



**Title: Handling of Creutzfeldt - Jakob Disease Specimens**

**Principle:**

Creutzfeldt – Jakob disease (CJD) is a fatal neurological disease, thus specific handling of infected tissues is required in order to reduce the potential for transmission of the disease. The Department of Anatomic Pathology at University of Colorado Denver will not process suspected tissue infected with CJD. The Colorado Department of Public Health and Environment recommends that all cases of CJD or suspected CJD samples to be send to NPDPS at Case Western Reserve University.

**Procedure:**

1. Please see attached instruction and test request form for shipping specimens to:  
National Prion Disease Pathology Surveillance Center  
Case Western Reserve University  
2085 Adelbert Road, Room 419  
Cleveland, Ohio 44106

More information can be located on NPDPS website:

[www.cjdsurveillance.com](http://www.cjdsurveillance.com)

2. Formalin, alcohol fixation or 10% bleach is NOT a sufficient method to disinfect items or surfaces that come in contact with prion infected tissue or fluid.

3. When possible provide instructions and supplies to department collecting specimen. If any instruments or surfaces come in contact with infected tissue specific protocols for cleaning instruments and surfaces must be followed. For specific instructions on disinfection see UCH policies and procedures. UCH policies and procedures can be found at: <https://pnp.uch.edu> and go to infection control hyperlink and go to next page and select precautions for patients with Creutzfeld-Jakob Disease, and other Transmissible Spongiform Encephalopathies.

4. In cases that were not suspected of being CJD, but proved to be after review of the slides, The paraffin blocks are incinerated and the slides are stored inside a biohazard bag in a secured location.

**Written by:** Gail Zander, CT (ASCP), 2/26/2014

**Revised by:** Gail Zander, CT (ASCP), 8/18/2014

**Attachments:** NPDpsc contact and mailing instructions, NPDpsc Test request form

**Approval of Procedure:**

Medical Director Signature: *m. Keith Davis, MD*

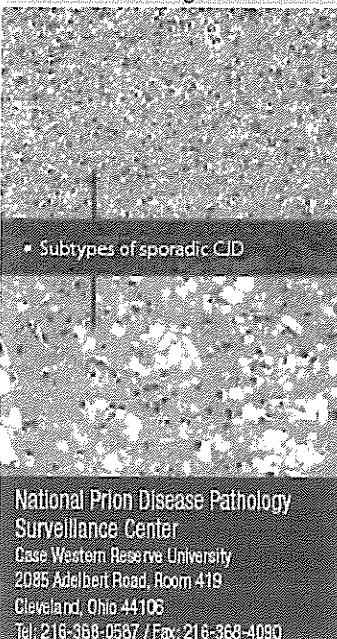
Date: *8/26/14*

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## CJD Surveillance National Prion Disease Pathology Surveillance Center

The Center is supported by the CDC and sponsored by the American Association of Neuropathologists.

About the Center
About Human Prion Diseases
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Contact & Mailing



## Contact & Mailing

### Mailing Instructions:

#### General Instructions

All specimens should be shipped using Federal Express. Specimens should be shipped Monday through Thursday to avoid Saturday and holiday delivery. For tracking purposes, a copy of the Federal Express Airbill should be faxed (216-368-2546 or 216-368-4090) to the NPDPC on the day of shipment

All shipments should be addressed to:

National Prion Disease Pathology Surveillance Center  
Institute of Pathology  
Case Western Reserve University  
2085 Adelbert Road, Room 419  
Cleveland, Ohio 44106-4907  
Tel: 216-368-0587  
Email: [cjdsurv@case.edu](mailto:cjdsurv@case.edu)

Please send a completed Test Request Form with all samples. The NPDPC requires any available clinical information when sending tissue and/or blood to assist us in making the most accurate diagnosis possible. The NPDPC is CLIA certified and fully compliant with HIPAA regulations.

#### Instructions by Type of Sample

**Blocks/slides:** Slides should be placed in plastic slide holders and mailed in a bubble wrap envelope. Blocks should be mailed in a bubble wrap envelope.

