SESLHD PROCEDURE COVER SHEET

Health
South Eastern Sydney
Local Health District

NAME OF DOCUMENT	Creutzfeldt-Jakob Disease (CJD) – Infection control for at risk surgical patients
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FUNCTIONAL GROUP(S)	Infection Control
KEY TERMS	Creutzfeldt-Jakob Disease (CJD); Surgical Patients; Risk; Lookback
SUMMARY	CJD is a fatal and rare neurological disease that affects approximately one in one million people per year worldwide. Although the risk of CJD infection from a contaminated surgical instrument is extremely remote, it is important that all elective patients are screened (Patient Questionnaire - Recommendations for Admission Form) and protocols are available to manage both the known and unknown surgical patients at risk of CJD.

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Creutzfeldt-Jakob Disease (CJD) – Infection control for at risk surgical patients **SESLHDPR/508**

1. POLICY STATEMENT

To ensure the safe management of surgical patients and the health and safety of healthcare workers in relation to their risk of Creutzfeldt-Jakob Disease (CJD).

All health care providers should be familiar with the Department of Health and Aged Care (2013) Creutzfeldt–Jakob disease – Infection control guidelines and adhere to them, so that patients who are at risk of CJD have access to appropriate evidence-based health care without discrimination and disadvantage.

There is no epidemiological evidence to indicate that Health Care Workers (HCW) are at an increased occupational risk for CJD.

Variant CJD (vCJD) is excluded from the scope of this document as vCJD has not been reported in Australia to date.

2. BACKGROUND

Although transmission of CJD in the health care setting is very rare, HCWs should be aware of the potential for transmission by contaminated instruments or via contaminated higher-infectivity tissues.

Creutzfeldt-Jakob disease, also known as CJD, is a rare degenerative disease of the brain that is fatal. It is one of a group of diseases known as the transmissible spongiform encephalopathies.

In CJD, the structure of a normal brain protein changes slightly, forming prions. The build- up of prions damages brain cells and causes the neurological symptoms of CJD.

Unlike bacteria or viruses, prions resist normal methods of heat and chemical sterilization and, very rarely, prions can be transmitted to others.

In Australia about one in one million people per year develops CJD. There are three types of CJD, about 90% of CJD cases occur by chance (sporadic or medically acquired CJD) and 10% of cases are hereditary (familial or inherited CJD). The third type, Iatrogenic CJD, although rare, has occurred worldwide as a result of a number of medical treatments, including transmission through neurosurgical instruments contaminated with central nervous system (CNS) tissue and through contaminated tissue implants or products (dura mater grafts, corneal grafts, pituitary products)

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3. RESPONSIBILITIES

NOTE: when discussing CJD with a suspected CJD patient their family, or a patient with an increased risk of developing CJD, do not use the term 'mad cow disease' as this media term refers to Variant CJD which has not appeared in Australia. This incorrect reference to CJD may cause distress and confusion for the patient or family member, given the cause of variant CJD and the vast differences in symptoms and progression of the disease.

3.1 Employees will:

- Understand the language required when discussing care or treatment with a patient who is at risk of or suspected to have CJD (see Note above)
- Report any positive responses to the CJD screening questions in the patients *Referral for Admission* papers
- Participate in the risk assessment, if requested by the Surgeon or Operating Theatre Manager e.g. Infection Prevention and Control staff, Sterilising Managers.

3.2 Line Managers will:

- Participate in the risk assessment, if requested by the Surgeon or Operating Theatre Manager
- Ensure that staff are educated on and have access to, evidenced based guidelines on CJD.

3.3 District Managers/ Service Managers will:

- Ensure that a risk assessment is conducted on at risk CJD patients who are undergoing surgery
- Ensure that the risk assessment is conducted and actioned by a team of experienced clinicians.

3.4 Medical staff will:

- Notify the Public Health Unit of patients with suspected CJD 9382 8333 after hours 9382 2222 –Ask for Public Health Nurse on Call
- Seek expert advice, if required, from the Florey Australian National CJD Registry
- Lead the risk assessment team for patients at-risk or suspected of CJD who require surgery

4. PROCEDURE

SESLHD endorses the Department of Health and Aged Care (2013) Creutzfeldt–Jakob disease – Infection control guidelines. This should be available and referred to when completing the risk assessment on a patient who is at risk for CJD.

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4.1 Risk assessment for elective and emergency surgery patients with a known risk for CJD and procedures involving exposure to higher infectivity tissues (Appendix 1)

- The risk assessment is to be completed by team that includes: Surgeon, Operating Theatre Manager, infection prevention and control, sterilising manager, Infectious Diseases Physician and other staff who may be required e.g. clinical risk manager.
- This risk assessment will guide the team to enable them to develop a plan for the patient.
- If a patient is suspected of CJD prior to surgery, the results of diagnostic tests are to be included in the risk assessment questions.

