

WV DEPARTMENT OF HEALTH AND HUMAN RESOURCES
BUREAU FOR PUBLIC HEALTH
OFFICE OF LABORATORY SERVICES

AVIAN ORAL SWAB COLLECTION PROCEDURE

OBJECTIVE: To monitor Arbovirus activity through the detection of Arboviral RNA in oral swab samples collected from dead birds in WV.

BACKGROUND:

Certain bird species, such as crows and blue jays, are very susceptible to Arbovirus infections, particularly West Nile. It is difficult to predict outbreaks due to mosquito-borne Arboviruses. However, when Arbovirus activity is high, illness in birds and other animals precede illness in humans. Monitoring and testing of dead birds allows Public Health to maintain mosquito-borne Arbovirus surveillance and potentially detect emerging or re-emerging viruses to help prevent human cases.

COLLECTION PROCEDURE:

Collection kits are available from the Office of Laboratory Services. A request form is available on our website or by calling OLS at the number listed in the Contacts section below.

NOTE: The viral transport media supplied in the dead bird swab kits is the same media used for Influenza testing. You may use the media supplied in the OLS Influenza Collection Kit as long as it has not expired.

Collect the swab from the dead bird as follows:

1. Open the collection kit bag and remove all the components. Check to make sure the viral transport media has not expired.
2. Before beginning collection of oral swab put on disposable gloves and mask.
3. Carefully tear open the swab wrapper at the bottom so that the cotton swab remains covered. Place it to one side until needed.
4. Avoid direct contact with the dead bird by using disposable gloves and handling the carcass only with plastic bags.
5. Invert the large plastic zippered bag, reaching through the bag pick up the dead bird carcass and pull through the bag turning it right side out with the bird inside.
6. Place the bagged carcass down on a flat surface with the opening of the bag facing away from you.

7. Holding on to the head of the bird with the plastic bag, carefully pry open the beak.
8. Remove the swab from its wrapper and swab the inner beak, oral cavity and throat. Leave the swab in the oral cavity.
9. Open the specimen tube containing transport media.
10. Remove the oral swab from the oral cavity and place it into the specimen tube breaking off the shaft if needed.
11. Tightly replace the cap and write the WV ID # (obtained by calling DIDE at 304-558-5358) directly on the tube with a permanent marker. This same ID # should also be written on the corresponding laboratory submission form.
12. Make sure that the submission form is completely filled out.
13. Place the specimen tube into a biohazard bag and seal it.
14. Place the submission form into the side pocket of the biohazard bag containing the corresponding specimen.
15. Place the bagged specimen and form into the mailing box.
16. Ship to OLS using current approved shipping regulations.
17. If unable to ship immediately, refrigerate at 4°C.

MAILING DIRECTIONS:

Oral swab specimens collected from the field should be mailed to OLS the day of collection. If this is not possible, the specimen must be refrigerated and sent to OLS as soon as possible. Specimens should not be mailed on Friday due to no mail pickup on Saturday. OLS recommends UPS or FedEx for shipment. If using USPS, OLS recommends adding Delivery Confirmation. Specimens do not need to be packaged with ice packs or dry ice.

TESTING PROCEDURE:

Specimens will be tested by the Southeastern Cooperative Wildlife Disease Study at the University of Georgia using Polymerase Chain Reaction (PCR) methods.

CONTACTS:

Office of Laboratory Services (OLS)
167 11th Avenue
South Charleston, WV 25303
304-558-3530

Division of Infectious Disease Epidemiology (DIDE)
350 Capitol Street, Room 125
Charleston, WV 25301
304-558-5358