



ISSUE BRIEF

Patients may have been exposed to fatal brain disease through surgical equipment

Key Points

- Eight patients at a New Hampshire hospital may have been exposed to a fatal brain disease through the use of neurosurgical equipment.
- Creutzfeldt-Jakob Disease (CJD) is a fatal disease caused by a small agent called a prion that is not eradicated through typical surgical instrument sterilization processes.
- The risk to the exposed patients is low. The Centers for Disease Control and Prevention says no equipment-related cases of CJD have been reported since 1976.
- ASHE encourages its members to speak with their hospital infection preventionists about this issue.

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Health authorities say eight patients at a New Hampshire hospital may have been exposed to a rare and fatal brain disease through the use of neurosurgical equipment. ASHE members should be aware of this development, and ASHE encourages members to talk with their hospital infection preventionists about the issue.

The New Hampshire Department of Health said on September 4 that a patient operated on at Catholic Medical Center in Manchester, N.H., is suspected to have had sporadic Creutzfeldt-Jakob Disease (CJD), a form of the fatal disease that occurs spontaneously with no known cause. Sporadic CJD is not the same as variant CJD, which is also known as “mad cow disease” and is transmitted by eating contaminated beef. An autopsy is now being conducted to confirm the diseased patient had sporadic CJD.

The disease is caused by a small protein called a prion. The eight patients were potentially exposed through neurosurgical equipment because the prion that causes CJD is not eradicated by the standard hospital sterilization process, authorities said.

The risk to the eight potentially exposed patients is extremely low. The Centers for Disease Control and Prevention says all known equipment-related cases of CJD occurred before the sterilization procedures currently used in hospitals became routine. No such cases have been reported since 1976.

In 2012, a hospital in South Carolina reported a similar incident of potential exposure and raised sterilization temperatures afterward.

Linda Dickey, RN, MPH, CIC, director for epidemiology and infection prevention at University of California Irvine Medical Center, told ASHE that when CJD is suspected in a patient before surgery, hospitals often use disposable instruments to avoid potential problems.

The Centers for Disease Control and Prevention says destruction of heat-resistant surgical instruments that contact highly infectious tissues is the safest infection control method but may not be practical or cost-effective. The CDC says chemical and autoclave sterilization methods can be considered as alternatives. ASHE recommends that members discuss options with infection preventionists at their facilities.

More information about CJD, including details of infection prevention and sterilization options, is available on the [CDC website](#).