# STANDARD OPERATING PROCEDURE

# FOR

# CRIME SCENE INVESTIGATION

**Directorate of Forensic Science Services**
**Ministry of Home Affairs, Govt of India**
**Block No. 9, 8th Floor, CGO Complex, New Delhi:110003**
**Tel No. 011-24365835/Fax No. 24362819**
**Website: www.dfs.nic.in / Email: cfs-dfss@nic.in**

डॉ. एस. के. जैन
निदेशक–सह–मुख्य न्यायालयिक वैज्ञानिक

**Dr. S.K. Jain, M.Sc Ph.D**
Director-cum-Chief Forensic Scientist

सत्यमेव जयते

न्यायालयिक विज्ञान सेवा निदेशालय,
गृह मंत्रालय, भारत सरकार
ब्लॉक–9, तल नं. 8 , केन्द्रीय कार्यालय परिसर
लोधी रोड, नई दिल्ली–110 003

**Directorate of Forensic Science Services,**
**Ministry of Home Affairs, Govt. of India**
**Block No. 9, 8th Floor, C.G.O. Complex**
**Lodhi Road, New Delhi-110 003 (India)**
**Tel. : 011-24362676 Fax : 011-24362819**
**E-mail : cfs-dfss@nic.in**

## PREFACE

The investigation of crime scene is like putting together a jigsaw. No one person has all the pieces but some of the key shapes can be found at scene of crime (SOC). Actions taken at the outset of an investigation at a SOC can play a pivotal role in the resolution of a case. Careful and thorough scientific investigation is a key to ensure that potential physical evidences are not tainted or destroyed or potential witnesses are not overlooked. There are very limited opportunities to the crime scene investigators (CSI) to recover all forensic evidence from Scene of Crime as potential criminal makes the task of detection more challenging, particularly when the technology is fast changing.

The evidence may be of scientific in nature such as Blood for DNA, Bite marks, Gun Shot Residues, fired pellets or unique marks on bullet; it may be very minute such as fibers, paint flakes or hairs or even unclear faces and speech samples. Whatever the type of evidence may be, the Crime Scene Investigator, who are at the forefront of the investigation are not able to recover vital physical evidences from SOC, then forensic experts will not be able to identify from where and whom it came.

In view of the above, the Directorate of Forensic Science Services (DFSS) under the Ministry of Home Affairs (MHA) has taken initiative on preparation of "***Standard operating procedures for crime scene investigation***" for collection of physical, Chemical, biological and digital evidences traces from wide variety of crime scenarios by various investigating agencies. A noteworthy aspect of this manual is that the information related to crime scene investigation is well compiled and presented in a user friendly manner by the Committee constituted by this Directorate for applications in practical scenarios by our Investigating Officers.

The booklet is one method of promoting quality crime scene investigation. The type and scope of a crime scene investigation will vary from case to case. Jurisdictions will want to carefully consider the procedures in this guide and their applicability to local agencies and circumstances.

I understand that there is always a scope of improvement and perfection can be achieved by collective efforts, therefore, stakeholders are welcome to offer their feedback and suggestions, if any, in this regard.

30/8/2022

**Dr. S. K. Jain**
**Director-cum-Chief Forensic Scientists**

**INDEX**

## 1. Introduction:

The goal of crime scene investigation is to identify, document and collect physical and biological evidences at the scene of crime and must be done with great care and a thoughtful approach, since the case under investigation has to be put in the court. Solving the crime will depend on piecing together the evidences to form a picture of what happened at the crime scene. Crime scene investigation includes securing of crime scene, photography, proper search of crime scene, systematic documentation of the crime scene along with the suitable collection, packaging, preservation and transport of all the evidences encountered at a specific crime scene. In the majority of cases, investigating officer who protects and searches a crime scene plays a critical role in determining whether physical evidence will be used in solving or prosecuting crimes.

Following are the guidelines for investigating officers for processing a crime scene:

## 2. Safety procedure:

- Ensure that there is no immediate threat to other responders; scan area for sights, sounds, and smells that may present danger to personnel (e.g., hazardous materials such as gasoline, natural gas). If the situation involves a clandestine drug laboratory, biological weapons, or radiological or chemical threats the appropriate personnel/agency should be contacted prior to entering the scene.
- Approach the scene in a manner designed to reduce risk of harm to officer(s) while maximizing the safety of victims, witnesses, and others in the area.
- Survey the scene for dangerous persons and control the situation. Notify supervisory personnel and call for assistance/backup.