**Blood:** Ship at room temperature in protective bubble wrap or Styrofoam on the day that the blood is collected. The NPDPC processes blood samples for special cases only, and all blood samples must be accompanied by a signed [Testing and Reporting Policies Form](#) as well as clinical and/or family history. Please contact the Center Manager at 216-368-0819 for more information if needed

**CSF:** Ship using a Styrofoam container with sufficient dry ice (5lbs/24hrs). The NPDPC requests a urine sample for research purposes with all CSF samples if available.

**Urine:** Ship double boxed using a Styrofoam container with sufficient dry ice (5lbs/24 hrs).

**Fixed tissue:** Ship double boxed without dry ice.

**Frozen tissue:** Ship double-boxed using a Styrofoam container with sufficient dry ice (5lbs/24hrs). Please include a signed [Testing and Reporting Policies Form](#) with frozen tissue samples. The NPDPC sequences the prion protein gene for all positive cases. Please contact the Center Manager at 216-368-0819 for more information if needed.

Note: Frozen and fixed tissue should be shipped using a UN class 6.2 approved container. Please, send fixed and frozen tissue samples in separate containers to avoid freezing of the fixed tissue which results in artifacts.

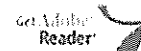
#### For More Information

General and shipping questions can be directed to the NPDPC at 216-368-0587 or by email [cjdsurv@case.edu](mailto:cjdsurv@case.edu).

Specific questions related to completing the Federal Express Airbill should be directed to Federal Express at 1-800-463-3339 or <http://www.fedex.com>.

Specific questions related to shipping infectious material should be directed to World Health Organization (WHO) at [http://www.who.int/emc/pdfs/emc97\\_3.pdf](http://www.who.int/emc/pdfs/emc97_3.pdf). (Note: You must have Adobe Acrobat Reader to view this file.) Examples for filling out the Dangerous Goods Declarations without dry ice can be found on page 17 and for Dangerous Goods Declarations with dry ice on page 18.

If you need the Adobe Acrobat Reader, you may download the reader for free by clicking on the icon to the right.



## Test Request Form

Please provide the following information for all samples submitted to the NPDPS, 2085 Adelbert Road, Room 418, Cleveland, OH 44106-4907. **Please note that it is required that you complete the entire form.** This information aids the NPDPS in accomplishing its goal of accurate diagnostics and therefore more complete prion disease surveillance. For more information on our shipping protocols, please visit our website: <http://www.cjdsurveillance.com>.

### 1. Attending/Referring Physician\*

Name: \_\_\_\_\_ Phone: \_\_\_\_\_ Fax: \_\_\_\_\_

Hospital/Institution: \_\_\_\_\_

Street address: \_\_\_\_\_

City/State/Zip code: \_\_\_\_\_

❖ *The physician will be contacted and should be available for any brief telephone inquiry about this case*

