



WEST NILE VIRUS QUICK FACTS

WNV is transmitted between mosquitoes and birds. Birds serve as carriers that have spread WNV across North America in only a few years. Mammals are infected by the few species of mosquitoes that feed on both mammals and birds.

Most birds, mammals, and people who get WNV infection from a mosquito bite never show signs of illness; others develop minor flu-like symptoms.

Over 4000 human cases have been documented in the U.S. and 200 people died. Typically, only those that are elderly or have compromised immune systems get severely ill.

Horses appear to be highly susceptible to encephalitis from WNV, but the virus has only rarely caused illness in dogs, cats, and domestic livestock.

BIRD SPECIES FOR TESTING

Corvids

Ravens
Crows
Magpies
Gray Jay
Steller's Jay

Raptors

Eagles
Hawks
Falcons
Owls

TO REPORT A DEAD BIRD

If you find a dead bird of the above species and/or a group of dead birds of any species, please **DO NOT PICK UP THE BIRD!**

Instead, contact either:

1) A local wildlife authority:

Anchorage ADF&G (907) 267-2347
or U.S. Fish and Wildlife Service,
Migratory Birds (907) 350-1677
(summer only)

Fairbanks ADF&G (907) 459-7206

Juneau ADF&G (907) 465-6197

Elsewhere: Your local ADF&G or
Park or Refuge office.

(2) Alaska Department of Health and Social Services, Section of Epidemiology in Anchorage at 907-269-8000.

What Hunters Should Know About West Nile Virus

As of August 2003, Alaska has yet to record a human or animal case of locally acquired West Nile Virus (WNV). However, because the disease has spread rapidly and reached the Pacific Northwest in 2002, the Alaska Department of Fish & Game (ADF&G) is working in partnership with the state Section of Epidemiology and Alaska State Virology Laboratory, US Fish and Wildlife Service, and US Geological Survey to conduct surveillance for the occurrence of WNV in wild birds in Alaska.

Although it is still unclear whether infection will be found in birds migrating to Alaska, authorities speculate that WNV is unlikely to become permanently established in Alaska. The probability of infectious birds getting to Alaska is unknown, mosquito vector species are different in Alaska, and the Alaska climate may deter development of the virus.

Surveillance for WNV in Birds

In most states affected by WNV in 2002, testing of dead birds, particularly crows, detected the presence of the virus in an area before the first human cases were diagnosed. Therefore, Alaska WNV surveillance efforts will be aimed at detecting WNV among species of birds that appear to be most susceptible to the virus. These include ravens, crows, magpies, jays, eagles, hawks, falcons, and owls. These birds can serve as sentinels for the already alert public health network.

Susceptibility of Game Animals to West Nile Virus

WNV has been positively detected by state and federal agencies in over 200 species of birds—finding either the actual virus or antibodies from previous exposure. Finding antibodies alone does not mean the bird died from the virus, only that it encountered it. The list includes common game birds, such as swans, geese, dabbling and diving ducks, doves and pigeons, bobwhite quail, ruffed grouse, pheasants, turkeys, sandhill cranes, and rails. However, testing has focused only on certain bird groups known to suffer high rates of mortality from WNV—it is not clear how vulnerable many bird species are to WNV.

Mortalities from WNV have been recorded in squirrels. However, most mammal species other than horses develop antibodies and don't exhibit illness. There have been a few extremely rare cases of WNV in captive wildlife or otherwise immune-compromised mammals, including a few white-tailed deer, captive reindeer, mountain goats, one wolf, and a black bear.

Safe Preparation and Cooking of Game Animals

It is a wise and safe practice to always wear rubber gloves, and keep tools and work surfaces clean when preparing game animals. This is not just advisable because of WNV. Clean and sanitary handling prevents common infections that can become serious, as well as transmission of a variety of diseases and parasites that can move between wildlife and humans.

