

WORK-RELATED HANTAVIRUS EXPOSURES AT YOSEMITE NATIONAL PARK

BACKGROUND

In the summer of 2012, ten Yosemite visitors became infected with a form of hantavirus, and eight developed a serious illness known as hantavirus pulmonary syndrome (HPS). No Yosemite employees were known to have HPS, but employees were interested and concerned about the visitor illnesses and the potential risk to employees.

Outside of Yosemite, some prior cases of HPS have been identified among employees who work with and around deer mice, or live in close contact with deer mice.

The National Park Service invited representatives from the California Department of Public Health (CDPH) to visit Yosemite as part of the investigation into cases of hantavirus.

WHAT CDPH DID

In the fall of 2012, CDPH conducted an assessment of Yosemite employee hantavirus safety:

- 526 employees had a blood test for previous hantavirus infection.
- 522 employees completed a survey questionnaire.
- CDPH observed work areas and reviewed hantavirus prevention policies and practices.

THE HANTAVIRUS DIRECTIVE

Yosemite National Park Directive #9, commonly known as the Hantavirus Directive, outlines procedures used to prevent hantavirus among employees. It describes activities that put employees at risk for hantavirus exposure, proper cleaning and safety practices, appropriate personal protective gear, and the difference between a light and heavy mouse infestation. The CDPH survey questionnaire asked about these topics.

MORE INFORMATION AVAILABLE

The CDPH report is available at: www.cdph.ca.gov/programs/ohb/documents/HantaRept.pdf. For questions, call CDPH's Workplace Hazard Helpline at (510) 620-5817 or (866) 282-5516 (toll free in CA). To obtain a copy of this document in an alternate format, please contact (510) 620-5757. (CA Relay Service: 800-735-2929 or 711).



KEY FINDINGS AND RECOMMENDATIONS

CONTACT WITH MICE



25% of employees reported cleaning a heavy mouse infestation at work in the last 12 months; 67% reported cleaning a light infestation.

INFESTATION CLEANING

Not all employees reported having access to or using proper personal protective gear.

Cleaning a heavy infestation requires a higher level of protection than cleaning a light infestation, including respiratory protection.



Employees need to know the difference between a light and heavy infestation.

Employees expected to clean heavy infestations must be identified in advance so that these employees can be fully protected.

Not all employees cleaning a heavy or light infestation followed the proper procedure for cleaning and disinfecting infestations:



BLOOD TEST RESULTS

One employee tested positive for previous hantavirus infection. This employee did not have HPS symptoms during 2012.

CDPH RECOMMENDS:

In-depth training on how to safely clean a heavy infestation, and the necessary supplies and equipment to safely clean an infestation.

A respiratory protection program covering all employees who clean heavy infestations or open closed buildings.

Hantavirus awareness and safety training for all employees, including photos of infestations and a demonstration of light infestation cleanup.

Rodent exclusion efforts in employee workspaces and housing.

A clear procedure by which any employee who reports symptoms of hantavirus infection can obtain prompt **medical evaluation**.

TAKE AWAY MESSAGE

Hantavirus infection remains an ongoing risk to employees with serious health consequences, and implementing well-known protective measures can help prevent transmission of the virus. However, the CDPH survey showed these precautions were not universally known or followed by employees. A lack of access to and use of cleaning supplies and personal protective equipment leaves employees with potential for hantavirus exposure. Enhanced and continuing vigilance of Yosemite's health and safety personnel, managers and supervisors, and employees will be necessary to adequately protect employees from future hantavirus exposures.