

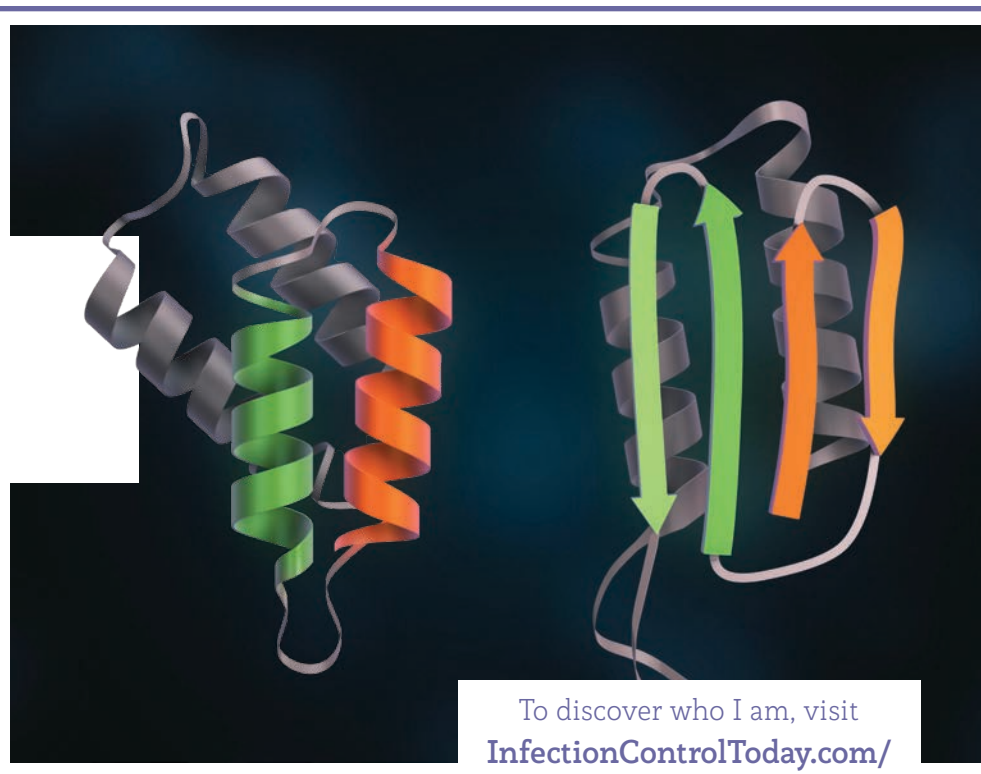
hand hygiene

Wasting Away

BY HEATHER SAUNDERS, MPH, RN, CIC

I am one-of-a-kind. I love that about myself. I'm not at all like any other infectious agents out there. I'm not a bacterium or a virus. No, I march to the beat of my own pathology. And I like to remain a bit of a mystery to those individuals who try their best to understand me. I'm insidious. I can hide away dormant, sometimes for decades, before anyone will know that I'm there. I'm also not very common. I like to carefully choose who I will infect, and only approximately 300 cases of me are found in the United States every year.

Diseases caused by me were first described in flocks of sheep in the 1800s, but little was known about how these infections came about. Infected animals would appear easily excited and eat heartedly—but still slowly waste away, resulting in their death. Human cases began to emerge in the early 20th century, some resulting from cannibalism in tribal communities. The last recorded case of infection resulting from cannibalism was in 2005. But consumption of human tissue is only one of several ways that I can be transmitted. Infection by me can also result in different diseases, all neurological. Although no one knows why, I can induce cellular proteins to fold and clump together and cause significant damage to the brain.



To discover who I am, visit [InfectionControlToday.com/view/Jan-2023-bug-month](https://www.infectioncontroltoday.com/view/Jan-2023-bug-month)

My incubation period may be long, but I eventually begin to make my presence known through the neurological symptoms that are seen in those individuals I infect. These symptoms often appear suddenly and progress rapidly. As brain damage progresses, those infected will rapidly develop dementia, difficulty walking, hallucinations, muscle stiffness, confusion, difficulty speaking, and fatigue. Although medicine can be given to slow the progression and keep those infected comfortable, there is no known cure for the diseases that I cause. Eventually, the rapid debilitation from my infection will likely result in death.

Humans are at risk of infection with me when they have a family history of the disease, have consumed infected meat, or have been infected by contaminated medical equipment or corneas. Since 1996, only 230 cases resulting from the consumption of infected cattle meat in 12 different countries have been identified. The most

common disease I cause is inherited or sporadic. For health care facilities, medical equipment contaminated with me can be quite concerning. It is important for health care facilities to have systems in place to identify individuals with suspected or confirmed infections of me, especially when surgeries are being planned.

Because the diseases I cause are neurologic in nature, my coming in contact with neurologic tissue is of the highest concern. Contaminated medical equipment must be disinfected, sterilized, or discarded appropriately to prevent my spread. Use of contaminated medical equipment on other patients could result in the transmission of me from one surgical patient to another. Health care facilities must also take care to communicate suspected or confirmed infections of me to prevent donations of infected corneas, which have also been associated with the transmission of infection.

I am Prions! ▣