

GUIDE TO FTA CARDS

For International Sample Submissions

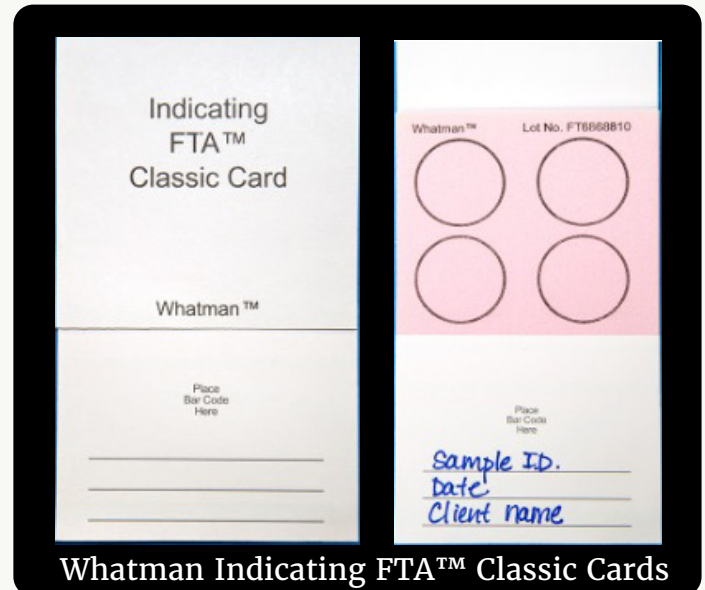


Poultry Diagnostic
and Research Center
College of Veterinary Medicine
UNIVERSITY OF GEORGIA

FTA CLASSIC CARDS

The PDRC Diagnostic Services utilizes Whatman Indicating FTA™ Classic Cards for International sampling for molecular analysis (PCR, RT-PCR, Genotyping). The FTA™ card allows for compliance with federal regulations for importing avian pathogens, while reducing the cost of shipping samples by eliminating hazardous materials such as phenol. DNA sequencing of PCR products allows:

1. Genetic characterization of the bacteria or viruses detected
2. Study of the epidemiology of these diseases in foreign countries
3. Differentiation between vaccines and field isolates for some organisms



REQUIRED TRANSPORT PERMIT

For shipment to the US, a USDA transport permit is required. PDRC's transport permit for FTA sample submission can be found on our website or at the link on the right.

Click or scan the QR code to access the transport permit.



*****There may be specific shipping forms that will need to be completed, depending on the courier used.*****

INTERNATIONAL SUBMISSION FORM

Complete the PDRC's International Submission form and include a copy of the completed form with your submission.

Click or scan the QR code to access the PDRC's International Submission form.

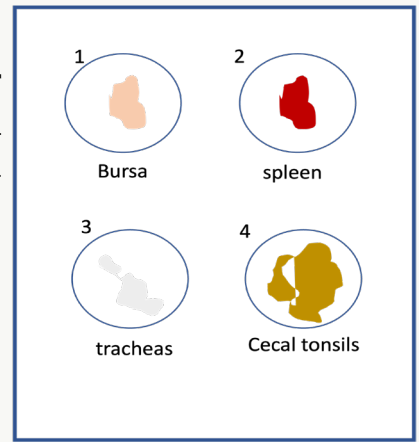


LABELING FTA CARDS

It is very important to provide concise instructions for sample testing. Please indicate the tests to perform on specified samples and if samples are to be tested individually or pooled.

Impressions from different tissues can be applied to circles on the same card (as shown in image).

On the International Submission form, identify tissues by circle and indicate if any samples are to be pooled for testing. *Never write on the inside of the FTA card.*



PACKING & SHIPPING

After applying the sample to the card:

1. Allow sample to dry before closing the card.
2. Once dry, place the FTA card in a ziplock or whirlpak bag with desiccant pouch and ship it.

OR, store at 4C until ready to ship



Before you begin sampling

TIPS FOR OPTIMAL TESTING RESULTS

For FTA card impressions, the recommended samples are:

Tissue impressions

Tissue smears

Liquid samples

Swabs

+ Use gloves when handling samples and FTA cards. Do not touch the application circles (Pink area) of the cards with bare hands.

