



United States Department of the Interior  
NATIONAL PARK SERVICE  
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**TECHNICAL BULLETIN**

To: Regional Concession Chiefs

From: Chief, Commercial Services Program

Subject: Managing Bat and Rodent Exclusion and Intrusion in Concession Operations  
(Revised)

This technical bulletin is a revision to and rescinds the bulletin on the same topic issued October 5, 2017. This updated bulletin was developed in collaboration with the NPS Office of Public Health and revises several procedures based upon input from the field. It also updates several links to internet resources.

Concessioners, as private operators contracted with the National Park Service, are obligated under the terms of their contract to develop, maintain and implement risk management and integrated pest management (IPM) programs to provide facilities and services in a manner that is protective of human health and safety to the extent reasonable. This includes preventing animals such as mice and other rodents, bats, and insects, which can transmit disease from entering and nesting in facilities such as lodging, food and beverage outlets, and employee housing. Due to the nature of parks, occasionally these creatures get into concession facilities. This technical bulletin addresses procedures to be followed by concessioners and park personnel regarding rodents and bats, two of the most common animals that are encountered inside concession facilities.

**Concessioner Program**

Per NPS policy, NPS Concessioner IPM programs must include policies and practices to:

- Exclude animals from facilities;
- Conduct inspections to ensure facilities are secure from animal intrusion;
- Train applicable employees on risks and actions to prevent, respond to, clean up, and abate animal intrusions;
- Provide awareness information to visitors on potential risks of animal exposure and preventive action;

- Report employee and visitor animal interactions to the NPS; and,
- Conduct any necessary animal intrusion response, clean up and abatement.

Information is available to concessioners on the NPS web site to assist them in developing and implementing their animal exclusion program. Resources are available directly to concessioners at [NPS Integrated Pest Management Program](#).

### **NPS Protocol for Animal Intrusion and People Interaction**

To ensure appropriate action is taken and accurate information is transmitted, the NPS has developed protocols for dealing with animal intrusions by bats and rodents, which should be followed by concessioners and park staff. The NPS Office of Public Health is an advisor and may assist in such situations. The protocols vary depending on the animal interaction and the scope of the incident.

#### ***Bats***

The primary disease of concern associated with bats is rabies, which can be transmitted when a bat bites or scratches a person. The possibility of a bite or a scratch must be considered if an employee or visitor wakes to find a bat in their bedroom and does not know definitively whether they might have been unknowingly bitten or scratched while sleeping. More information on bats and rabies can be found at [NPS Bats and People](#). In addition, information including rack cards and fact sheets are available to NPS personnel from the InsideNPS [Office of Public Health rabies page](#) or the [Wildlife Health Branch disease surveillance and investigation page](#). Park staff are encouraged to download and share resources from these sites with their concessioners.

In the event of an interaction, the following actions are to be taken:

1. Upon notification of a bat interaction by a person (e.g., visitor or employee) in a concession facility, trained concession staff should investigate and capture the bat for rabies testing, if that can be done safely. Anyone involved in the capture should wear long sleeves and thick gloves, and place a container over the bat. The trained person should slide a stiff piece of cardboard between the container and surface on which the bat was captured to trap the bat in the container. If multiple bats are involved and it is not possible to know which particular bat was the concern, capturing and testing the bat for disease should not be conducted. The involved facilities (e.g., room(s)) should be closed until they are no longer accessible to bats and determined to be suitable for use again.
2. In the event of a potential human-bat exposure, the concessioner should promptly notify Public Health and provide the name and contact information for the person(s) with potential bat exposure, so that an assessment for rabies post-exposure prophylaxis need can be done. To reach Public Health for a risk assessment, the concessioner can contact their local or State health department directly or the NPS Office of Public Health (OPH) (Dr. Maria Said at 202-513-7151 or Dr. Danielle Buttke at 970-267-2118). They should also notify the park concession program and their NPS OPH public health consultant. The local/State health department and/or the NPS OPH can provide the concessioner guidance on how to arrange to

test the animal for rabies. (Rabies testing fees are covered by the NPS or State). The park concession program should notify the park IPM coordinator.

3. A representative from Public Health (either from the local/State health department or the NPS OPH) will contact the person directly to obtain details on the animal interaction, inform the person of the potential bat rabies risk, and make recommendations about the potential need to see a health care provider based on rabies test results for the bat, if available, and the type of exposure that occurred.
4. The concessioner, in consultation with the public health consultant and the park concession program, IPM coordinator, and other applicable park personnel, must investigate the source(s) of the intrusion, clean up, and abate the animal intrusion risk using appropriate equipment and techniques. This may be limited to a single room or structure or they may have to address a larger infestation. The involved facilities should not be reopened until this can be accomplished.
5. The concessioner should intensify monitoring to ensure the resultant bat exclusion actions were effective, and the park concessions specialist should check to ensure this monitoring by the concessioner is occurring.

