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**Flinders Technology Associates (FTA) Cards:**

FTA is a device that allows for sample collection, room temperature storage, shipping and processing of DNA for analysis.



**Advantage:**

- Simple Collection
- Convenient room temperature storage and transport
- Safe Handling

**FTA card formats:**

FTA Cards & Indicating FTA



Blood Sample Collection Kit



**Kit Contents**

- FTA Microcard
- Peelable barcodes x 2
- Return mailing envelope
- Multi-barrier pouch
- Nitrile gloves – 1 pair
- Tamper evident tape to add to pouch or shipping container
- Alcohol wipe
- Disposable lancet
- Band aid
- Desiccant packet

Easi-Collect



Buccal Sample Collection Kit



**Kit Contents**

- Indicating FTA Micro Card x 1
- Peelable barcodes x 2
- Sterile Foam Tipped Applicator x 1
- Return mailing envelope
- Multi-barrier pouch
- Nitrile gloves – 1 pair
- Tamper evident tape to add to pouch or shipping container
- Desiccant

**Instruction for blood collection using Whatman FTA Blood Collection Kit**



Place the contents of the package out on a clean and dry table or other surface.

Wear gloves and unfold protective flap of FTA to expose the printed circle.



Use alcohol wipe to clean the Finger properly.

Firmly hold the end of the lancet on the part of the finger that was cleaned with the alcohol wipe and press the trigger to prick the finger.

Press the finger to deposit a drop in the Printed circle without touching the card.



Do not oversaturate, as DNA cannot be recovered from an FTA card that is saturated with too much blood.

Allow card to dry fully for 1-2 hours at room temperature. Close the protective cover of the FTA card and insert the card with desiccant packet into the Multi Barrier Pouch



Insert the Multi Barrier Pouch into the mailing envelope.



**Instruction for Buccal Cell Collection using Whatman FTA Buccal Collection Kit**



Place the indicating FTA card and other component on a clean, dry, flat surface.

Remove one Sterile Foam Tipped Applicator.



Holding the plastic handle of the applicator, place the foam applicator in the mouth.

Soak up as much saliva as possible by running the foam applicator on the inside cheek for 30 secs. Repeat the process with the opposite side of the applicator.



Carefully lift the paper cover of the indicating FTA card to expose the pink sample area.

Apply pressure; rock the foam applicator from side to side three times.



Turn the applicator over and repeat with the other side within the sample circle.

The sample area will turn white indicating the transfer of sample



Position the card for drying by supporting the sample area with the paper cover as shown in the figure. Allow the card to completely dry at room temperature

After the indicating FTA card is dry, place the card with a desiccant packet into the Multi Barrier Pouch



**Procedure for collection and preservation of biological evidences by IOs**

Sample	Condition	Location	Methods of collection, preservation & packaging	Transportation	Precautions
Blood	Liquid form	Crime scene	Collect in EDTA tube using syringe or dropper Or Transfer on gauze piece / FTA card. Air dry it and keep in paper packet / envelope	Must be submitted in the laboratory within 24 hours after collection.  Liquid blood samples must be kept in thermos flask or thermos box stuffed with ice/coolant pack	Use disposable syringe to collect blood into EDTA tube.
	Fresh / Wet clot	Crime scene	Collect clot in sterile tube and add equal volume of normal saline / PBS (PBS is preferred for DNA evidence samples) Or Transfer on gauze piece / FTA card. Air dry it and keep in paper packet / envelope with desiccant.		
	Wet / damp	Crime scene, clothing, fabrics, Victim's clothing, suspect's clothing etc.	Thoroughly air dry at room temperature. Roll it in clean in paper or brown paper. Pack in paper bag / envelope or cotton bag. Separate the cloth of victim / deceased and accused.	Must be submitted in the laboratory without any delay	Handle fabrics / clothes as little as possible. Never use direct sunlight, hot air blower, heater to dry the stains. Never try to pack.
	Wet	Object	Thoroughly air dry at room temperature. Collect the item as it is. Pack in paper bag / envelope, cardboard / shipping boxes, depending upon the size of object. Use standard packaging material for packing of evidences.		The clothes dry or wet in air tight container or polythene bags. Always document the stain pattern by sketching, photography or videography before removing them.
Dried blood stain, Semen stain, Vomit, Sputum and other body fluid stains	Crust / stain / Spatters	Crime scene, or Unmovable surface, floor, concrete wall etc.	Moistened the dry blood stain for 5-10 minutes with PBS / distilled water. Collect the moistened stain with foam tipped swab / FTA card / gauze piece and air dry the swab. Pack this dried swab in paper envelope.	Must be submitted in the laboratory without any delay	Never makes blood scrapings. Collect scraps of different spots in separate packets/envelopes. Never make swab of stains at different place by single cloth. Collect swabs of different spots
	Stain	Weapon/firearms/bullet Small objects such as household utensils, stones, bricks etc.	Allow the stains to dry. Collect the item directly. Pack and seal in card board / shipping box. Seal with evidence tape	Must be submitted in the laboratory without any delay	