WNV is not known to be transmitted from simple handling of birds by humans or other animals. Blood-to-blood transmission has occurred rarely in laboratory accidents. Thus, a person could theoretically contract WNV if they were cut with the knife while cleaning an infected animal during the brief period of high virus numbers in its blood. WNV can be neutralized with heat, drying, and disinfectants. Practical protection for hunters includes: (1) wearing gloves when cleaning game; (2) washing tools and hands thoroughly with soap and water; and (3) cooking game meat thoroughly.

How can I protect myself from WNV while hunting?

WNV can be acquired from some types of mosquitoes and from blood-to-blood contact with infected birds. Hunters should take these precautions:

1. *Deter mosquitoes with long-sleeved shirts, hats, gloves, and head nets.*
2. *Use mosquito repellants. However, repellents that contain more than 30% DEET may be hazardous. Follow label directions.*
3. *When camping, deploy screens and netting to keep mosquitoes out of your tent or cabin.*
4. *Do not handle birds that appear sick or birds found dead.*
5. *Use rubber gloves when cleaning game; wash hands, tools and surfaces immediately afterward.*
6. *Cook game meat thoroughly to kill disease organisms and parasites.*

Email your questions to:

WNVinfo@fishgame.state.ak.us



Frequently Asked Questions

Q: When will WNV be seen in Alaska?

A: Wildlife and *Public Health* authorities are unsure whether WNV will be detected in Alaska's birds. However, they don't expect the virus to be very efficient at spreading or becoming established due to our environmental conditions. It is not possible to predict when WNV might reach Alaska or whether it will become established in local mosquitoes and birds.

Q: Everybody knows Alaska has abundant and huge mosquitoes. Won't that make WNV problems worse here than in the Lower 48?

A: Those big and numerous mosquitoes are not the same species that are responsible for spreading the disease elsewhere. WNV can only be spread to people by a few types of mosquitoes that bite both birds and mammals.

Q: Since crows and raptors are most likely to get sick, can't we protect ourselves by killing these birds now?

A: The birds that become infected and die help us detect the presence of WNV, but they are not the species most likely to transmit the virus to mosquitoes. Thus, killing these species would not prevent the spread of WNV. Other birds are efficient carriers of the virus, but don't necessarily get sick. There is no practical way to identify or control these "reservoir" birds. Remember that nearly all birds are protected--it is illegal to harass or kill birds except as allowed under hunting regulations or special state and federal permits.

Q: What should I do if I find a sick or dead raven or jay while hunting?

A: First, contact a wildlife or public health office shown on the front of this flyer. If the carcass is of suitable condition and should be tested, they will arrange with you the most efficient method for collecting the carcass or advise you on how to dispose of it. DO NOT handle or collect birds unless asked to do so by agency personnel.

Q: I've heard that my hunting dog could get WNV. Can we vaccinate our pets to protect them?

A: There have been no reported cases of WNV in hunting dogs. Dogs are exposed to WNV via mosquito bites. Use of repellents with DEET or citrus oils is NOT recommended for dogs. Check with your veterinarian for approved products. Because dogs exposed to WNV become immune without showing signs of illness, there is no indication to vaccinate them even in areas of where human or horse cases occur. Hunters who use horses to pack out game are advised to have their horses vaccinated with the approved equine vaccine prior to the arrival of WNV in an area since the disease is devastating to horses. Over 14,000 horses have contracted WNV in North America and 1/3 of those who become ill have died.

For More Information:

- Check our website for updates/new developments:
<http://www.state.ak.us/adfg/wildlife/geninfo/disease/wnv.htm>
- For human health information in Alaska:
<http://www.epi.hss.state.ak.us/id/dod/wnileinfo.stm>
- National Centers for Disease Control and Prevention (CDC):
<http://www.cdc.gov/ncidod/dvbid/westnile/index.htm>
- National Wildlife Health Center:
http://www.nwhc.usgs.gov/research/west_nile/west_nile.html
- The US Department of Agriculture:
<http://www.aphis.usda.gov/lpa/issues/wnv/wnv.html>
- Canadian Cooperative Wildlife Health Center:
<http://wildlife.usask.ca/english/frameWestNile.htm>