



# SAFETY FIRST: ENSURING TIMELY NOTIFICATION FOR SUSPECTED CASES OF CREUTZFELD-JAKOB DISEASE (CJD)

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## Background

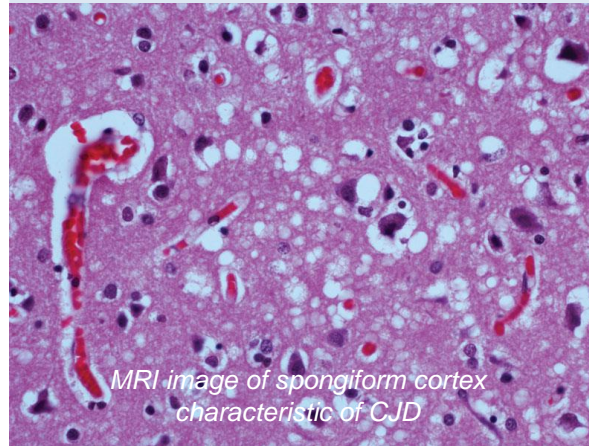
A 77-year old patient presented to a Niagara Health (NH) emergency department with a reported 6-week decline in balance, mobility, and vision. Over the course of her 19-day admission, dramatic neurologic deterioration led the care team to strongly suspect Creutzfeldt-Jakob disease (CJD) as a primary diagnosis. A lumbar puncture (LP) was completed on day 6, and IPAC was notified of the suspect CJD case on day 14. The gap in notification triggered a months-long non-critical Quality of Care Reflective Review (QCRR) of the policy and procedure.

## Methods

An interdisciplinary QCRR team was assembled, including the patient's primary medical care team, facility and unit management, occupational health and safety (OHS), medical device reprocessing (MDR), environmental services (EVS), laboratory management, and IPAC. Assessment of gaps in procedure affecting patient and staff safety, and lab instrument compromise were identified.

## Results

The QCRR team identified gaps in suspect-CJD CSF collection protocol including missed incineration of linens and lumbar puncture kit waste, improper risk labelling of CSF samples, and overlooked processing limitations in CSF testing that resulted in replacement of expensive lab equipment. Recommendations made for process improvement included immediate notification to IPAC at the time of CSF order entry (prior to LP), a checklist for required PPE and supplies for suspect-CJD specimen collection, staff education, and lab requisition adjustment for notification flagging. A few short weeks later, these recommendations were successfully implemented in a second suspected (and later, confirmed) CJD case at NH, with prompt notification to IPAC resulting in appropriate LP safety precautions, specimen labelling, and lab instrumentation preservation.



## Conclusion

Despite the low incidence of CJD in Niagara Region (last reported case in 2018), Niagara Health identified two unrelated lab-confirmed cases of the disease in 2022. The first of these helped to expose opportunities for process improvement for future suspected CJD cases, placing heavy emphasis on early IPAC notification to ensure staff and patient safety, proper LP kit disposal, and preservation of expensive laboratory equipment.