



**State Health Laboratories**

50 Orms Street  
Providence, RI 02904-2222

401.222.5600  
401.222.6985 fax  
TTY: 711  
[www.health.ri.gov](http://www.health.ri.gov)

This will describe two methods of collecting a buccal sample. Buccal cells line the inner cheek inside the mouth, and are a good source of DNA for reference samples. The process is relatively straightforward.

**Packaging and labeling specimen:**

All specimens collected shall be properly collected, packaged, and preserved as required in the Rules and Regulations and as described below. All specimens shall include appropriate identifying information such as the name and initials of the individual collecting the sample, the case number, and the date on which the sample was collected or transferred.

**FTA Card Collection**

FTA® Cards

Impregnated with chemical which traps, immobilizes, and stabilizes DNA  
Protects DNA from breakdown  
Infectious pathogens are rendered inactive upon contact  
Can be stored at room temperature  
DNA is stable for years  
Available through Whatman, Inc. at [www.whatman.com](http://www.whatman.com)  
Indicating FTA Micro Card # WB 120311 and  
Sterile foam tipped applicators # WB 100032  
(Alternative: EasyCollect #WB120462)

Items you will need for FTA Card collection:

Gloves  
Evidence tape  
Outer Packaging envelope  
FTA Card  
Foam tipped applicator

FTA Card Collection:

Have the subject remove any items contained in their mouth such as gum or candy.

1. Place FTA card on a clean, dry, flat surface. Label the FTA card with the subject's name, date of collection, and your initials.
2. Remove one Foam Tipped Applicator from the packaging.
3. Holding the plastic handle of the applicator, place the foam tip in the subject's mouth and rub one side of the tip on the inside of the cheek for at least 10 seconds, ensuring that the outline of the swab can be seen from the outside of the subject's cheek. Repeat using the opposite side of the foam tip for the other cheek. Remove applicator from the subject's mouth.

The next step is to transfer the cells taken from the inside of the cheek onto the pink sample area of the FTA card. When cells and saliva make contact with the card, the pink area will turn white.

Lift the paper cover of the FTA to expose the pink sample area.

Press the applicator tip within the sample circle area. Without lifting the tip from the card, squeeze the tip by pressing it against the card using a side to side motion three times to completely saturate the sample area. Turn the applicator over and repeat with the other side of the foam tip within the same circle. The sample area should turn white upon transfer of sample.

Each swab can only be used once and then must be discarded. Discard the applicator and gloves. Do not place the foam swab in the mouth after it has touched the FTA card.

Position the FTA card for drying by supporting the sample area with the paper cover. Allow the card to dry for at least 10 minutes at room temperature if possible.

Seal sides with evidence tape, place in an outer paper envelope, seal with tape. Place your initials over the seal, and transport to the laboratory. If the sample is to be stored, keep in a cool dry environment. Do not store the sample in plastic as it may degrade.

Alternative: EasyCollect – An all in one unit containing the FTA card and the foam applicator swab. Directions are included with the unit.

### **Buccal swab collection using sterile swabs:**

Alternatively, sterile cotton swabs may be purchased at a medical supply facility. Swabs are a more economical alternative; however, they do not contain any preservative.

Items you will need for sample collection using sterile swabs:

Swabs

Gloves

Evidence tape

Outer packaging envelope

Sterile swabs should be individually packaged in singles or pairs. Opening a large package of swabs will render them unsterile.

Remove two swabs from the packaging.

Holding the handles of a pair of swabs, place the swabs in the mouth and rub the swabs using a twisting motion for 10 seconds on the inside of the cheek, ensuring that the impression of the swab can be seen from the outside of the subject's cheek. Repeat using the same swabs with the inside of the other cheek. Place swabs handle side down back into their original packaging and allow to air dry completely.

Place dried swabs and packaging into an appropriate paper transport container, preferably an evidence collection envelope. Seal with evidence tape and place your initials over the seal, and transport to the laboratory. If the sample is to be stored for a short length of time, keep in a cool, dry environment. For long term storage, freezing is recommended.

Remember, proper labeling and packaging are critical to the integrity of this evidence. Please call the Forensic Biology Laboratory at the Department of Health if you have any questions.

Rhode Island Department of Health  
Forensic Biology Section  
50 Orms St.  
Providence, RI 02904  
Telephone: 401.222.5535  
FAX: 401.222.5536

e-mail: [cara.lupino@health.ri.gov](mailto:cara.lupino@health.ri.gov)