4.2 Information you will be required to provide when you are notified that a previous patient has been diagnosed with CJD

- CJD is a Notifiable Disease. All patients who have either been diagnosed with, or died from, CJD are notified to local Public Health Units. In the event that a patient has had recent surgery on medium-high infectivity tissue, the hospital executive will be notified by the Public Health Unit.
- Quarantine instruments used on the affected patient immediately (Appendix 3)
- The NSW Ministry of Health Centre for Population Health will coordinate the investigation, actions and decisions regarding a look-back with the National CJD Advisory Committee. The healthcare facility will be included in the process.
- The following information may be requested by the Centre for Population Health for the investigation:
    1. Date of surgery
    2. Name of surgery
    3. Any adverse events related to the surgery
    4. Surgeon
    5. Instruments (reusable) used during the surgery
    6. Reprocessing methods for those instruments
    7. Type of tracking system available e.g. instruments packs or individual instruments
    8. Patient lists: all reusable instruments used on the index patient and subsequently used on other patients

4.3 Consumer/Carer/family participation in the risk assessment

- Patients at risk of CJD are generally well informed about the disease and the implications for surgery.
- The patient must be kept informed of decisions regarding any delays to surgery.
- The CJD Support Group Network offers support to all Australians affected by CJD or other prion diseases and patients can be referred to this group for information.

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5. DOCUMENTATION

Risk assessment
Decision Making Flowcharts for patients at risk of CJD (Appendices 2-4)

6. AUDIT

Risk assessment completed

7. REFERENCES

Number	Reference
1.	NSW Health Policy Directive PD2023_025 - Infection Prevention and Control in Healthcare Settings
2.	NSW Health Creutzfeldt-Jakob Disease Fact Sheet
3.	NSW Health Policy Directive - PD2022_023 Enterprise – Wide Risk Management Policy
4.	NSW Health Policy Directive - PD2014_041 Creutzfeldt-Jakob Disease Related Information Sharing
5.	NSW Health - Creutzfeldt–Jakob Disease (CJD) control guideline
6.	SESLHDPR/526 - Sterilisation: Traceability of Reprocessed Reusable Medical Devices (RMDs)
7.	Department of Health and Aged Care (2013) Creutzfeldt–Jakob disease – Infection control guidelines
8.	CJD Support Group Network (CJDSGN)
9.	Australian National CJD Register (ANCJDR) The Florey Institute of Neuroscience and Mental Health

8. VERSION AND APPROVAL HISTORY

Date	Version	Version and approval notes
March 2015	1	Infection Control Policy Working Party
July 2016	1	Approved by Clinical and Quality Control
Feb 2019	2	Review by: Infection Prevention and Control Working Party
June 2021	2	Minor review: references and links updated; Endorsed by SESLHD Infection Prevention and Control Working Party and Executive Sponsor
30 August 2024	2.1	Minor review by Infection Prevention and Control Subcommittee: hyperlinks updated. Approved by SESLHD Infection Prevention and Control Committee and Executive Sponsor.

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Appendix 1 – Risk Assessment Questions for an elective and emergency surgery patient

	Reference Item in Department of Health and Aged Care (2013) Creutzfeldt–Jakob disease – Infection control guidelines	Yes	No	Risk Assessment Team Comments / Actions
Is this elective surgery?				
Is this emergency surgery?				
Does the patient meet the criteria to be classified as an at-risk category for CJD?	Section 2.3			What is the at-risk category?
Will the surgery be performed on medium to high known or predicted infectivity of body tissues?	Section 2 – Table 1			If a low or high risk CJD patient is having a procedure involving low or no detectable infectivity tissue, a risk assessment is not required
Will additional precautions be required?	Section 2.4 – Table 2			
Are disposable instruments required?	Section 3.6			Who will order?
Is loan equipment required?	Section 3.3			Who will arrange?
If emergency surgery, has the patient completed a questionnaire to determine CJD risk status?	Appendix 3: Classical Creutzfeldt - Jakob Disease (CJD) Risk Assessment Tool			
What Additional Precautions will be required in the Operating Theatre, anaesthetics and sterilising department?	Section 3.2 – Table 3			

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<table>
<tr><th></th><th>Reference Item in Department of Health and Aged Care (2013) Creutzfeldt–Jakob disease – Infection control guidelines</th><th>Yes</th><th>No</th><th>Risk Assessment Team Comments / Actions</th></tr>
<tr><td>Is there a tracking system in the sterilising department for tracking instruments and equipment?</td><td>Section 3.3</td><td></td><td></td><td></td></tr>
<tr><td>Are staff educated on CJD and additional precautions (if required)</td><td>Key Points – page 1</td><td></td><td></td><td>Who will provide?</td></tr>
<tr><td>Will surgery need to be delayed?
(This will need to be communicated to the patient)</td><td>Section 3.6</td><td></td><td></td><td>Who will communicate with the patient?</td></tr>
<tr><td>Is expert advice or escalation required?</td><td></td><td></td><td></td><td></td></tr>
<tr><td>If this is a suspected CJD patient, has notification been made to the Public Health Unit?</td><td></td><td></td><td></td><td></td></tr>
<tr><td colspan="5">What is the plan for this patient?

