

Hantavirus: Yet another worry in the Adirondacks?

Just when I think I have heard everything when it comes to health concerns in the Adirondacks, something new comes along. As many readers who follow local media in the Park have heard, the most recent is hantavirus infections.

First, the basics. Hantavirus is a particularly nasty bug, which causes a couple of distinct conditions in humans. Hantavirus pulmonary syndrome (HPS) is a severe illness in which fluid accumulates in the lungs, leading to complications from lack of oxygen. Hantavirus hemorrhagic fever with renal syndrome (HFRS) is a devastating condition in which shock, bleeding, and failure of many organs develop over a period of a few days. Neither condition has any specific therapy, other than life support, and as many as half of patients die. Although the condition has probably been with us for a long time, it is only recently being widely recognized, and is thus considered an "emerging infectious disease."

The condition is not known to spread from human to human. Rather, it is spread by rodents, especially mice, who carry the virus without having any symptoms, and excrete it in their feces, urine, and saliva. Humans apparently become infected through inhalation of the virus in areas that have experienced heavy rodent infestation. This could certainly include camping structures such as lean-tos.

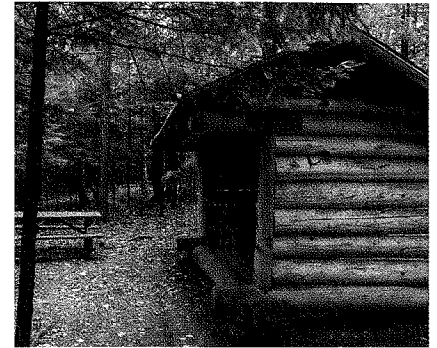
The most dramatic, and well-studied, hantavirus event traced to backcountry activity occurred last year in Yosemite National Park. Ten individuals acquired hantavirus infection over a brief period of time; three of these died. Nine of them had camped at a particular "tent cabin" village in the park. The outbreak was studied by the U.S.

Centers for Disease Control and Prevention (CDC) and the California Department of Health. Warnings were issued, and the tent cabins in question were closed.

At roughly the same time as the Yosemite event, there was a confirmed case of hantavirus infection in New York State. The infected individual, who thankfully recovered, reported rodent exposure in a lean-to in the Adirondacks. The New York State Department of Health (DOH) confirmed that the individual reported that he was bitten by a rodent while camping in the lean-to. No other rodent exposures were identified in a thorough investigation by the DOH. Absent additional cases from the same location, or other supporting information, it is impossible to make a definitive statement about the way in which this infection was acquired.

Regardless of whether or not it came from an Adirondack lean-to, the message is clear. The history of infectious diseases over centuries reminds us that humans should avoid sharing sleeping and living space with rodents! Hantavirus is but one of scores of infectious diseases whose transmission involves mice and their kin.

As iconic as the Adirondack lean-tos are, I assiduously avoid sleeping in them—and now have yet another reason to continue to avoid them. The detritus of decades of campers has made these structures home for many rodents, and a quick look inside most of them shows evidence



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of this inhabitation. For those who still enjoy the ambiance of lean-tos, the DOH has some helpful advice at www.health.ny.gov/press/releases/2012/2012-10-22_hantavirus.



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