### ***Rodents***

Rodents can carry many diseases, including hantavirus, tick-borne relapsing fever, salmonella, leptospirosis, and rat bite fever, and should be excluded from buildings. The most serious rodent-borne disease is hantavirus, which has a high case fatality rate. Although hantavirus is a very rare disease, and only a very small percentage of rodents, mainly deer mice (western US) and white-footed mice (eastern US), are infected with hantavirus and an even smaller percentage are shedding the virus at any point in time, we cannot tell if a rodent is infected just by looking at it. Any deer mouse or white-footed mouse in a facility should be considered a hantavirus risk. The vast majority of human cases are associated with high-risk activities that stir up dust, such as sweeping, cleaning out old buildings, or living in heavily infested buildings.

Resources on rodent management are available to NPS personnel on the [InsideNPS rodent management web page](#). Information on hantavirus in particular can be found on [InsideNPS hantavirus web page](#). Park staff are encouraged to download and share resources from these sites with their concessioners.

If there is evidence of a rodent in a building, it should be considered a potential health risk and responded to immediately through the following actions:

1. Upon notification by a person (e.g., visitor or NPS employee) of an intrusion (e.g., rodent sighting or noted evidence of rodent intrusion such as droppings), trained concession personnel should immediately investigate the incident location to identify the nature of the intrusion.
2. If the rodent is still present, it should be properly trapped and disposed of by a trained concession person wearing proper personal protective equipment. The NPS does not test individual rodents for hantavirus because the proportion of infected and/or virus-shedding rodents changes rapidly and does not tell us if other infected rodents have previously been in the room or if the tested rodents was previously shedding the virus. If one rodent

can get in, other rodents could have entered as well, and a rodent that tests negative may give a false sense of security.

3. The concessioner should keep a log of all rodent and trap activity, including the location, date, nature of activity (i.e., droppings or reports of rodent sightings), and actions taken to address the issue. The park concession program should review this log with the park IPM coordinator and public health consultant on a regular basis.
4. If a visitor reports a rodent in their lodging, they should be informed by the concessioner that rodents are associated with health risks. In areas with higher hantavirus prevalence (mainly the western United States), the visitor should be specifically informed of the potential hantavirus risk and the symptoms of hantavirus. They should also be instructed to seek medical attention if they develop two or more symptoms of hantavirus within 8 weeks of their exposure and inform their medical provider that they may have been exposed to hantavirus. Information on hantavirus is available on the [NPS.gov hantavirus](#) page. Additional information on rodent-borne diseases, in general, is available through the [Centers for Disease Control and Prevention \(CDC\) rodent page](#). If further concern exists, the NPS Office of Public Health can be consulted (Dr. Maria Said, 202-513-7151, [maria\\_said@nps.gov](mailto:maria_said@nps.gov) or Dr. Danielle Buttke, 970-267-2118, [danielle\\_buttke@nps.gov](mailto:danielle_buttke@nps.gov)).
5. When evidence of elevated rodent activity or inadequate rodent exclusion is detected based on review of the rodent activity log, the concessioner, in consultation with the public health consultant and the park concession program and other applicable park personnel, must investigate the source(s) of the intrusion, clean up, and abate the animal intrusion risk using appropriate equipment and techniques. This may be limited to a single room or structure or may need to address a larger infestation. The involved facilities should not be occupied until this can be accomplished. Information on rodent exclusion is available in the [NPS Rodent Exclusion Manual](#).
6. The concessioner should intensify rodent monitoring and snap trapping in the facility which experienced the elevated rodent activity until reasonably certain that the rodent exclusion is effective. The park concessions specialist should check to ensure monitoring and trapping by the concessioner is occurring.

### **Responsibilities and Limitations**

Public health recommendations are based on current CDC guidance. Visitors are under no obligation to follow the advice that is offered regarding medical treatment. Those communicating with visitors as outlined above will inform the person that the information provided is advice, not a requirement. NPS is not responsible for payment of visitor or employee medical expense that may result from taking the advice offered.

Concessioners are not contractually obligated to pay for medical expenses incurred by visitors who take the advice offered by the regarding medical treatment. However, they may wish to do so as a business decision.

### **NPS Oversight of Concessions Program and Practices**

Concessioners are responsible for implementing their own internal animal exclusion program including facility inspections and animal intrusion prevention practices. The NPS provides

oversight of concession programs and practices through the Concessioner Review Program. Lodging, employee housing, and food and beverage service periodic evaluations include review criteria specifically related to animal exclusion program implementation. Finally, the NPS may conduct more focused animal exclusion program inspections using technical experts such as NPS public health consultants, IPM coordinators, or facility managers.

### **Other Wildlife Interactions Health or Safety**

There are a variety of other potential wildlife interactions that may occur with concessioners, employees, and visitors in concession facilities or during concession-provided activities. Concessioners should follow contract requirements, NPS policy and guidance, and park-level procedures associated with these events.

### **Distribution**

Please distribute this memorandum to park concessions managers in your region.

### **Feedback and Questions**

For further information, contact [Kurt Rausch](#), Contract Management Branch Chief, Commercial Services Program, at 202-513-7202; [Danielle Buttke](#), One Health Coordinator and veterinary epidemiologist, at 970-267-2118; or [Maria Said](#), Epidemiology Branch Chief, at 202-513-7151.

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