## 3. Securing the crime scene:

- In order to protect and prevent unwanted access to crime scene by the people with curiosity or malicious intentions, a perimeter must be established by police line tape.
- In order to prevent contamination of the scene or any other evidence, the officer must prevent anyone from entering into the crime scene.
- The investigating officer needs to wear gloves and protective clothing to reduce the possibility of contaminating the evidence themselves.
- Control the flow of personnel and animals entering and leaving the scene to maintain integrity of the scene.
- Maintain the privacy and confidentiality of scene of crime. Do not allow the media and press personnel.

**4**. **Preliminary Survey:**

- Do an overall survey of the crime scene
- Evaluate and establish a path of entry / exit to the scene to be utilized by authorized personnel.
- Evaluate initial scene boundaries.
- Conduct scene “walk-through” and initial documentation.
- Identify and protect fragile and / or perishable evidences.
- Prepare preliminary documentation of the scene as observed.
- Ensure that all evidences that may be compromised are immediately documented, photographed and collected.
- Identify the origin of the incidence and reconstruct the sequence of events. The sequence of events should not contradict with the statement of witnesses.

**5. Contamination control:**

Contamination control and preventing cross contamination at scene of crime is essential to maintain the safety of personnel and the integrity of evidence.

- Limit scene access to people directly involved in scene processing.
- Strictly follow established entry / exit routes at the scene.
- Use personnel protective equipments to prevent contamination of personnel and to minimize scene contamination.
- Disposable device should be used for the collection of biological evidence materials.

**6**. **Documentation:**

- The investigating officer shall maintain documentation as a permanent record.
- Review preliminary survey of scene of crime to determine what kind of documentation is needed (e.g. photography, video, sketch, measurements, notes).
- The notes and reports should be done in a chronological order and should include **no opinions, no analysis or no conclusions** but just facts.
- A general description of the scene of crime should be given just as the investigating officer sees it when he / she does the preliminary survey.

**7. Sketching of scene of crime:**

- The crime scene sketch should generally be rough sketch, however in cases of heinous crime sketches must be to scale also, distances should be measured accurately and nothing of important should be left out of the sketch map.

- The exact position of one or two permanent fixture should be provided which will be helpful in ascertaining its distance to the major articles, exhibits, marks such as blood stains, track marks of vehicles etc.
- The compass point must be indicated and the north point should be obtained by means of a compass.
- The title, case reference, date, time, name and signature of investigation officer should be mentioned in the corner of the sketch.

**8. Photography of crime scene:**

- Photography should be used as part of the documentation for all physical crime scenes.
- The photographs should include dead body (if present) to show locations, injuries and condition.
- Each piece of evidence should be photographed to illustrate where it was found to establish relationship of evidences to the victim.
- Photographs of evidences should be taken from straight above eliminating potential distance distortions.
- Blood pattern should be photographed along with the scale from different angles.
- Identify the type of weapon of offence from blood stain pattern on scene of crime.

**9. Methods for searching crime scenes:**

- The investigating officer must adopt an orderly process to access the crime scene so that any material evidence is not left out. Any one of the following crime scene search pattern may be adopted as per need**(Figure 1)**.:

i. **Line or Strip Method:** Walk a path from one end of the crime scene to the other side of the room/area and then return in the direction from where you first started. Useful for large and outdoor scenes.

ii. **Grid method:** Best for large crime scenes such as fields. It is basically a double line search where searcher moves from one end of the area to the other.

iii. **Wheel or Ray method:** Best for small and circular crime scenes. The searchers gather at the center and proceed outward along radii.

iv. **Spiral method:** It is best used where there are no physical barriers (outdoor scenes). The searcher examines the area for evidences in an ever widening circle, from the position of center or core of crime scene and then moves in an outward direction.

v. **Zone method:** Most effective in houses of buildings. The area is divided into four quadrants / squares and then examined using previously described methods.

