

Creutzfeldt-Jakob Disease (CJD)

Agent: Believed to be caused by a prion protein

Mode of Transmission: The majority of CJD cases (80%-90%) are sporadic CJD, with no known source. A small percentage of cases (5%-15%) may be due to heredity (familial CJD) or exposure to organ tissue contaminated with the prion (iatrogenic CJD). Classic CJD includes sporadic CJD, familial CJD, and iatrogenic CJD. A form of the disease, variant Creutzfeldt-Jakob disease (vCJD), is thought to be transmitted through ingestion of beef from cattle with bovine spongiform encephalopathy (BSE, commonly referred to as mad cow disease).

Signs/Symptoms: Symptoms may begin with confusion, and they rapidly progress to a wide range of neurological signs and symptoms, including loss of coordination and dementia.

Prevention: Organ and tissue transplants from infected individuals should be avoided. For protection against vCJD, the federal government has regulations in place to prevent the spread of BSE in the United States.

Other Important Information: vCJD occurs in younger individuals, while classic CJD occurs more often in older individuals and has a slower progression. In Virginia, CJD is reportable when it occurs in persons under 55 years of age.

No cases of Creutzfeldt-Jakob disease in persons less than 55 years of age were reported in Virginia during 2009. The last reported case occurred in 2007 in a white male in the 30-39 year age group, and the infection was determined to be classic CJD. The individual died as a result of this condition. There have been six cases of classic CJD infection diagnosed in Virginia residents less than 55 years of age since 1998.

The only case of vCJD ever diagnosed in a Virginia resident occurred in 2006. Based on the patient's history, it was determined that the infection most likely occurred from contaminated cattle products consumed as a child when living in Saudi Arabia. It was the third case of vCJD reported in a U.S. resident. The two previously reported cases were born and raised in the United Kingdom, where they were believed to have been infected.