How to report a suspect case of white nose syndrome

This document provides information on white-nose syndrome (WNS) for people in Australia who come into contact with microbats (e.g. wildlife rehabilitators, ecological consultants, wildlife researchers and students, cavers, cave managers, park rangers, members of the public). Veterinarians should refer to the National guidelines for sample submission for guidance on appropriate collection and submission of samples to facilitate the exclusion of WNS in Australia.

WNS is a fungal disease that has caused significant declines in insectivorous bat populations across North America. WNS has **not** been detected in Australia and is a **nationally notifiable disease**. For more information on WNS, see Background information below.

Members of the public should not handle bats. If you find an injured or sick bat, contact a wildlife care organisation or your local veterinarian.

Only people who are experienced, wearing appropriate protection and are vaccinated should handle bats.

See Human health precautions below, for more information.

Clinical signs of WNS in bats

Only microbats are known to be affected by WNS. Australia's flying-foxes are not considered at risk of WNS.

Testing for WNS should be considered when Australian microbats display any of the following signs:

- White or grey powdery fungus on the face, fur, skin or wings (Figure 1)
- Wing damage (membrane thinning, discolouration, flaky appearance or holes)
- Mass mortality (multiple deaths)
- Abnormal behaviour (such as flying during the day).

Figure 1 Clinical signs of white-nose syndrome in microbats

Photos: Karen Vanderwolf/NB Museum. More images are available from the USGS National Wildlife Health Center.

How to report a suspect case

WNS is a nationally notifiable disease in Australia. Based on the clinical signs described above, if you suspect WNS, you should contact:

- Your local State / Territory Wildlife Health Australia (WHA) Coordinator or
- The 24 hour Emergency Animal Disease Hotline on freecall **1800 675 888** or
- Your local veterinarian or
- Wildlife Health Australia

If you are able to do so, please also report to the cave managers or park rangers and advise you have contacted one of the above.

To assist with the investigation and management of suspect cases, the following information may be helpful for investigators ***(where possible and safe to do so)***:

- Record the exact location of the suspect bat(s)
- Record other details if known e.g. total number of bats, number of affected/dead bats, species, any unusual behaviour
- Take photographs

If a suspect bat was observed in a cave, on leaving the cave follow the decontamination instructions below to prevent the possibility of spreading disease.

If a suspect bat has been captured in a trap during fieldwork, decontaminate equipment that has been in contact with the bat. If the bat is to be held for any period, isolate it to prevent physical contact with other bats (see Spread of Disease below).

Human health precautions

No human health risk from WNS has been identified. However, there is a risk of exposure to other diseases when handling bats, such as Australian bat lyssavirus (ABLV).

Members of the public should not handle bats. If you find an injured or sick bat, contact a wildlife care organisation or your local veterinarian. Only people who are experienced, wearing appropriate protection and are vaccinated should handle bats.

ABLV is transmitted by the saliva of an infected animal introduced via a bite or scratch, or by contamination of mucous membranes or broken skin. In the event of a bat bite, scratch or other significant contact, **seek medical attention URGENTLY.** Bite or scratch wounds should immediately be washed thoroughly with soap and copious water for approximately 15 minutes and a virucidal antiseptic applied. Bat saliva in the eyes or mouth should be rinsed out immediately and thoroughly with water. For more information contact your local Public Health agency for advice.

For experienced bat handlers, further information on ABLV risk management:

- WHA: Personal Protective Equipment (PPE) Information for Bat Handlers
- Qld WHS: Australian bat lyssavirus and handling bats and safe bat handling video
- Links to state/territory ABLV resources

Spread of disease

Transmission of WNS occurs via direct contact between microbats. The fungus has also been found to survive in the environment for long periods without the presence of bats, providing the opportunity for bats to become infected from environments contaminated with the fungus. Humans may also facilitate the spread of the disease to new locations by transferring spores on clothing, footwear or equipment.

Where WNS is suspected, the bat should be kept separately and isolated from all other bats to reduce the risk of disease transmission.

The use of personal protective equipment (PPE) and decontamination (see below) should be adopted to reduce the potential transfer of the fungus between individual bats, between bats and the environment, and to limit the spread within the environment. Consideration should be given to how clothing and equipment will be decontaminated (see below) before any contact with suspect cases.

Decontamination

Guidelines for the disinfection of materials and equipment exposed to the fungus have been published in the USA and Canada. The first step in decontaminating clothing, footwear and equipment is to thoroughly remove all dirt, sediment and debris. The next step, where suitable, is submersion in hot water maintaining a temperature of at least 55°C for a minimum of 5 continuous minutes, followed by complete drying. Items that cannot be immersed in water can be treated by disinfection, followed by rinsing in clean water and complete drying. The The US National White-nose Syndrome Decontamination Protocol (March 2024) details specific, effective disinfectants (see Table 1 in the Protocol). Note the safety information outlined in the Protocol. Cleaning and decontamination steps are described in detail, in the Biosecurity Guidelines for Bat Research in Caves in Australia, along with examples of suitable methods for specific equipment used in caves.

Background information

Microbats play a very important role in balanced ecosystems

Microbats are fascinating animals that are vital for healthy environments. They eat an enormous volume of insects so bat populations can reduce the number of pest insects, which has benefits for Australia's native bushland, agricultural industries and human health.

WNS has devastated microbat populations across North America

Millions of microbats have died following infection with *Pseudogymnoascus destructans,* the fungus that causes WNS, since it was first discovered there in 2006. Experts are concerned that some species are threatened with extinction in certain regions. WNS is estimated to have killed more than 5.5 million microbats in northeast USA and Canada. In some sites, 90-100% of microbats have died (WNS Response Team).

WNS has not been identified in Australia

The fungus that causes WNS has **not** been detected in Australia. However, Australia is home to a number of microbats that are closely related to those affected by WNS in North America. If similar signs to those described for WNS are observed in any Australian species of microbat, these should be investigated by a veterinarian. WNS should also be ruled out for any mass mortality of Australian microbats, with or without signs consistent with WNS.

For more information on WNS, see the WHA White-Nose Syndrome Fact Sheet, the WHA Bat Health webpage, and the North American White-nose Syndrome Response Team website.