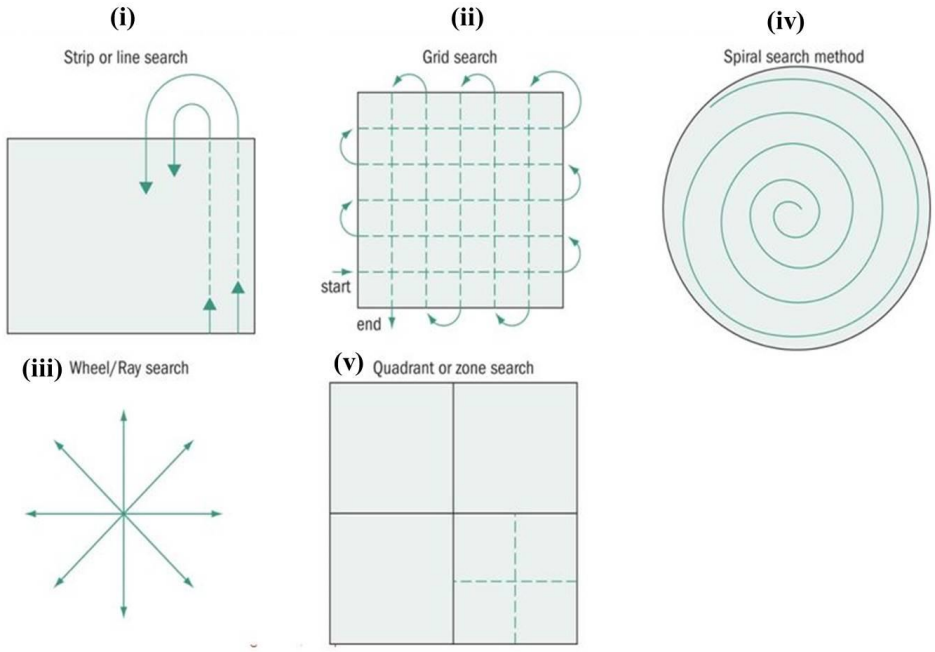


**Figure 1: Crime scene search patterns**

## 10. Packing of Physical Evidence / Exhibits:

### 10.1. Protection of Evidence (against):

- Loss
- Contamination
- Cross-transfer
    - Suspect to victim
    - Victim to suspect
    - Scene to scene
    - Item to item
- Deterioration

### 10.2. Packing Material:

- Plastic Container/Polythene pouch: In some cases plastic containers/polythene pouches are optimal and can be used for drugs, documents and digital evidences.
- Airtight polythene pouches
- Paper bags/envelopes are optimal and may prevent the deterioration of a biological sample if it is not completely dry when packaged.
- Size of Packing Material to be considered (Fig. 2)


**Fig.2. Packaging materials**

### 10.3. Precautions:

- Protect the scene of offence immediately after the receipt of information about the offence.
- While picking and packing the material for dispatch to the laboratory, care should be taken to see that no article is inadvertently contaminated with extraneous material.
- Obtain photographs of the scene from a number of angles so as to later establish the exact position of the object, the body (if any), the weapons, etc.
- Look for unusual foreign matter like pieces of hair, fiber, paper, clothes, glass, wood, metal, etc., and collect the sweepings from the floor without disturbing other things like blood, saliva, semen-stains, etc.
- Make a rough sketch of the position of objects and note the relationship of various pieces of evidence to the surrounding.
- While investigating cases of murder or suicide, a medical officer should accompany the police to the scene of crime whenever possible and inspect the body and its surroundings before they are disturbed.
- Under no circumstances wet or moist items should remain in plastic or paper containers more than two hours. The articles must be air dried before packaging them finally. Do not dry stain material by heating or placing the article in bright sun light.

### 10.4.General Directions:

- Each article should be separately packed and labeled indicating the serial number of an item.

- Each exhibit should be labeled with FIR no. and date, under section, name of IO, police station, district, state and should be duly signed and sealed by the IO.
- Never pack more than one type of item together.
- The labels should be numbered consecutively and should bear the signature of the forwarding officer.
- All the packets belonging to one case should be enclosed in one box or an outer covering.
- Articles belonging to different cases should never be forwarded under the same cover.
- All parcels should be carefully sealed by the dispatching officer and packed in such a manner that they cannot be opened without destroying the seals.

### 10.5.Directions for Specific type of Exhibits:

#### 10.5.1.Weapons and Tools:

- Iron metal parts stained with blood should be preserved from getting rusty as far as practicable and should be sent for examination to the laboratory as early as possible, after proper drying of blood stain/fluid.
- Although paper is good packaging for bloodstained evidence, but it can easily endanger anyone who handles this evidence and blood sample sticking on the evidence can be lost.
- Knives, guns, tools and other weapons need to be immobilized first and then should be secured to board by means of strings. It should be then placed in a box of suitable size.

