

# White Nose Syndrome



Bats with White-Nose Syndrome

White-Nose Syndrome (WNS) is a deadly ailment that has recently killed more than 500,000 bats in the northeastern United States. Biologists are working hard to study WNS, but no one yet fully understands the cause of the deaths, how to stop them, or how to stop them from spreading. What is known is that WNS is spreading. **There is evidence that people may carry WNS from cave to cave.** To prevent or reduce the risk of people spreading WNS throughout the United States and other parts of the world, the BLM is suggesting the following policies and actions.

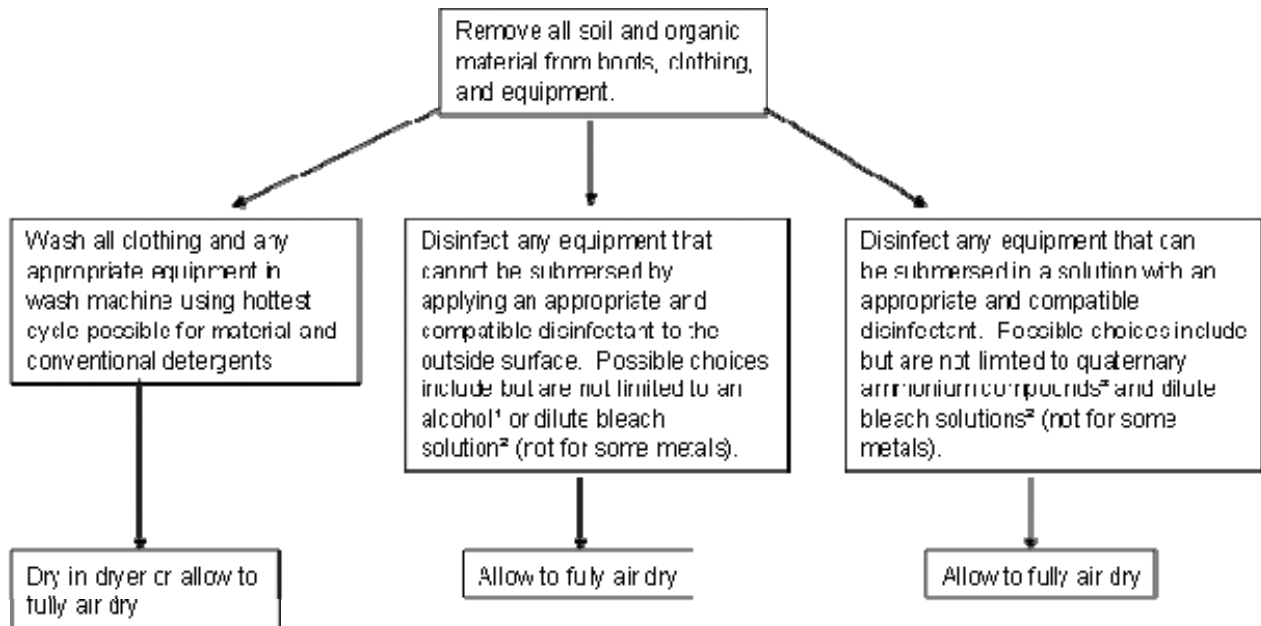
- Upon exiting a cave, whether inhabited by bats or not, follow the containment and decontamination procedures below. Decontaminate all clothing, footwear, and gear **prior to departing for your next caving** trip if you did not decontaminate these items after last exiting a cave.
- Because clothing, footwear and gear used in accessing a cave in New York, Vermont, Connecticut, Massachusetts, Pennsylvania, Virginia, or West Virginia within the past 2 years could pose a risk of spreading WNS, the US Fish and Wildlife Service advises that these items not be used when accessing caves anywhere and that these items not be transported until the cause of WNS is identified and the effectiveness of decontamination procedures can be evaluated. We advise that you decontaminate these items immediately (see decontamination procedures below) and store them away, and that you thoroughly wash and decontaminate any surfaces with which these items may have come into contact (e.g., car trunk).

The BLM asks that cavers please follow these procedures for containment and decontamination in the circumstances identified above. These reasonable practices will reduce the transfer of infectious agents which potentially affect bats from one cave to another cave.

Any gear, including outer clothing, should not be used in multiple caves on the same day unless the cleaning and disinfection recommended below can be performed. A cave should only be entered with clothing, boots and equipment that have been fully cleaned using the protocol below and rinsed to remove disinfectant residue prior to entry into another cave. Upon exiting a cave, scrape or brush off any dirt and mud from your clothes, boots and gear and then place them in a sealed plastic bag or container to be cleaned and disinfected off site. Remember to bring extra clothes for the drive home. Companion animals should be kept out of caves.

## Decontamination Procedures

The first step of decontamination is to remove all soil and organic material from equipment, clothing and boots using repeated rinses with water. This is especially important as organic material can inactivate many cleaning and disinfectant agents.



**It should be noted that product guidelines should be consulted for compatibility before using any disinfectant on specific equipment.**

Boots need to be fully scrubbed and rinsed so that all soil and organic material is removed. The soles of the boots can then be disinfected with an appropriate disinfectant, including but not limited to, 70% isopropyl alcohol<sup>1</sup> and dilute bleach solutions<sup>2</sup> (not for some metals).

Ropes and harnesses: Caution should be taken when considering disinfectant products for ropes and harnesses so performance is not affected. Some manufacturers suggest using water with a maximum temperature not to exceed 104°F for rinsing and washing cycles and then disinfection by soaking in quaternary ammonium compounds<sup>3</sup> diluted in water not exceeding 68°F. Ropes should be rinsed thoroughly and allowed to fully dry after a disinfectant is used. Consult specific manufacturer's recommendations for more details. Consult the manufacturer of your rope or harness for specific recommendations on appropriate cleaning and disinfectant procedures and products.

If any bats with WNS are observed in a cave or dead bats with WNS are found please contact the local BLM Field Office.

<sup>1</sup>**Alcohol:** A 70 percent or greater isopropyl alcohol is readily available and a good choice.

<sup>2</sup>**Bleach** solutions: These products can be corrosive to some metals and irritating to skin. Consult manufacturers' guidelines for appropriate use. Bleach solutions (5.25 percent sodium hypochlorite) to be used for disinfectants are diluted in the range from 1:100 (1 part bleach in 100 parts water, which supplies approximately 500 ppm available chlorine) to 1:10 (1 part bleach in 10 parts water which supplies approximately 5000 ppm) depending on the surface to be disinfected. The 1:100 dilution is appropriate for smooth pre-cleaned surfaces, whereas the 1:10 dilution is appropriate for porous surfaces that are difficult to pre-clean.