

Draft Disinfection Protocol for Bat Field Studies
U.S. Fish and Wildlife Service- Region 5
April 2008

To minimize the potential for transmission of white-nose syndrome (WNS) while handling bats (both between handler and bats and between bats), some procedures can be easily implemented. This list is intended as a basic set of precautions in or after working in affected and suspect states (Connecticut, Massachusetts, New York, Pennsylvania, Vermont) and adjacent states (Maine, New Hampshire, New Jersey, and Rhode Island). However, these guidelines, while important for addressing concerns about WNS, are simply good practice to avoid disease transmission and risk of exposure to zoonoses, and we recommend implementing them in all situations where people handle wildlife to minimize potential disease-related impacts to wildlife and people, even in areas where WNS is not known to occur. Please note that individual states may have additional permitting requirements above and beyond these general procedures. In addition, these guidelines may be revised upon review of new information.

Any equipment that comes in contact with bats has the potential to be a vector for spread of WNS. For example, Mist nets, harp traps, bat bags, wing punchers, weighing tubes, rulers, gloves.

Bags and Gloves

To avoid cross-contamination of samples, it is imperative to keep holding bags as clean as possible. Ideally, each holding bag should be used only once during an entire night of field work and should be washed following procedures below) and dried between nights. Paper bags may also be an option for holding bats temporarily. Bats should be kept in bags rather than holding cages.

At all times throughout a field night, only one bat should be in a given bag.

Disposable gloves should be worn over handling gloves and swapped out regularly throughout the night. Smooth leather gloves may be wiped down with disinfectants between bats. After each night of netting (or prior to next night of use), bags and gloves should be soaked in an appropriate disinfectant agent and completely dried.

Options include:

Remove heavy soil deposits from surface. Thoroughly wet surface or soak in 10% bleach solution (10 parts water to 1 part bleach) with detergent as a surfactant for one hour. Rinse two times and completely dry.

Puregreen 24. Remove heavy soil deposits from surface. Thoroughly wet surface or soak in disinfectant for at least 10 minutes. Dry thoroughly.
<http://www.puregreen24.com/index.html>

Quaternary Disinfectant Cleaner. Remove heavy soil deposits from surface. Thoroughly wet surface or soak in disinfectant with solution of ½ oz. of concentrate per gallon of water. Keep on surface for one hour. Rinse and completely dry. See product warnings

for contact with skin and eyes. <http://www.drugs.com/vet/lysol-brand-i-c-quaternary-disinfectant-cleaner-concentrate.html>

Equipment with Hard Surfaces

Use a bactericide/virucide (e.g. Nolvasan, chlorhexidine diacetate) or one of the above-listed agents to sanitize all equipment that comes into contact with a bat's body, including banding pliers, rules, calipers, scale, etc. We suggest cleaning these items after each bat. The solution can be placed in a small plastic spray bottle and carried in the banding bag to afford accessible, easy application to equipment. If using containers to weigh bats, separate containers used to weigh tree bats from cave bats, do not place tree bats in a container previously used for a cave bat. Containers used to weigh cave bats (film canisters, baggies, cardboard rolls) should be disinfected regularly throughout the night or replaced periodically. Alternatively, bats can be put in a plastic bag, weighed, and measured (forearm). Throw out the bag after each bat.

If collecting wing biopsies for any approved research studies, use one punch per bat and dispose of punch afterward.

Nets

- Use separate sets between affected and unaffected states

Or if not possible and the state permit allows,

- When moving equipment from affected states to non-affected states, nets should be soaked in one of the above-listed disinfecting agents and hung until completely dry

Harp Traps

- Use separate traps between affected and unaffected states

Or if not possible and the state permit allows,

- Each night after use in affected states, remove any dirt/debris from wires/lines and bags, and spray on one of the above-listed disinfecting agents. Swab the bag with disinfectant and allow to dry completely (preferably in the sun) prior to the next use
- Bats should not be allowed to remain in the bag for more than 10 minutes.

Notification of Signs of WNS

As a reminder, the white fungus is only one of the signs of WNS. In addition, we do not expect to find bats with fungus on them during the summer/fall. However, if that should occur, please photograph and report it to local U.S. Fish and Wildlife Service (Service) Field Office and/or State natural resource agency within 24 hours.