



## Frequently Asked Questions about Rehabilitation of Bats



### **Do we need to follow the decontamination protocol if our bats do not exhibit visible signs of White-nose Syndrome (WNS)?**

All bats should be treated as having WNS upon intake. Use a long-wave UV ray light to determine if the bat has WNS. If it does not have WNS, it does not need to be handled with the same protocol as a bat that has WNS. The bat must be placed in a separate room from the WNS infected bats.

### **Can I use a hot water bath, sanitary cycle on a washing machine, etc. to submerge and decontaminate porous material?**

The method for submerging porous material during decontamination is flexible. The items must be completely submerged for the entire twenty minutes, and the water must be set at 131° Fahrenheit. Whatever method that is used to achieve these means is acceptable, whether it be an autoclave, washing machine, lobster cooker or hot water bath.

### **How long do the *Pseudogymnosascus destructans* (Pd) spores persist?**

There is evidence that the spores persist in hibernacula all year long, even in the absence of bats. In some lab studies, it has been shown to persist for at least five years in the right conditions.

### **Is it necessary to wear masks when working with bats?**

It is possible to contract Histoplasmosis with any large quantity of bird or bat feces. We recommend masks as an extra safety precaution.

### **Will all bats with WNS fluoresce with the long wave UV ray light?**

This method is quite effective. A recent project done by USGS Carol Meteyer and Alex Demas showed that 98.8% of all bats that had WNS were shown by the long-wave UV ray light. 100% of bats that did not have WNS were positively identified as well. The method works by showing the fungal spores that are in lesions and on the wing. The fungus will fluoresce an orange-yellow color if the bat has WNS.

### **Is there a treatment for WNS such as anti-fungal medications?**

Field trials are in progress throughout several states and scientists are looking for novel biocontrol agents in others. It is a time period where encouraging disease treatments are being explored and partners are eager to stop WNS at the leading edge.

While we await the results of ongoing trials, we strongly encourage the bat rehabilitation community to continue to follow all relevant guidelines to reduce further transmission of Pd. Anti-fungal medications taken orally have not been shown to eliminate WNS to date. In addition, the fungus is not just found on the surface of the bat. Therefore, bathing may not be the most effective means to try and treat the bat. The procedure is therefore at the discretion of the rehabilitator and the veterinarian. If the bat is treated by either of these aforementioned means, the bat still needs to be contained in the WNS room and not placed with the bats that do not exhibit signs of WNS.

### **Is the incubation period for White-nose Syndrome known?**

The exact time period of incubation is not known. Field surveys have indicated that the characteristic white, fuzzy fungus can be seen within a few weeks of the bat being exposed to the fungus. It should still be detected with the UV ray light even when the fungus is not visible.

**Are there any dangers for my education bats if I have bats with WNS in the rehabilitation center?**

White-nose Syndrome is very easily spread due to the prolific nature of the fungus and the microscopic form of the spores. Bringing bats into a facility with education bats could put the education bats at risk. However, following the decontamination protocols, and isolating the bats with WNS in a separate quarantined area, will reduce this risk. We also recommend dedicating rehabilitation tools to use only for education bats (e.g. feeding dishes, holding containers, etc) and never with wild bats.

**Do we need to euthanize bats with WNS?**

Bats with WNS do not need to be euthanized unless they have sustained an insurmountable injury. Bats with WNS that cannot be released must be euthanized unless otherwise coordinated with the Division of Wildlife.

**How should bats be euthanized?**

We no longer require bats to be euthanized only by means of cervical separation. As long as the bats are euthanized via AVMA standards, veterinarians can use injections, cervical separation, or inhalant methods. However, it should be noted that the use of CO<sub>2</sub> is not permitted due to bats being highly tolerant of it.

**Is keeping bats in separate cages sufficient to keep them isolated?**

No. Bats with WNS must be kept in a quarantine room away from other animals, including bats without WNS. Keeping bats in separate cages but in the same room is not sufficient because of the microscopic nature of the fungal spores. This makes it easy to unknowingly transmit the fungal spores from one surface to the next. This is the case for infant, juvenile, or adult bats.

**Do bats always need to be isolated from each other?**

No. Bats with WNS must be kept in a separate, quarantine room, away from bats without WNS, but they may be held together in the same cage if they are of the same species and are from the same county/township. It must be noted that male big brown bats (*Eptesicus fuscus*) may injure each other if held in the same cage. Bats held in the same cage, must be individually marked in order to manage their individual treatment/record keeping.

**Do I need a separate flight-conditioning cage for WNS infected bats?**

Yes. A free-standing pop-up screen tent may be a good option for flight-conditioning bats. Tents/cages used for bats with WNS must not be used with bats without WNS and must be decontaminated after each use.

**Is there a place that I can go to get additional information on rehabilitation of bats and White-nose Syndrome?**

There are several resources that can be used to clarify questions about the rehabilitation of bats. The state of Wisconsin has a fairly detailed rehabilitation plan that can be used as a reference. In addition, the documents on <https://www.whitenosesyndrome.org/resource/protocol-wildlife-rehabilitator-response-hibernating-bats-affected-white-nose-syndrome> and <http://www.bats101.info/resources/Manual%20Rehabilitating%20Bats%20with%20WNS%20Secured.pdf> have quite a bit of information on decontamination protocols and proper maintenance of bats in a rehabilitation facility. Keep in mind when referring to the documents that it is your responsibility to follow the minimum standards as laid out by the Division of Wildlife. These documents are simply a guide to help you do so.

**Who should I contact if I have questions about the protocol?**

Questions about the protocol may be directed to the Permit Coordinator at the Division of Wildlife, at [wildlife.permits@dnr.state.oh.us](mailto:wildlife.permits@dnr.state.oh.us).