	Stain	Vehicle upholstery, carpet, wallpaper, wood etc.	Cutout the stained area. Allow it to dry in shade. Package each cutting separately. Also collect an unstained cutting as a control from adjacent area.	Must be submitted in the laboratory without any delay	separately, dry in shade and pack in separate packets/envelopes. Never use direct sunlight or hot air, blower, heater to dry the swabs. Never forward loaded firearms. Pack bullets/pallets with sufficient paddings to avoid rattling. Air dry the swab thoroughly and pack, preferably paper envelop or in sterile glass vial.
Semen	Liquid form	Object, crime scene	Collect the sample with sterile gauze piece / cotton swab / surface swab. Air dry the swab and pack in paper envelope.	Must be submitted in the laboratory without any delay	
Tissue organs / foetal remains	Wet / semi dry	Mutilated remains at crime scene or place of recovery	Tissue / organs in a clean plastic container recommended. Immediately store parcel under freezing conditions without any preservative for DNA analysis. For toxicology / drug test, use saline as preservative.	Must be submitted in the laboratory within 24 hours after collection. While transporting the exhibits containers must be kept in thermocol box with dry ice / coolant pack and vaccine carrier.	Never add any preservatives like formalin. Samples must be packed separately. Store the packed sample in freezer if there is any delay in transportation and submission to laboratory.
Bones teeth	Wet / semi dry / dry	Crime scene or place of recovery	Clean and wash the bones and teeth to remove any debris. Allow it to dry completely in air. Role / pack in brown paper, envelope and seal in cotton cloth / card board boxes etc.	Must be submitted in the laboratory without any delay	Never add any preservatives like formalin. Send intact bones. The order of preference for sending intact bones should be (i) Femur (ii) Tibia (iii) Humerus (iv) Teeth (molar) (v) Ribs. Completely burned bones are not useful for DNA analysis.
Hair with root	Dry or wet with blood, semen, saliva	Crime scene, weapon, clothing	Collect the sample with help of tweezers / forceps in white paper / butter paper and pack in paper envelope. If found attached in dry blood, weapon etc. do not remove	Must be submitted in the laboratory without any delay	If wet, allow the hairs to dry in shade. Never wash the recovered hairs.

#### 11. Crime scene investigation kit:

Following are the major components of crime scene investigation kit used for biological evidences:

High resolution digital camera	
Disposable Gown, Cap, Shoe, Gloves, Mask, Goggles, hand-towels. Bio-hazard polythene bag for biological waste.	
Sterile gauze, Filter paper and dessicant	
Alcohol swabs and tissue, hand sanitizer	
Evidence marking letter, alphabets and direction indicators	
Hand torch and magnifier lens	

Surgical blades, forceps, dropper and syringe	
Sterile water, saline and phosphate buffer	
EDTA vials and FTA cards	
Surface swabs, Cotton swabs and plastic container	
Evidence collecting envelopes and cardboards	

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**CENTRAL FORENSIC SCIENCE LABORATORY**

DNA Unit,  
Ministry of Home Affairs, Govt. of India,  
CFIs Complex, Dakshin Marg, Sector 36-A, Chandigarh - 160036

**EVIDENCE SUBMISSION FORM**

Government/Law Enforcement Agency Submitting the case

This form **MUST** be completed before processing can begin on this case.

<b>Case Information</b>		<b>Date:</b>		
FIR _____ U/S _____ P.S. _____				
Full Address of Submitting Agency:				
Telephone # _____		Fax # _____		
Delivering Officer _____		Designation: _____		P.S. _____
Phone No. _____		Email Address: _____		
Signature _____				
<b>Type Of Case</b>				
Disputed Paternity/Disputed Maternity/ Criminal Paternity / Sexual Assault/ Homicide/ Human identification				
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Examination Required	Brief Description of Items Submitted	Brief Case History (Attach extra sheet if required)	Seal Impression (s)	No. Of Seals

**Information to be provided in sexual assault cases**

Please Answer these Questions For Requested Laboratory Services (Serology/DNA Analysis)

Who was bleeding? Suspect  Victim

Has victim had sexual relations within 3 days?

Did perpetrator use a condom?

Did ejaculation occur outside the body?

How much time elapsed between the sexual assault and medical examination?

**Statement of Authorization**

I authorize CFSL, Chandigarh to perform DNA analysis on the specimens submitted regarding the aforementioned case.

