



## FACT SHEET

### Rodent Control After Hurricanes and Floods

Rats and mice are destructive pests that can spread disease, contaminate food, and destroy property. However, as a result of a disaster, the number of rats and mice are often reduced. Thus, illness associated with rats and other small rodents is uncommon immediately after a disaster.<sup>1</sup>

Surviving rodents often relocate to new areas in search of food, water, and shelter. As the rodents settle into new areas, they will build colonies and reproduce. Typically, it takes 6 to 10 months for rodents to re-establish their colonies after a disaster. As the rodent population grows and resettles, people have a greater chance of being exposed to the diseases carried by rodents.

The following recommendations are designed to help residents reduce the risk of disease or personal injury associated with rodents.

#### Precautions to Limit Household Exposure

Removing food sources, water, and items that provide shelter for rodents is the best way to prevent contact with rodents. Where necessary, control rodents by using an integrated pest management approach that includes environmental sanitation, food storage, rodent-proofing, poisoning, and trapping.

#### *Inside the Home*

- Keep food and water covered and stored in rodent-proof containers. A rodent-proof container is made of thick plastic, glass, or metal and has a tight-fitting lid.
- Keep pet food covered and stored in rodent-proof containers. Allow pets only enough food for each meal, then store or discard any remaining food. Do not leave excess pet food or water out overnight.
- Dispose of garbage on a frequent and regular basis. If storing trash and food waste inside the home, do so in rodent-proof containers.
- Wash dishes, pans, and cooking utensils immediately after use.
- Remove leftover food and clean up any spilled food from cooking and eating areas.
- Do not store empty cans or other opened containers with food residues inside the home.
- When possible, use spring-loaded traps in the home. Use a small amount of chunky peanut butter as bait. Place traps in a "T" shape against baseboards or wall surfaces where rodent rub marks, droppings, or rodents have been seen. Keep children and pets away from areas where traps are placed.
- Glue traps and live traps are not recommended. Rodents caught in live traps will likely reenter the dwelling. Glue traps can scare mice that are caught live and cause them to urinate. This may increase your risk of being exposed to diseases.

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### ***Outside the Home***

- Dispose of debris and trash as soon as possible. Woodpiles and stacks of lumber, or other materials to be saved for later use should be stored at least 12 inches above the ground and as far away from the home as possible.
- Store garbage in rodent-proof containers with tight fitting lids.
- Store grains and animal feed in rodent-proof containers.
- Remove any food sources, including animal carcasses, which might attract rodents.
- Haul away trash, abandoned vehicles, discarded tires, and other items that might serve as rodent nesting sites.
- Keep grass short and cut or remove brush and dense shrubbery that may provide rodents cover and protection. Trim the limbs off any trees or shrubs that overhang or touch buildings.
- Place spring-loaded traps in outbuildings and in other areas where signs of rodents are found. Do not allow children or pets to play near spring traps.

### ***Rodent-Proofing Your Home***

Seal gaps and holes inside and outside the home that are greater than a ¼-inch diameter with any of the following materials: cement, light-gauge metal mesh, wire screening, hardware cloth, steel wool, caulk, expanding foam, or other patching materials.

### **Cleanup of Rodent-Contaminated Areas or Dead Rodents**

Thoroughly clean areas with signs of rodent activity to reduce the likelihood of exposure to germs and diseases. When cleaning, it is important that you do not stir dust when sweeping or vacuuming up droppings, urine, or nesting materials.

#### ***Cleanup of Contaminated Surfaces***

- Wear rubber, latex, vinyl, or nitrile gloves if you touch dead rodents, traps, or rodent droppings.
- Spray rodent urine or droppings with a disinfectant or a 1:10 chlorine solution (1 part bleach to 10 parts water) until thoroughly soaked. Use a paper towel to pick up the urine and the droppings and discard it outdoors in a sealed container.
- Do not vacuum or sweep rodent urine, droppings, or contaminated surfaces unless they have been disinfected.
- After the rodent droppings and urine have been removed, disinfect items that might have been contaminated.

#### ***Cleanup of Dead Rodents***

- Check traps regularly.
- Spray dead rodents with a disinfectant or chlorine solution.
- While wearing gloves, take the rodent out of the trap by lifting the spring-loaded metal bar and letting the animal fall into a plastic bag or place the entire trap containing the dead rodent into a plastic bag, and seal the bag. Then place the rodent into a second plastic bag and seal it. Promptly dispose of the rodent in the sealed double bag.
- After removing gloves, thoroughly wash hands with soap and water (or use a waterless alcohol-based hand gel when soap and water are not available and hands are not visibly soiled).
- If the trap will be reused, decontaminate it by immersing and washing it in a disinfectant or chlorine solution and rinsing well afterwards.