#### 10.5.2. Hair and Fibres:

- If hair and fibres are found adhering to some objects with blood, clot, the whole object with the hair or fibre adhering should be sent to the laboratory.
- In order to prevent contamination, any foreign matter adhering to the hair or fibres should be picked up with forceps.
- They should be placed in glazed surface, cellophane, filter or blotting paper, which should be carefully folded along the length of the exhibit and enclosed in a suitable container (Fig. 3)
- Hair from the persons or animals should be obtained by combing or clipping from several points, cutting them close to the skin.
- Pubic hair should be taken from rape victims. This should be clipped close to the skin. This is useful for comparison with the hair found on the person clothing or handkerchief of the suspect.

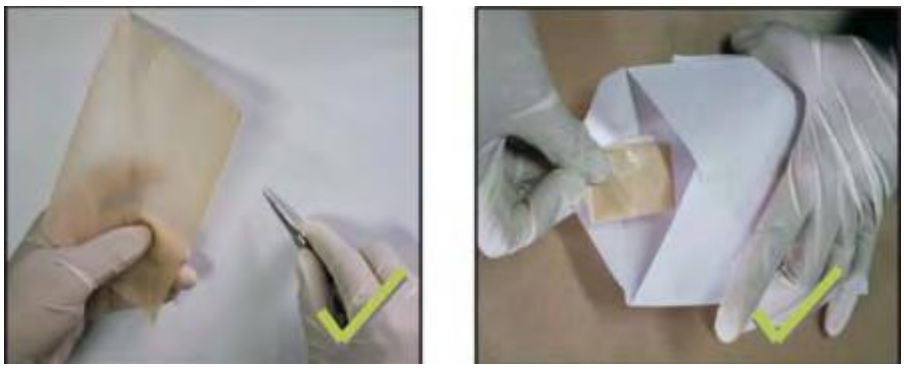

**Fig.3. Packaging of hair sample at the scene of crime**

### 10.5.3. Blood and Bloodstains:

- Ensure that anything that comes in contact with the biological samples during collection should not contaminate it. Work on clean surfaces and wear gloves if necessary to avoid contamination. Do not use any preservative unless specified.
- Blood that is in liquid pools should be picked up on a gauze pad or other clean sterile cotton cloth and allowed to air dry thoroughly at room temperature. Pack gauze pad or sterile cotton cloth after drying between clean white paper and send it in paper envelope. Do not dry stained material by heating or in bright sunlight. Hang clothing and similar articles in a room where there is adequate ventilation.
- For fresh moist stains on clothing, sheets, blankets, etc., allow the stain to dry at room temperature. Insert the stained clothing between clean white paper and send in paper envelope after sealing it properly.
- For fresh moist stains on solid objects such as weapons, wood, plaster, automobile, etc., collect the blood stain on filter paper or gauze pad and allow the stain to dry in shade at room temperature and send in any envelope. Blood may be soaked on filter paper or gauze pad and allow drying in shade at room temperature and sending in any envelope.
- Dried stains on clothing, sheets, and blankets: Send the entire clothing to the laboratory, protecting the stain with clean white paper and send in any paper envelope.
- Dried stains on small solid objects: Send the whole stained object to the laboratory after labeling and packaging.
- **Dried stains on large solid objects that cannot be delivered to the laboratory:** Scrape the stain onto a clean piece of paper, which can be folded and place in an envelope. Do not scrape directly onto the evidence. Scrape blood from objects using a freshly washed and dried knife or similar tool. Wash and dry the tool before each stain is scraped off. Seal and mark the envelope.

- Never attempt to wipe dried stains from an object using a moistened cloth or paper.
- If the blood is found on earth, or earthy material, scrapping should be made deep enough (1 inch) to collect the soaked blood.
- Do not use any packaging device that limits air exchange because biological samples get deteriorated. (Fig. 4)
- If blood stains are suspected to be present in the nails, it should be clipped and the clippings be packed in a glazed paper and sent in any envelope to the laboratory. While clipping nails, care should be taken to avoid cutting of the skin or flesh.

**Fig.4. Blood samples packed in tube (air tight), pouch (air tight) and paper envelope**

**10.5.4. Control samples:**

- In cases where it is not possible to send the entire object to the laboratory, a portion of the unstained area immediately surrounding the stain should always be forwarded for control tests, and the location on the clothing from where the control sample has been taken must be marked with red pencil and the investigating officer should sign the marking.
- If stain is on soil, plaster, furniture, etc., a portion (1 inch) of the unstained area should be scraped to the same depth as the stained area and sent as control.
- In the case of weapons, it is very desirable that the whole object is sent to the laboratory with suspected blood stain so that the control sample is also prepared by taking swab from unstained surface of the weapon.

