

WEST NILE VIRUS TESTING RECOMMENDATIONS FOR THE COLLECTION OF BIRDS

For

Local Public Health Departments
Oregon Department of Agriculture
Oregon Department of Fish and Wildlife
Vector Control Agencies

Overview

Birds are a natural host for West Nile virus and act as an indicator to detect the virus and its transmission locally

Criteria

Oregon State University, Veterinary Diagnostics Laboratory has been funded to test birds for West Nile virus (WNV) encephalitis. The following guidelines have been created to facilitate the collection and testing of birds in Oregon due to limited funding available:

- Emphasis on testing crows, ravens, jays, and magpies (Corvid family) and sage grouse. Other bird species may be tested only in consultation with Oregon Department of Fish and Wildlife.
- Bird(s) must have been **dead no more than 24 hours** to ensure accurate results.
- Bird(s) to be tested may either be a single, collected bird or part of a continuous die-off (1 - 2 day event).
- Bird(s) killed by other obvious means, such as injury from other animals or suspected pesticide spraying will not be tested.
- **All** bird specimens must be approved by the local county health department before submittal to Oregon State University, Veterinary Diagnostics Laboratory.
- In all cases, the local county health department should contact the Oregon Department of Fish and Wildlife regional biologists to determine the extent of dead bird reporting.

Responsibility

Professional It is up to the local jurisdiction to determine if they will pick up birds or request assistance from the public to deliver them to a specified place.

Public Report birds to your local vector control district or health department and they will determine if fit to test.

Specimen Collection Instructions (Birds other than Corvids)

- Wear disposable gloves when handling a dead bird or use plastic bag if gloves are not available.
- Prevent contact between a dead bird and yourself and other animals.
- Invert a plastic bag over the bird to pick it up, and then seal it.
- Place the sealed bird in a second plastic bag and seal it again.
- Place the double-sealed bird in a leak-proof container with enough sealed ice or blue ice packs to keep it refrigerated until it reaches the laboratory.
- It must be shipped to the lab within 24 hours, or kept in a freezer until shipped
- Several specimens may be shipped in the same container but sealed in separate bags.

Shipment Instructions

- Complete the “Dead Bird Submission Form” (within this document) for each bird clearly identifying each sealed bird sample with its corresponding for.
- Check with your shipper for labeling requirements for shipping diagnostic wildlife specimens.
- Ship the sample that day, guaranteed to deliver within 24 hours or less. Samples must arrive no later than Friday noon, unless arrangements are made for someone to be at the lab to accept the shipment.
- Ship to:
Oregon State University,
Veterinary Diagnostic Laboratory
30th and Washington Way
Magruder Hall – Room 134
PO Box 429
Corvallis, OR 97339-0429

NOTE – Bird specimen collection requests from the public must be approved by either the local public health department or the local vector control agency. Only approved testing will be free of charge. To acquire approval call:

Oregon DHS Health Services, Office of Disease Prevention and Epidemiology
Acute and Communicable Disease Prevention

Phone: 971-673-1111

Address: 800 NE Oregon Street, Room 772
Portland, OR 97232

Fax: 971-673-1100

**INSTRUCTIONS FOR COLLECTING
OROPHARANGEAL SWAB SECRETIONS FROM CORVIDAE
AND THEIR TRANSFER TO WHATMAN FTA® CARDS**

The FTA® card by Whatman, Inc. is a convenient method of storing a nucleic acid specimen while inactivating pathogens thereby allowing the transport of the sample via standard US mail. The Whatman FTA card used for WNV sampling is an “indicating” card meaning it is treated with pink chemical that blanches to white when fluid is absorbed by the card. The blotter card itself is contained in an outer paper cover appearing much like a paper matchbook.

Inside the paper cover, the blotter paper has a pink with a large circle on it. The following procedure is suitable for crows, jays, magpies and other Corvidae species which are known to have a high concentration of virus in the oral secretions. Other birds should be submitted whole for brain removal only when test has been approved by Oregon Department of Agriculture biologist or Oregon Department of Health.

1. Gloves should always be worn while handling dead birds.
2. Fill out the WNV surveillance submission form and note a bird identification number on it that will be recognizable to you.
3. Place an FTA card on a clean surface and record the bird identification and submitter on the outside of the card.
4. Open a packet containing a sterile swab.
5. Grasp the plastic stick of the swab in one hand and open the beak of the bird with the other.
6. Insert the swab into the oral cavity and swab the top, sides and back of the mouth and throat (if the bird has been frozen, thaw out completely before swabbing).
7. Try to wet the swab with as much oral secretion as possible and then remove the swab from the mouth.
8. Open the cover of the FTA card to expose the pink circled blotter paper.
9. Firmly press the swab onto the blotter paper and roll it back and forth in the center of the circle to transfer the oral secretion onto the blotter. The pink blotter should blanch to white as the liquid is transferred. Be aware that it is not necessary to wet the entire circled area. Try to concentrate the transfer into the center of the circle.
10. Prop open the FTA card and allow to air dry for 1 hour.
11. Appropriately bag and dispose of the bird and swab.
12. To transport the FTA card to the lab for testing, place the card in the foil lined Whatman Multi-Barrier pouch. Remove the protective adhesive strip cover and seal by folding along the perforated line.
13. Only one FTA card should be placed in a multi-barrier pouch.
14. Place the pouch and the completed Surveillance Form into an envelope and mail to:

WNV Surveillance
Oregon State University
Veterinary Diagnostic Laboratory
PO Box 429
Corvallis, OR 97339-0429

**WEST NILE VIRUS TESTING
DEAD BIRD SUBMISSION FORM**

Oregon Health Division, Office of Disease Prevention and Epidemiology

Fax to:

Acute and Communicable Disease Program at 971-673-1100

Submission Information

Name _____

Telephone _____ Fax _____

Agency _____

Address _____

Specimen Information

Species _____ Specimen ID Number _____

Date of collection _____ County _____

City _____ Zip Code _____

Description of Location _____

Weather Conditions _____

Coordinates LAT (1983 NAD) _____

LONG (1983 NAD) _____

Results

Test performed (circle one) Vec Test Ramp

Results Positive Negative

Confirmed by PCR Yes No