

Bats and Disease

While bats are associated with a number of diseases in other parts of the world, bats in Alaska are relatively free of diseases that pose threats to human health.

Rabies

Unlike some regions in the Lower 48, rabies virus is NOT well-established or enzootic among bat populations in Alaska. Since the 1970s the Alaska State Virology Laboratory has evaluated over 150 bat brain specimens for rabies. Only two cases of rabies have occurred in bats in Alaska, and in neither case was the disease transmitted to a human. In 1993, a little brown bat was found crawling and squeaking on the ground near Ketchikan in the Tongass Forest was found to be infected with the silver-haired bat rabies virus variant. In 2006, a Keen's long-eared bat on Prince of Wales Island that was unable to fly was found to be infected with the red bat rabies variant.

Manifestations of Rabies in Bats

- Fly during daytime (this may also be typical of juvenile bats shortly after weening)
- Remain in "open" night roosts or in atypical places by day (also seen in healthy young bats)
- Roost alone (healthy male bats may also roost singly)
- Fly slowly or uncertainly, sometimes blundering into objects while in flight (also seen in healthy young bats)
- Unable to fly; paralysis and weakness leading to tremors and vocalization or death
- Move in an uncoordinated manner or thrash on the ground
- Animals may be thin, dehydrated and hypothermic
- Noise elicits squeaking from infected bats - healthy bats are generally quiet and motionless

Histoplasmosis

Histoplasmosis is a respiratory disease caused by a fungus that grows in soil enriched by bird and sometimes bat droppings. Lung infection can occur. The symptoms of Histoplasmosis are similar to pneumonia and the infection can become serious if not fatal if left untreated. The vast majority of human cases are found in the Ohio and Mississippi River valleys and adjacent areas where warm, humid conditions favor fungal growth. Cases of histoplasmosis have NOT occurred in Alaska.

http://www.epi.hss.state.ak.us/bulletins/docs/b2001_16.htm

What to do if you find a dead bat or a bat behaving abnormally.

Bats die from many natural causes, including capture by house cats. If you come upon a bat acting abnormally or bat mysteriously dead from unknown causes:

IF THERE HAS BEEN NO HUMAN OR PET EXPOSURE (Exposure is defined as any penetration of the skin by teeth; non-bite exposures are defined as contamination of open wounds or mucous membranes with saliva or other potentially infectious material - i.e., brain).

Report the bat to your local Alaska Department of Fish and Game office. When an ADFG employee receives a report of a sick or dead bat and there has been NO human/pet exposure reported, they will refer the contact to the Regional Wildlife Diversity Program Biologist for response. If the report includes a sick or dead bat or bat carcass for disease surveillance, the ADF&G Regional Wildlife Diversity Program (WDP) Biologist will contact ADF&G Wildlife Veterinarian immediately.

IF THERE HAS BEEN HUMAN OR PET EXPOSURE

Report the bat to your local Alaska Department of Fish and Game office. When an ADFG employee receives a report of a sick or dead bat and there HAS BEEN human/pet exposure reported, the ADF&G employee will contact Alaska DOH HSS SOE immediately so the human health risk can be dealt with and for authorization prior to submitting specimens for rabies testing. HSS SOE will then contact and coordinate with the ADF&G Veterinarian.

How to collect a dead bat if you are directed to do so by an ADF&G biologist:

A fresh dead bat should be handled with protective gloves, placed in a ziplock bag, and chilled immediately in a refrigerator. Please do NOT freeze bat carcasses unless specifically instructed to do so or the carcass can't be shipped within 72hrs or the ADF&G Wildlife Veterinarian does not call back within 48hrs. Fresh chilled is always preferred for disease diagnostic purposes. Chilled specimens should be kept cold (35-45°F) prior to shipping. Frozen samples should be kept frozen. Dead bats may be collected and chilled or frozen by the reporting citizen under the direction of an ADF&G employee with the appropriate collecting permits if the employee will later pick up the specimen from the private citizen for processing.