**10.5.5. Semen:**

Seminal stains are often found on clothing, blankets and sheets. Allow these stains to get dried at room temperature before packaging. Wrap these clothing with suspected stain of semen in paper and pack the evidence in paper bags after marking the stains with red pencil.

Precautions:

● Do not use plastic bags because it will deteriorate the sample.

● The garment or fabric may be folded taking care that the stained areas are not folded.

**10.5.6. Saliva:**

- If saliva is suspected to be present on any object, the entire object should be sent to the laboratory.
- Control samples of saliva from the victim and the suspected persons should be collected and sent immediately in small sterile plastic/glass tube with an advice to be kept in the freezer

**10.5.7. Soil:**

- Dust or soil should be placed in a filter paper and then enclosed in a suitable container. (ii) If the dust is found on any article of furniture, it can be collected directly in a filter paper with the help of a vacuum cleaner.
- Soil may be collected with a spatula or spoon.
- If the dust is found on an object which can be readily transported such as shoe or clothing, the whole object should be sent to the laboratory keeping the dust or soil intact on the material.
- Metal filing, glass fragments, finger nail scrapings, paint chips, wood chips, plaster and similar samples should be placed in filter paper and enclosed in suitable containers.

Precautions:

● For all the above purposes, cellophane paper or any other paper preferably with a glazed surface can be used instead of filter paper.

● Liquids and greases should be sent in glass containers with non-leaking ground glass stoppers.

**10.5.8. Arson and Burning Cases:**

- In arson cases, traces of flammable fluid may be found in cans, mattresses, rugs, furniture, wallboard, and other objects at the scene. The traces of the same flammable fluid may spread to the areas where no burning has occurred or where there is a partial burn.
- The traces of these flammable fluids from the material such as soil, wood, cloth, paper, etc., if suspected, can be preserved in a heat sealed plastic bags and then packed in an airtight appropriate size leak proof plastic/metal container. The investigating officer should ensure that the traces of flammable liquid do not get evaporated by the time the samples reach the laboratory.
- If volatile liquids are found in open containers, pour a small amount of material into a clean bottle with an airtight seal so that no loss occurs. Do not use any rubber-lined lids or plastic containers.

- Large pieces of wood, furniture, wallboard, and similar exhibits which will not fit in cans should be placed in heat-sealed plastic bags. Note: In all cases, the package or container should be marked as inflammable.

**10.5.9. Bones/Teeths:**

- 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.

  **Note:** 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.

**10.5.10. Tool Marks:**

- Tool marks should be protected by covering with soft paper. It should then be placed in strong wrapping papers. The whole thing should be in a strong box and packed after fixing the evidence in the box by thread so that the tool marks on the evidence are not damaged during transportation. (Fig. 5)
- Submit the whole evidence containing tool marks to the laboratory instead of just removing the area containing the marks. If this is not possible, carefully photograph and sketch the area containing the marks.
- Casts of tool marks can be made by an experienced person. Attempts should never be made to fit tools into questioned marks or to make test marks prior to laboratory examination because the questioned mark or tool marks may be altered. In addition, traces of transferred paint or other stains on the tool may be lost or additional material may be transferred to the tool.