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- Continue trapping for at least 1 additional week after the last rodent is caught.
- If rodents continue to be a problem, consider contacting a professional pest control operator for help.

## Potential Rodent-borne Diseases in Hurricane Katrina Affected Areas

The table below provides a list of potential rodent-borne diseases in the areas affected by Hurricane Katrina (Louisiana, Mississippi, and Alabama). Many of these diseases are rare. However, residents in the affected areas should be aware that rodents may seek shelter in homes after the disaster. Residents re-entering their homes should take precautions when cleaning rodent urine, droppings, or nesting materials, and take steps to eliminate the infestation by removing rodent food sources and nesting sites as noted above.

**Table. Potential Rodent-borne Diseases in Hurricane Katrina Affected Areas**

Disease	Rodent reservoir	Method of Transmission	More Information
Leptospirosis	Rodents and other animals	Ingestion of contaminated water or food; skin or mucous membrane contact with water or soil contaminated with urine from infected animals.	<ul style="list-style-type: none"> <li>• <a href="http://www.cdc.gov/ncidod/dbmd/diseaseinfo/leptospirosis_g.htm">www.cdc.gov/ncidod/dbmd/diseaseinfo/leptospirosis_g.htm</a></li> <li>• <a href="http://www.bt.cdc.gov/disasters/hurricanes/katrina/leptofags.asp">www.bt.cdc.gov/disasters/hurricanes/katrina/leptofags.asp</a></li> </ul>
Lymphocytic Choriomeningitis (LCM)	House mouse	Inhalation of, mucosal contact with, or ingestion of dust or food that is contaminated with rodent secretions/excretions; and occasionally bite wounds.	<ul style="list-style-type: none"> <li>• <a href="http://www.cdc.gov/ncidod/dvrd/spb/mnpages/dispages/lcmv.htm">www.cdc.gov/ncidod/dvrd/spb/mnpages/dispages/lcmv.htm</a></li> </ul>
Hantavirus pulmonary syndrome (HPS)	Cotton rat, Rice rat, and White-footed mouse ( <a href="http://www.cdc.gov/ncidod/diseases/hanta/hps/noframes/rodents.htm">www.cdc.gov/ncidod/diseases/hanta/hps/noframes/rodents.htm</a> ) in affected region	Inhalation of, mucosal contact with, or ingestion of dust or food that is contaminated with rodent secretions/excretions; and occasionally bite wounds.	<ul style="list-style-type: none"> <li>• <a href="http://www.cdc.gov/hantavirus">www.cdc.gov/hantavirus</a></li> </ul>
Murine typhus	Rats	Inhalation of aerosolized ectoparasite feces; bite from an infected flea or mite; or by inoculation of abraded skin with crushed infected ectoparasites or feces.	<ul style="list-style-type: none"> <li>• <a href="http://www2.ncid.cdc.gov/travel/yb/utills/ybGet.asp?section=dis&amp;obj=rickettsial.htm">www2.ncid.cdc.gov/travel/yb/utills/ybGet.asp?section=dis&amp;obj=rickettsial.htm</a></li> </ul>
Rat-bite fever	Rats and possibly mice	Bite or scratch wound; ingestion of food, water, or milk contaminated with rat feces.	<ul style="list-style-type: none"> <li>• <a href="http://www.cdc.gov/ncidod/dbmd/diseaseinfo/ratbitefever_g.htm">www.cdc.gov/ncidod/dbmd/diseaseinfo/ratbitefever_g.htm</a></li> </ul>
Rickettsialpox	Rats and mice	Bite from an infected mite.	<ul style="list-style-type: none"> <li>• <a href="http://www2.ncid.cdc.gov/travel/yb/utills/ybGet.asp?section=dis&amp;obj=rickettsial.htm">www2.ncid.cdc.gov/travel/yb/utills/ybGet.asp?section=dis&amp;obj=rickettsial.htm</a></li> </ul>
Salmonellosis	Rats and mice	Ingestion of feces from handling rodents, droppings, or bedding.	<ul style="list-style-type: none"> <li>• <a href="http://www.cdc.gov/ncidod/dbmd/diseaseinfo/salmonellosis_g.htm">www.cdc.gov/ncidod/dbmd/diseaseinfo/salmonellosis_g.htm</a></li> </ul>

## References

1. World Health Organization. Rodent control in disaster settings. Available at URL: [http://w3.who.org/en/Section23/Section1108/Section1835/Section1864\\_8625.htm](http://w3.who.org/en/Section23/Section1108/Section1835/Section1864_8625.htm).

For more information, visit [www.bt.cdc.gov/disasters/hurricanes](http://www.bt.cdc.gov/disasters/hurricanes), or call CDC at 800-CDC-INFO (English and Spanish) or 888-232-6348 (TTY).

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