

## Creutzfeldt-Jakob Disease Case Definitions and Confirmation

CJD Type	Diagnosis
<b>Sporadic</b>	<ul style="list-style-type: none"> <li>• <b>Confirmed:</b> Diagnosed by standard neuropathological techniques; and/or immunocytochemically; and/or Western blot confirmed protease-resistant PrP; and/or presence of scrapie-associated fibrils.</li> </ul> <hr/> <ul style="list-style-type: none"> <li>• <b>Probable:</b> Progressive dementia <b>And</b> at least 2 of the following 4 clinical features: <ul style="list-style-type: none"> <li>Myoclonus</li> <li>Visual or cerebellar disturbance</li> <li>Pyramidal/extrapyramidal dysfunction</li> <li>Akinetic mutism</li> </ul> <b>And</b> A typical EEG during an illness of any duration; and/or a positive 14-3-3 CSF assay and a clinical duration to death of &lt;2 years Routine investigations should not suggest an alternative diagnosis</li> </ul> <hr/> <ul style="list-style-type: none"> <li>• <b>Possible:</b> Progressive dementia <b>And</b> at least 2 of the following 4 clinical features: <ul style="list-style-type: none"> <li>Myoclonus</li> <li>Visual or cerebellar disturbance</li> <li>Pyramidal/extrapyramidal dysfunction</li> <li>Akinetic mutism</li> </ul> <b>And</b> No EEG or atypical EEG and duration &lt;2 years</li> </ul>
<b>Variant</b>	<ul style="list-style-type: none"> <li>• <b>Confirmed:</b> Neuropathologic examination of brain tissue is required to confirm a diagnosis of variant CJD. The following confirmatory features should be present. <ol style="list-style-type: none"> <li>a. Numerous widespread kuru-type amyloid plaques surrounded by vacuoles in both the cerebellum and cerebrum—florid plaques.</li> <li>b. Spongiform change and extensive prion protein desposition shown by immunohistochemistry throughout the cerebellum and cerebrum.</li> </ol> </li> </ul> <hr/> <ul style="list-style-type: none"> <li>• <b>Suspect</b> <ol style="list-style-type: none"> <li>a. Current age at death &lt;55 years (a brain autopsy is recommended, however, for all physician-diagnosed CJD cases).</li> <li>b. Psychiatric symptoms at illness onset and/or persistent painful sensory symptoms (frank pain and/or dysesthesia).</li> <li>c. Dementia, and development =4 months after illness onset of at least two of the following five neurological signs: <ul style="list-style-type: none"> <li>◦ Poor coordination</li> <li>◦ Chorea</li> <li>◦ Hyperreflexia</li> <li>◦ Myoclonus</li> <li>◦ Visual signs</li> </ul> (If persistent painful sensory symptoms exist, =4 months delay in the development of the neurologic signs is not required).</li> <li>d. A normal or an abnormal EEG, but not the diagnostic changes often seen in sporadic CJD.</li> </ol> </li> </ul>

- e. Duration of illness over 6 months.
- f. Routine investigations of the patient do not suggest an alternative, non-CJD diagnosis.
- g. No history of receipt of cadaveric human pituitary growth hormone or a dura mater graft.
- h. No history of CJD in a first degree relative or prion protein gene mutation in the patient.

**NOTE**

- a. If a patient has the typical bilateral pulvinal high signal on MRI scan, a suspected diagnosis of variant CJD requires the presence of a progressive neuropsychiatric disorder, d, e, f and g of the above criteria and four of the following five criteria
  - o Early psychiatric symptoms (anxiety, apathy, delusions, depression, withdrawal)
  - o Persistent painful sensory symptoms (frank pain and/or dysesthesia)
  - o Ataxia
  - o Myoclonus or chorea or dystonia
  - o Dementia

<b>Iatrogenic</b>	Progressive cerebellar syndrome in a recipient of human cadaveric-derived pituitary hormone
	<b>Or</b> Sporadic CJD with a recognized exposure risk, e.g. antecedent neurosurgery with dura mater implantation.
<b>Familial</b>	Confirmed or probable CJD <b>plus</b> confirmed or probable CJD in a first degree relative
	<b>And/or</b> Neuropsychiatric disorder <b>plus</b> disease-specific prion protein (PrP) gene mutation