### 2. Drawing/Sending Laboratory

Name: \_\_\_\_\_ Phone: \_\_\_\_\_ Fax: \_\_\_\_\_

Laboratory/Hospital: \_\_\_\_\_

Street address: \_\_\_\_\_

City/State/Zip code: \_\_\_\_\_

### 3. Samples enclosed. (Please check all that apply.)

- CSF (Please note that we request urine be sent with all CSF samples, if available.)  
*\*If NPDPS is to bill patient directly for testing, please also complete and submit the CSF Billing Requisition Form. Otherwise lab will be billed for this test.*  
**Collection Date:** \_\_\_\_\_
- Urine (Urine will only be stored for future research purposes.)  
**Collection Date:** \_\_\_\_\_
- Blood (Please see our blood protocol for special instructions before sending.)  
**Collection Date:** \_\_\_\_\_
- Fixed brain biopsy tissue in 10% neutral buffered formalin
  - Treated in \_\_\_\_\_% formic acid for 30 mins (Range of formic acid should be between 88-98%).  
*Follow formic acid treatment with 10% formalin rinse.*
  - Biopsy Date:** \_\_\_\_\_  please check here if untreated with formic acid
- Frozen brain biopsy tissue
  - ↳ Stored at:  -70°C (recommended)  -20°C  Refrigerator 4°C
  - Biopsy Date:** \_\_\_\_\_
- Fixed brain autopsy tissue in 10% neutral buffered formalin for 2 weeks before sending
  - Grossed  Not grossed (if not grossed, do not treat with formic acid)
  - Grossed & Treated in \_\_\_\_\_% formic acid for 1 hour (Range of formic acid should be between 88-98%).  
*(If grossed and treated, follow formic acid treatment with 10% formalin rinse)*
  - Autopsy Date:** \_\_\_\_\_
- Frozen brain autopsy tissue
  - ↳ Stored at:  -70°C (recommended)  -20°C  Refrigerator 4°C
  - Autopsy Date:** \_\_\_\_\_

4. **Patient Information**

Name: \_\_\_\_\_ ID# \_\_\_\_\_

Date of birth: \_\_\_\_\_ Sex \_\_\_\_\_ Race \_\_\_\_\_

Onset (month/year): \_\_\_\_\_ Date of death (if applicable): \_\_\_\_\_

City, state and county of residence: \_\_\_\_\_ Current /previous occupations: \_\_\_\_\_

City and state of death (if applicable): \_\_\_\_\_

5. For all blood and tissue samples sent to the NPDPS, we REQUIRE that a full clinical history be submitted to aid us in making our diagnosis (if sending blood sample on an asymptomatic patient, you must submit family history). Has clinical history been submitted on this patient?
- Yes, it is enclosed in this package                       No, it will be sent under separate cover
- Yes, it has been submitted previously

6. Has the patient served in the military?
- Yes                       No

7. Does the patient have clinical history consistent with any of the following?
- |   |  |   |
|---|--|---|
| <input type="checkbox"/> Rapid dementia     | <input type="checkbox"/> Cerebral infarction | <input type="checkbox"/> Acute brain trauma               |
| <input type="checkbox"/> Brain lymphoma     | <input type="checkbox"/> Paraneoplastic      | <input type="checkbox"/> Asymptomatic (for blood samples) |
| <input type="checkbox"/> Viral encephalitis | <input type="checkbox"/> encephalopathy      |   |

8. Does the patient have any family history of CJD or early onset dementia? If yes, please also submit information on family history.
- No                       Yes, early onset dementia                       Yes, CJD (describe relationship below)

9. Please check if the patient may have any risk for the iatrogenic form of CJD due to the following factors:

- Human growth hormone (hGH)                       Human pituitary gonadotrophin (hGNH)

If either box above is checked, please list start and end dates of treatment:

- Intradural brain or spinal cord surgery. Please list date and location of surgery: \_\_\_\_\_

- Dura mater graft. Please list date and location of graft: \_\_\_\_\_

- Corneal transplant. Please list date and location of transplant: \_\_\_\_\_

10. Does the patient have a known history of foreign travel or eating wild game?

- Yes, foreign travel: Where and when?

- Yes, patient consumed wild game: What type and from what state(s)? \_\_\_\_\_

- Yes, patient has a known history of hunting wild game: What state(s) and when? \_\_\_\_\_

11. Did the patient donate/receive blood?  No                       Unknown

- Yes, donated : In what year(s) and city/state? \_\_\_\_\_

- Yes, received: In what year(s) and city/state? \_\_\_\_\_

# ANNUAL SIGNATURE REVIEW

**PROCEDURE TITLE: Handling of Creutzfeldt - Jakob Disease Specimens**

**Signature on this page insures that each procedure has been reviewed annually. Any changes will be reflected on the procedure by the revised date. CYP.02500**

MEDICAL DIRECTOR	SIGNATURE	DATE
M. Scott Lucia, M.D.	<i>M. Scott Lucia</i>	3/24/14
	<i>M. Scott Lucia</i>	8/20/14