+ For samples where scrapings are indicated, use scalpel blade to scrape the epithelial lining of the tissue and apply to a circle on the FTA card.

+ For sampling between houses, flocks, farms, always try to use sterile utensils and new gloves. Ethanol can be used to disinfect utensils between sampling if respiratory testing will be requested.

+ Avoid sampling from dead birds if possible as the nucleic acid is of poor quality and test will be compromised.

Regardless of the sample, maintain the cold chain for transport of samples until applied to FTA card.

Example of proper cold transport method



SAMPLING & SAMPLE METHODS: BEST PRACTICES

Prior to collecting the sample

Visit the PDRC's website and note the preferred tissue or sample type for each diagnostic test (see example below). Contact the lab if you have any questions or would like more information.



Click or scan the QR code to access the full list of tests.

PDRC DIAGNOSTIC LAB TESTS

AVIAN LEUKOSIS VIRUS J PCR

Department of Population Health, PDRC Diagnostic Services and Teaching Laboratory, Poultry Diagnostic and Research Center

Test Code: VRLH

Species: Chicken, Turkey and other avian species

PREFERRED SPECIMEN

Liver, Spleen, Tumor

ACCEPTABLE SPECIMEN

Liver, Spleen, Bursa, Bone Marrow, Blood, Cloacal Swabs

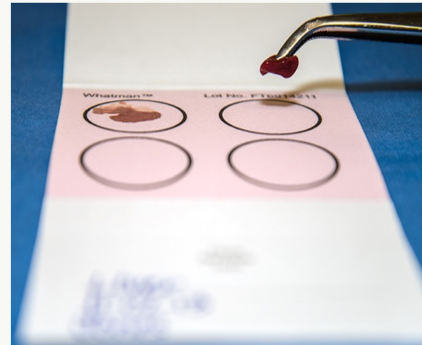
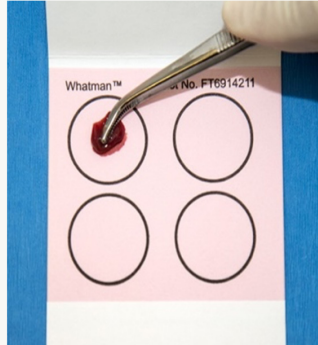
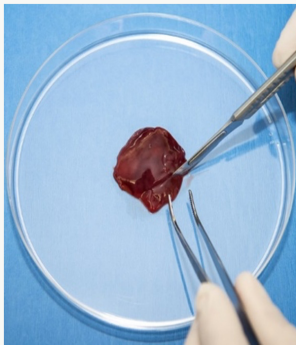
COLLECTION PROTOCOL

Aseptically collect tissue into a whirl pak bag. Freeze tissue until ready to ship. For international submissions, completely before closing, place in a ziplock bag with desiccant pouch and store at room temperature.

Tissue impressions on an FTA card allow the card to dry

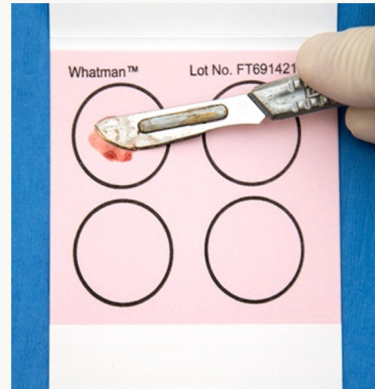
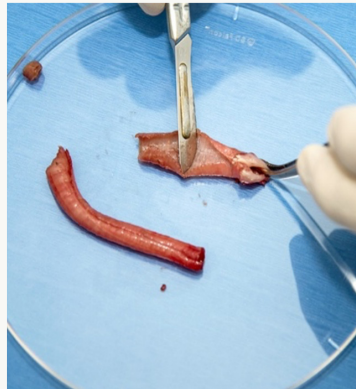
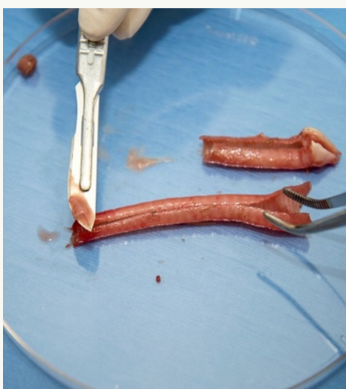
TISSUE IMPRESSIONS

