

**MINISTRIES OF MINES, ENVIRONMENT AND FOREST LANDS AND NATURAL RESOURCE OPERATIONS,  
BRITISH COLUMBIA**

*Decontamination procedures when visiting potential bat habitats in mines and caves*

**PURPOSE**

To describe decontamination procedures to reduce the risk of introducing the fungus *Pseudogymnoascus destructans* (formerly known as *Geomyces destructans*) into B.C. bat habitats and reducing transmission among sites.

**DESCRIPTION**

Bats have high economic and ecological value, providing between \$3 and \$53 million dollars in pest control services (US figures). These benefits are under a serious threat. A new disease caused by a newly introduced fungus, *Pseudogymnoascus destructans* (*Pd*), has killed over 6 million bats in eastern North America. The disease is called White Nose Syndrome (WNS) because of the white fungal fuzzy growth on the nose and fur of affected bats. The organism forms spores that transmit the disease when affected bats are in close contact in colonies in caves, mines and other places during hibernation and roosting. To date, the disease has not been detected west of the Rocky Mountains but there is concern that spores can be transported inadvertently to the west by humans; on boots, clothing and the equipment of cavers, miners, geologists, geocachers and others who frequent habitats that are also used by bats. Although bat to bat contact is considered the primary mode of *Pd* transmission, human associated transport of fungal spores is suspected in at least one case of WNS emergence. The extent of bat movement across the Continental Divide is unknown, but may not be extensive. Given this, it is important that humans do not become the vector of WNS transmission to western North America.

**RESPONSIBILITY**

It is recommended that geologists, surveyors, miners, support staff and recreational users in and around potential bat habitat in mines and caves, particularly unused mines, follow these SOPs. People moving to B.C. from areas where White Nose Syndrome has been detected should pay particular attention to reducing the risk (<http://www.whitenosesyndrome.org/>). It is recommended that these decontamination protocols be implemented in B.C. when people, equipment and materials equipment are moving between mines and caves that are >10 km apart, are in different watersheds, or have major geographical barriers between them.

**STANDARD OPERATING PROCEDURES**

The B.C. Ministry of Environment and Ministry of Forest, Lands and Natural Resource Operations now recommend the protocol posted on the Canadian Wildlife Health Cooperative website specific to western Canada, be adopted in B.C.

**Decontamination procedures for cavers, miners and other users of habitats associated with bats in western Canada:**

[http://www.cwhc-rcsf.ca/docs/WNS\\_Western\\_Transmission\\_Prevention.pdf](http://www.cwhc-rcsf.ca/docs/WNS_Western_Transmission_Prevention.pdf)

It is important to note that the information on the efficacy of the recommended chemical disinfection agents is rapidly evolving. So, it is important to consult the Canadian National White Nose Syndrome Plan (<http://www.cwhc-rcsf.ca/docs/BatWhiteNoseSyndrome-NationalPlan.pdf>) for the latest information and ensure that the most up to date information on chemical disinfection procedures are followed.

#### **FURTHER INFORMATION ON WNS**

If signs of WNS are detected (large numbers of dead or dying bats, day flights of bats observed in the middle of winter, bats with damaged wing membranes etc), please immediately contact:

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For further information on WNS: [BC Wildlife Health website \(http://www.env.gov.bc.ca/wld/wldhealth/\)](http://www.env.gov.bc.ca/wld/wldhealth/) and navigate to “White Nose Syndrome Alert” under Current Issues on the right menu.

#### **ACKNOWLEDGEMENTS**

This protocol was initially drafted by Dr. Cori Lausen, Wildlife Conservation Society Canada, in consultation with Dr. Helen Schwantje and Cait Nelson, Ministry of Forests, Lands, and Natural Resource Operation, and Dr. Purnima Govindarajulu, Ministry of Environment. It has been reviewed by the BC Bat Action Team Bat Health Committee. Unpublished sources of information were obtained from Jordi Segers, Canadian White Nose Syndrome Coordinator, and Canadian Wildlife Health Cooperative.