Name: \_\_\_\_\_

Signature: \_\_\_\_\_



**BLOOD SAMPLE AUTHENTICATION FORM**

(To be completed by the Authorized Medical officer collecting the samples. Identity of person from whom blood sample is being collected)

Name of person: \_\_\_\_\_ Father's/Guardian/Husband name: \_\_\_\_\_

Gender: Male [ ] Female [ ] Age \_\_\_\_\_ Caste/ Origin of State: \_\_\_\_\_

Address: \_\_\_\_\_ PIN \_\_\_\_\_

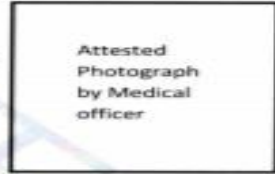
FIR/Crime Case No: \_\_\_\_\_

Collection Center Name \_\_\_\_\_

Sample Collected By \_\_\_\_\_ Sample Collection Date \_\_\_\_\_

Collection Center Address \_\_\_\_\_

Storage conditions used \_\_\_\_\_



Name of the person Collecting the blood sample	Date & Time	Signature
Name of Investigating Officer/ Representative	Date & Time	Signature
Name of Witness	Date & Time	Signature
Name of Witness	Date & Time	Signature

**Chain of Custody**  
Blood samples sealed and released by: \_\_\_\_\_ Blood samples released to: \_\_\_\_\_

Mode of release: Hand delivery [ ] or Mail [ ] Date sent to CFSL, Chandigarh: \_\_\_\_\_

For Office use only

**SUBJECT'S STATEMENT OF VOLUNTARY CONSENT & RELEASE**

I \_\_\_\_\_ Son/Daughter/Wife/Guardian of \_\_\_\_\_ hereby certify that the information provided above is true and accurate. I willingly consent to the collection of the blood sample from myself for the purpose of DNA analysis.

Signature/thumb impression of the donor \_\_\_\_\_ Date & Time \_\_\_\_\_

CFSL File No: \_\_\_\_\_ Sample received on: \_\_\_\_\_

Laboratory Reference No: \_\_\_\_\_ Examined By: \_\_\_\_\_

Laboratory Exhibit Code No: \_\_\_\_\_

**Signature of Authorized Medical Officer**

**CHAIN OF CUSTODY  
(FOR INVESTIGATING OFFICERS)**

REFERRING INVESTING AGENCY: \_\_\_\_\_

FIR/DDR/CRIME CASE #: \_\_\_\_\_

NAME OF THE INVESTIGATING OFFICER: \_\_\_\_\_ DESIGNATION \_\_\_\_\_

PARCEL #	# OF SEALS	SEAL IMPRESSION	DESCRIPTION OF ARTICLES (Indicate place, time and date of collection and the name of the Investigating Officer collecting/receiving the exhibits)

PARCELS/ EXHIBITS	TIME & DATE	EVIDENCE RECEIVED FROM (Name & Signature)	EVIDENCE RECEIVED BY

Signature of Investigating Officer

**AUTOPSY SPECIMEN (S) SUBMISSION FORM**

(To be completed by the Authorized Medical Officer who conducted the Postmortem)

1. Identity of person from whom samples are being collected:

Name: \_\_\_\_\_ Religion/Caste \_\_\_\_\_

Date of Death \_\_\_\_\_ Hospital Patient # (If any) \_\_\_\_\_

2. Cause of Death \_\_\_\_\_

3. Has the individual received a blood transfusion or bone marrow transplant in the last three months? \_\_\_\_\_

4. Legal Contact: \_\_\_\_\_ Phone \_\_\_\_\_

5. Specimen Collection:

Collection Centre Name: \_\_\_\_\_

Collection Centre Address: \_\_\_\_\_

Sample Collected by: \_\_\_\_\_ Sample collection date: \_\_\_\_\_

6. Description of Samples Collected:

Sample	Storage conditions	Other remarks

Specimen Disposal: (Please check either option 1 or 2 or 3)

Note: If the disposal or return of the sample is not authorized, a Specimen(s) may be destroyed of in 1 year.

7. Chain of Custody

Specimen(s) sealed and released by \_\_\_\_\_

Specimen(s) released to: \_\_\_\_\_

Mode of release: Hand delivery \_\_\_\_\_ Mail \_\_\_\_\_

Date sent to CFSL, Chandigarh \_\_\_\_\_

**Authorized Medical Officer Signature: \_\_\_\_\_ Date \_\_\_\_\_**

**SEXUAL ASSAULT VICTIM INFORMATION FORM**

(To be completed by the Authorized Medical Officer who conducted the Medical examination)