1. Cut a cross section of tissue for card impression.
2. Apply interior section of tissue to card. For example, cut the bursa and invert so that the bursal follicles are exposed. Apply bursal impression by pressing inverted bursa onto FTA card and making smear.
3. Ensure only tissue impression is left on the card; no pieces of tissue should remain on the card.



TISSUE SMEARS

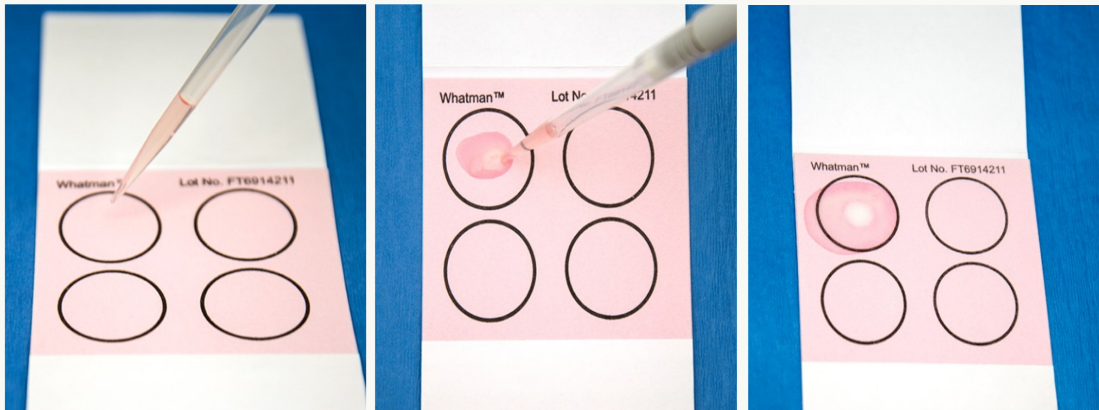
1. For tracheas, it is best to harvest the trachea and cut lengthwise.
2. Using a sterile scalpel blade, scrape the length of trachea and apply to FTA card. This will yield more target samples for respiratory testing.



SAMPLING & SAMPLE METHODS: BEST PRACTICES

LIQUID SAMPLES

1. Apply 5–50 microliters of liquid sample (allantoic fluid, plasma, etc.) or samples in suspension (cell culture, blood etc.) onto the active circle of the FTA paper. It is possible to apply samples from several birds to one circle if the samples need to be pooled.
2. Allow samples to dry on the cards for 45–60 minutes at ambient temperature. Store cards at room temperature or in the refrigerator or freezer in a moisture-free environment (ziplock or whirlpak bags).

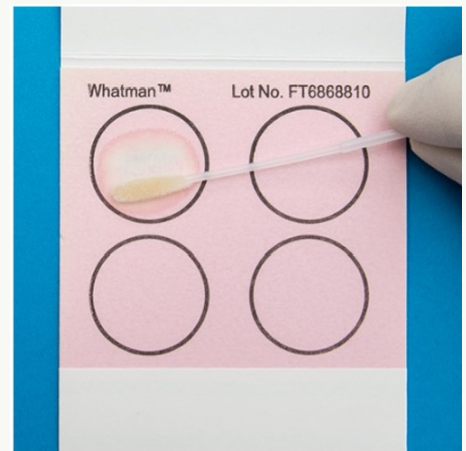


SWAB SAMPLES

Not all swabs are equal & the best swabs to use for FTA are **Dacron, flocked, or polyester**.

****Never use cotton-tipped swabs****

Transfer contents of swabs (from tracheas or other organs) by pressing onto the FTA paper.



*****For best results on liquid and swab samples, do not add samples from more than 5 birds to one circle or testing sensitivity may be reduced.*****



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If you have any questions, please contact PDRC:

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PDRC Website**