Surgery risks identified and agreed upon by risk assessment team?

Communication with patient:

Pre-admission

Admission

Discharge (to evaluate your risk assessment)

Ordering of disposable equipment

Education of staff

Is expert advice required?</td></tr>
</table>

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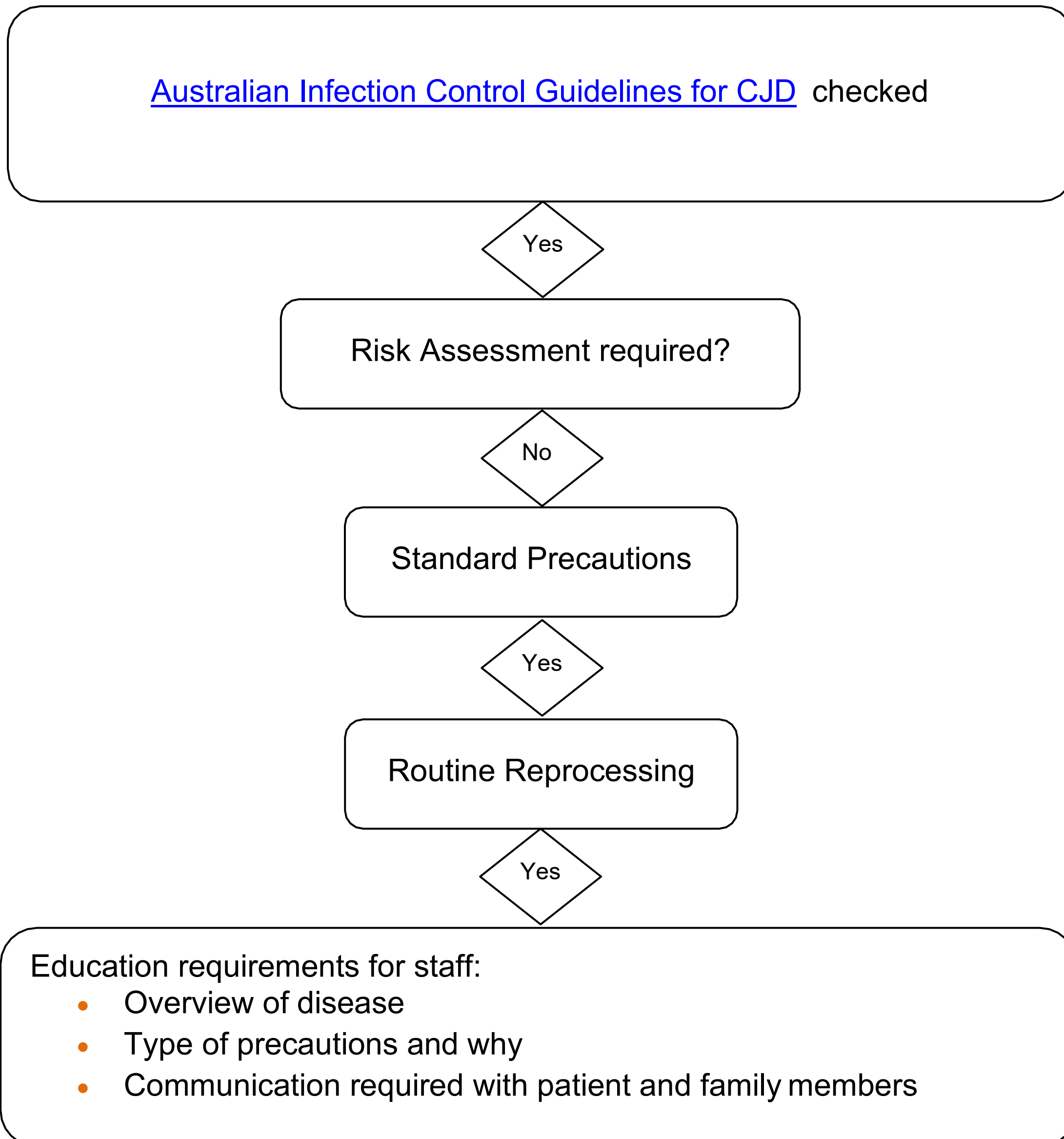
Appendix 2 – Elective and Emergency Surgical Patient (Low risk patient and low infectivity tissue or fluids accessed)



