avian influenza from berries or bird eggs?

The H5N1 virus can be shed in bird droppings, so the virus could be on the outside of eggs. However, even if a mother bird was infected, the virus is unlikely to be inside of her eggs. Washing eggs is always a good idea, and cooking eggs kills any germs that cause illness. It is also good practice to wash berries. Don't eat berries with visible bird feces or other obvious contamination without washing them.

Are our fish safe from HPAI?

Yes. Influenza viruses do not infect fish.

Can eating mammals that have eaten infected birds make us sick?

The risk of contracting H5N1 from consuming mammals that have eaten infected birds is extremely low. Although the virus could potentially survive in a mammal's digestive system if it consumes an infected bird, the likelihood of human infection through consumption is low. A case has never been identified in this way. Proper cooking also destroys the virus, further reducing the exposure risk.

What if I get sick after hunting?

If you become sick after hunting, contact your healthcare provider and let them know you were recently hunting, which animals you were exposed to, and whether any of the animals appeared sick or had an infected wound.





How can I protect my backyard flock from avian influenza?

- Maintain separation between domestic and wild birds. If you have a pond where waterfowl may be, do not allow your chickens or ducks near the water.
- Keep feed protected from wild birds or other wildlife.
- Keep poultry under cover or otherwise limit free ranging to prevent contact with wild birds.
- Keep it clean. Wash hands thoroughly after handling or working with birds.
 Wear clean clothes and disinfect cages or equipment that come in contact with birds and their droppings.
- Change clothes and boots before going to another farm or area with birds.
- **Don't bring disease home.** If you have been near other birds or bird owners, clean and disinfect poultry cages and equipment before going home.
- Isolate new birds for 30 days before adding them to your flock.
- **Don't risk disease from your neighbor.** Do not borrow tools, or poultry supplies from other bird owners.
- **Know the warning signs.** Such as sneezing; coughing; nasal discharge; watery or green diarrhea; lack of energy; poor appetite; drop in egg production; swelling around the eyes, neck, and head; purple discoloration of wattles, combs, and legs; and a sudden increase in bird deaths.

To report illness or death in a backyard flock, please contact your local veterinarian or the Office of the State Veterinarian at **907-375-8215**



H5N1 FAQs for Alaska Food Safety

Is this the same avian influenza that's in dairy cows in the lower 48?

Currently, the strain of H5N1 detected in Alaska differs genetically from the one affecting dairy cows in the lower 48. However, flu viruses can change rapidly through mutations. That's why ongoing surveillance is in place to study and understand the genetics of H5N1 viruses found in Alaska.

How did dairy cows get avian influenza?

It's not entirely clear how the H5N1 virus got into the dairy cows, but it likely happened when the virus passed from wild birds to one group of dairy cows in Texas. From there, it spread to other groups of cows for about 4 months before the outbreak was identified and confirmed.

Is our commercial food supply safe?

Yes. Viable virus has not been found in any retail milk tested. There's no indication that H5N1 fragments found in pasteurized milk, beef, or other common foods can cause human illness. Studies show that routine pasteurization would kill the virus, if it were in milk. Initial tests have not found the virus in any commercial meat.

Is H5N1 found in raw milk?

Yes, FDA has identified viable H5N1 virus in raw cow's milk on several farms in the Lower 48. Raw milk has not been tested for H5N1 virus in Alaska. Raw milk products can be contaminated with a range of harmful bacteria and viruses that can cause illness in humans; some of these illnesses can be life-threatening.

Can I become exposed to the H5N1 virus from locally-hunted meat?

Many wild birds and some wild mammals in Alaska have tested positive for the H5N1 virus. As such, it is important to practice safe handling of game and properly cook eggs, game, and poultry products. Cooking poultry and eggs to an internal temperature of 165 [°F] kills bacteria and viruses, including the H5N1 virus.









H5N1 FAQs for Alaska Dead Wildlife

What do I do if I find sick or dead wildlife?

- If you find a sick or dead wild bird or have concerns about migratory birds, call the Alaska Sick or Dead Bird Hotline at **866-527-3358**.
- Avoid handling any sick birds or birds that are found dead. If you need to handle a dead bird, use disposable gloves or a plastic bag. Double bag the carcass and dispose of it in regular trash.
- To report observations and concerns about migratory birds, email ak mbm@fws.gov or call **1-866-527-3358**.
- To report illness or death in a backyard flock, contact your local veterinarian or the Office of the State Veterinarian at **907-375-8215**. Do not attempt to care for these animals on your own.
- To report sick or dead wild terrestrial mammals, contact your local Alaska Department of Fish and Game office or call the Wildlife Health and Disease Surveillance Veterinarian at **1-907-459-7257**.
- To report a sick marine mammal, call the National Marine Fisheries Service (NMFS) Alaska Stranding Hotline at **1-877-925-7773** (24 hrs).
- Do not touch sick or dead birds without wearing gloves, mask, and protective eye wear.
- Keep pets away from all sick wild animals.
- Do not consume any animal found dead.
- For human health concerns after contact with dead wildlife, contact your healthcare provider and let them know which type of animals you were exposed to and whether they had signs of an infection.









H5N1 FAQs for Alaska Marine Mammals

Can marine mammals be infected with the H5N1 virus?

Marine mammals can be infected by H5N1 through various routes, primarily through contact with infected birds or contaminated environments. While cases of H5N1 infection in marine mammals are relatively rare compared to birds, there have been documented cases of infection in marine mammal species. When marine mammals contract H5N1, they can experience symptoms like those seen in birds and humans, including respiratory distress, lethargy, and fever. Additionally, some marine mammals may experience tremors, convulsions, and paralysis.

Where have infected marine mammals been found?

Globally, infected marine mammals have included harbor seals, gray seals, elephant seals, California sea lions, common dolphins, harbor porpoises, Atlantic white-sided dolphins, bottlenose dolphins, South American sea lions, southern elephant seals, South American fur seals, and various cetacean species. H5N1 was detected in a polar bear located in Alaska's North Slope and a walrus in Norway.

Have other mammals been infected by H5N1 in Alaska?

As of May 2024, in Alaska H5N1 infection has been detected in one black bear, one brown bear, and three red foxes. For further details on these detections, please refer to the <u>DEC website</u>. Antibodies to H5N1 have been detected in healthy, live wild mammals too indicating exposure and survival.

Can handling marine mammals cause H5N1 infection in humans?

Direct contact with infected marine mammals or their bodily fluids, like respiratory secretions, could potentially transmit the virus to humans. Practicing proper hygiene, like wearing protective gear (e.g., gloves, mask) and washing hands

thoroughly after handling potentially infected marine mammals, can reduce the risk.

Can eating marine mammals cause H5N1 infection in humans?

Most human H5N1 infections globally have occurred while raising or slaughtering infected poultry or through close contact with contaminated environments. While infection through food is theoretically possible it appears to be extremely rare. You cannot get H5N1 from properly cooked meat products; cooking meat to an internal temperature of 165°F will destroy the virus.

What about eating mammals that have recently consumed infected birds?

The risk of contracting H5N1 from consuming mammals that have eaten infected birds is very low. Though the virus could potentially survive in a mammal's digestive system if it consumes an infected bird, the likelihood of human infection through consumption is low. Proper cooking also destroys the virus, further reducing the risk.