1. Victim Name: \_\_\_\_\_ MLR/PMR Number \_\_\_\_\_

Address \_\_\_\_\_ Age \_\_\_\_\_ Sex \_\_\_\_\_

Date & Time of assault \_\_\_\_\_ District & State of Incident: \_\_\_\_\_

Date of Examination: \_\_\_\_\_

Number of Assaultants \_\_\_\_\_ Age \_\_\_\_\_ Sex \_\_\_\_\_

Sexual Assault Examiner: \_\_\_\_\_

Hospital Name: \_\_\_\_\_ Hospital Telephone No.: \_\_\_\_\_

Attested Photograph  
by Medical Officer

2. DETAILS OF ASSAULT: (e.g., oral, rectal, vaginal penetration/contact; perpetrator penetration of victim with fingers or with foreign object; oral contact by perpetrator; oral contact by victim; ejaculation, if known by victim, other injuries)

3. Pregnancy test to determine pre-existing pregnancy only. Yes/ No/Don't know \_\_\_\_\_

4. PRIOR TO EVIDENCE COLLECTION, VICTIM HAS:

1. Bathed / Urinated /Defecated /Vomited/Had Food or Drink/ Brushed Teeth or Used Mouthwash \_\_\_\_\_ None of the above

2. Whether Clothes changed: Yes/ No/Don't know \_\_\_\_\_

4. For "Rape Drug" Test Blood and/or Urine Sample taken: Yes/ No/Don't know \_\_\_\_\_

5. AT TIME OF ASSAULT WAS:

1. Contraceptives / Spermicide / Lubricant/ Condom present /used? Yes/ No/Don't know \_\_\_\_\_

2. Victim menstruating? Yes/ No/Don't know \_\_\_\_\_

6. AT TIME OF EXAM WAS: Victim menstruating: Yes/ No/Don't know \_\_\_\_\_

7. RECENT CONSENSUAL COITUS:

Has Victim had consensual coitus within last 5 days? Yes/ No/Don't know \_\_\_\_\_

If yes, was birth control used? Yes/ No/Don't know \_\_\_\_\_

What method of birth control was used? \_\_\_\_\_

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**Brief Description of Evidence Submitted (One item per line.)**

Parcel No.	No. of Seals	Description

**Chain of Custody**

Parcel Description	Evidence received From	Evidence delivered To	Date	Comments

**Examinations Requested**


9. Person authorizing release of information is (check one): Victim \_\_\_\_\_ Victim's parent \_\_\_\_\_ Victim's guardian \_\_\_\_\_ Other (Specify) \_\_\_\_\_

If reporting anonymously, I have been informed that all evidence, including my clothing will be disposed of, if I do not report the crime within 3 months after the medical examination.

Signature: <b>VICTIM/PARENT/GUARDIAN SIGNATURE</b>	Date:
	Place:
Signature with stamp: <b>Sexual Assault Examiner</b>	Date:
	Place:

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**CENTRAL FORENSIC SCIENCE LABORATORY**  
DNA Unit,  
Ministry of Home Affairs, Govt. of India,  
CFIs Complex, Dakshin Marg, Sector 36-A, Chandigarh - 160036

**ABORTUS (Aborted Foetus) IDENTIFICATION SHEET  
(DNA PATERNITY TESTING)**

To be completed by the Authorized Medical Officer who conducted the Medical/Postmortem Examination

1. Identity of person from whom abortus sample is being collected

Name of person: \_\_\_\_\_

Address: \_\_\_\_\_

Whether the individual is juvenile or deceased? \_\_\_\_\_

2. Specimen Collection (See instructions)

Hospital Name: \_\_\_\_\_ Hospital Telephone No.: \_\_\_\_\_

Medical Examiner \_\_\_\_\_ Date \_\_\_\_\_

3. Type of Specimen(s) Collected (Please specify the portion of Abortus)

i.

ii.

iii.

4. Weeks Gestation \_\_\_\_\_ Storage conditions used \_\_\_\_\_

5. Chain of Custody

Specimen sealed and released by: \_\_\_\_\_

Specimen released to: \_\_\_\_\_

Mode of release: Hand delivery \_\_\_\_\_ Mail \_\_\_\_\_

Date sent to CFSL, Chandigarh: \_\_\_\_\_

Signature of Authority Medical officer

**ABORTUS SPECIMEN COLLECTION INSTRUCTIONS**

<b>Abortus collection</b>	Wear gloves while collecting samples Tissue from an abortus shall be selected by the physician and approximately 2 cm <sup>2</sup> portion must be placed into a sterile plastic tube. Print the mother's name and the date of collection on the label. Physician should put his/her initials on the label.
<b>Mother's sample</b>	A blood sample needs to be collected and the appropriate form completed (DNA Paternity Test/Chain of custody form).
<b>Storage</b>	Do not preserve the tissue in formalin. Freeze the tissue and transport it on ice. Blood sample should be collected in sterile EDTA tubes. Do not freeze the blood sample.
<b>Forms</b>	Complete the forms, documenting all the required information. Sign the form where indicated to verify collecting the biological samples.
<b>Packing</b>	Package each sample separately and affix with a tamper proof seal.