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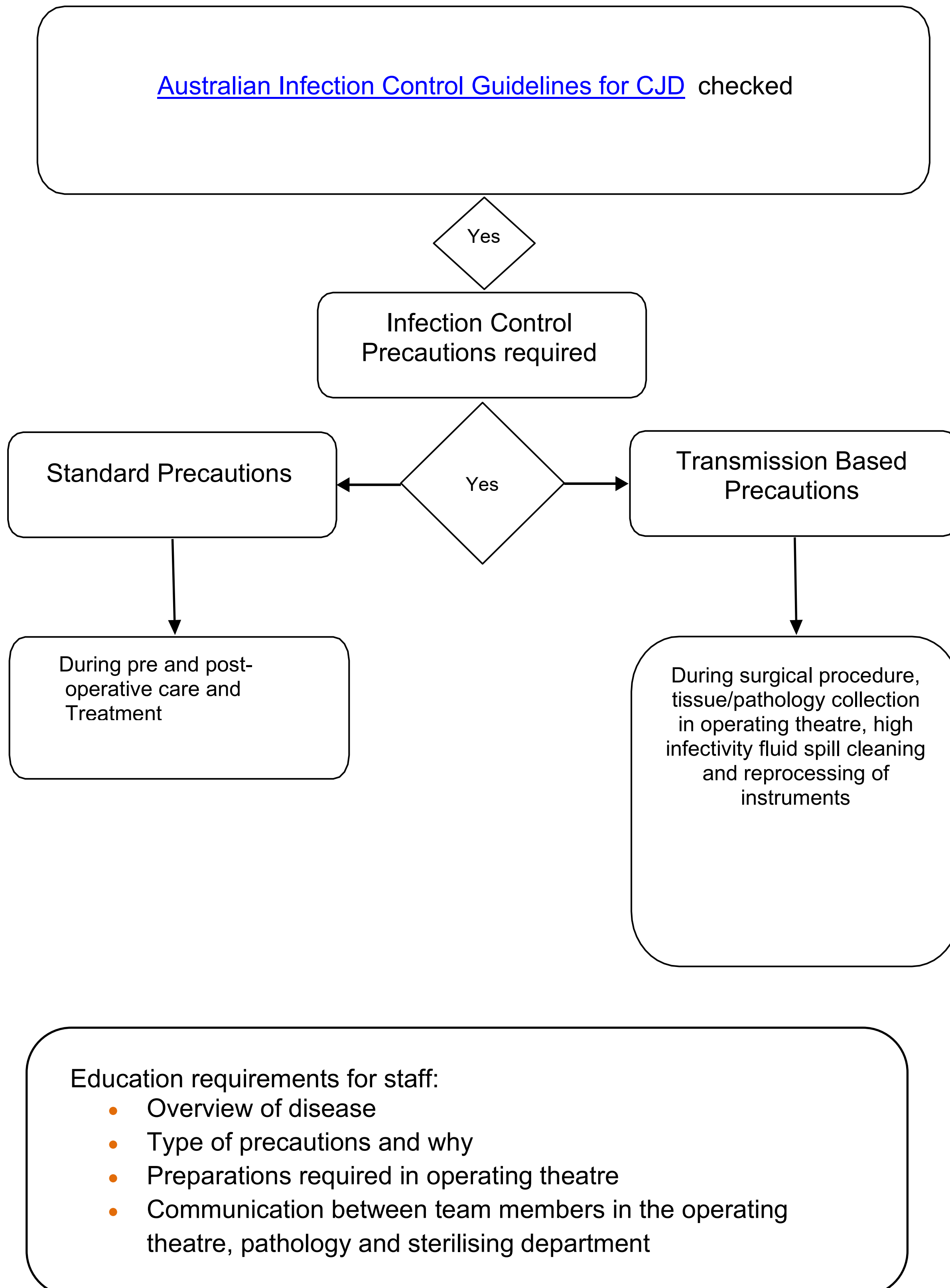
Appendix 3 - Elective and Emergency Surgical Patient (high infectivity tissue or fluids accessed)



Education requirements for staff:

- Overview of disease
- Type of precautions and why
- Preparations required in operating theatre
- Communication between team members in the operating theatre, pathology and sterilising department

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Appendix 4 - Notification of a Post Elective or Emergency Surgical Patient (high infectivity tissue or fluids accessed) and CJD risk not known at time of surgery

Australian Infection Control Guidelines for CJD checked

Yes

Action List for Healthcare Facility

1. Quarantine instruments used on the affected patient
2. Nominate a coordinator/lead within the healthcare facility
3. Begin an Action and Communication log for all aspects of the investigation
4. Begin to collect information required
5. Population and Public Health Branch within NSW Ministry of Health will contact the National CJD Advisory Committee to determine the action plan, lookback required and recommendations for improvement
6. Plan for a post investigation debrief session to discuss the process

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