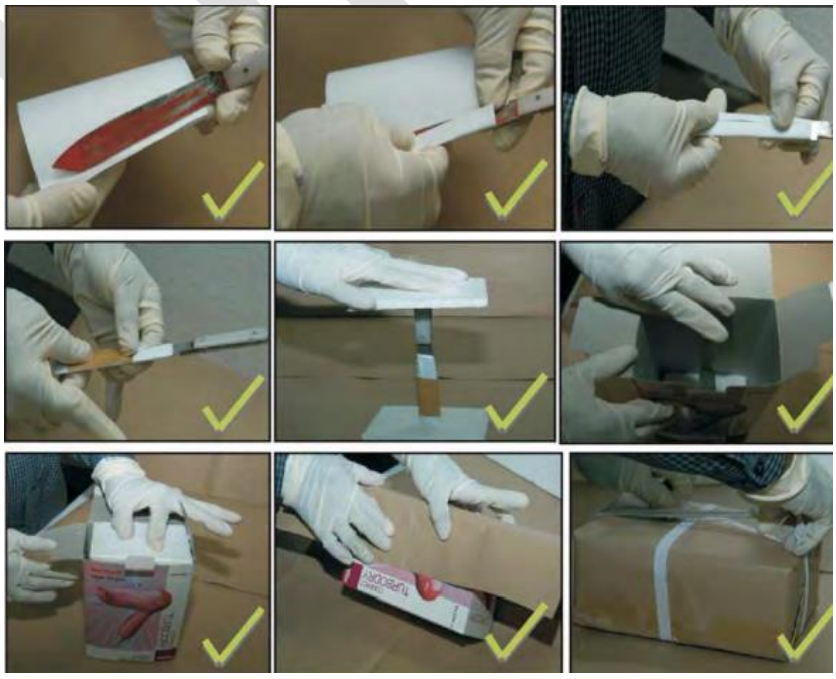

**Fig.5. Packaging of knife with suspected blood stain at scene of crime**

### 10.5.11. Firearms:

- Photograph the firearm with ammunition.
- Inspect for live ammunitions, if any, remove them. Never submit a loaded gun to the laboratory.
- The investigating officer should not try the mechanism or the working of the firearms. It should be brought in-original condition of the seizure.
- Never clean the bore, chamber, or cylinder before submitting a firearm, and never attempt to fire the gun before it is examined in the laboratory.
- Record serial number, make, model, manufacture details and calibre of the weapon.
- Enclose the firearm in a cellophane sheet and pack in cloth cover and seal properly
- Handguns may be sealed in a box. Give cotton padding so that the firearm does not move inside the box and seal properly.
- If fingerprint present on firearm, it should be preserved/ lifted properly.

### 10.5.12. Cartridge Cases:

Place recovered cartridge cases in plastic envelopes separately and then packed collectively in a suitable box preferably cardboard, plastic or wooden box. The box should be packed in a clean cloth and sealed properly. If an examination is required to determine whether a bullet or cartridge case was fired by a specific weapon, submit the weapon and all recovered unfired ammunition to the laboratory.

### 10.5.13. Bullets:

- Note calibre of bullet.
- Never mark bullets on its outer surface with a metallic marker.
- Wrap each recovered bullet in a piece of paper and then pack in a suitable box with sufficient padding of cotton. Then pack the box in a cotton cloth and seal properly
- Submit all evidence including bullets recovered to the laboratory. Do not attempt to clean recovered bullets before sending them to the laboratory. Bullets recovered from a body should be air dried and wrapped in paper.

### 10.5.14. Ammunition:

- Always attempt to recover unused ammunition for comparison purposes from the locations such as cars, clothing, houses, or other locations.
- Do not put any details/marks on the cartridge.
- Enclose the cartridge in a plastic envelope and seal in a box giving sufficient padding of cotton between two cartridges to avoid the cartridges from colliding with each other.

**10.5.15. Glass:**

- Shoes and clothing of suspects or other objects contaminated with glass should be wrapped in paper and send to the laboratory for examination. (Fig.6)
- Place small glass fragments in a coin envelope and then in bigger envelopes, which can be marked and sealed
- Place large glass fragments in boxes with sufficient cotton padding to prevent any breakage or damage during shipment. Seal and mark the box properly.

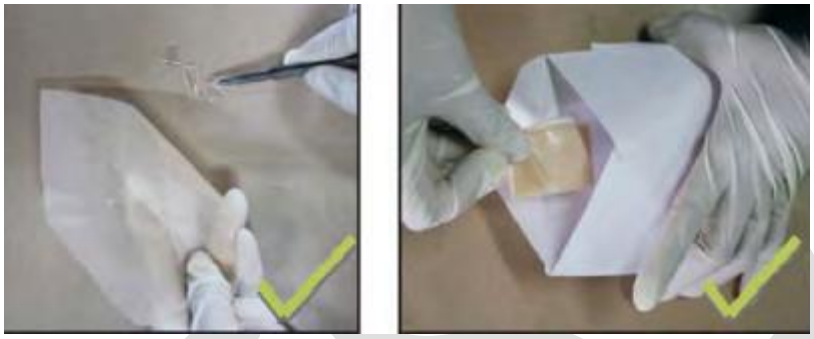

**Fig.6. Packaging of glass fragments**

**10.5.16. Paint:**

Keep all samples collected in separate containers. Small paper can be used to collect and hold many paint samples. It can be placed in an envelope, which can be marked and sealed. Never place paint directly into envelopes unless large pieces are enclosed.

**10.5.17. Drug Samples:**

- Appropriate packaging materials for drug evidence are heat sealed like plastic pouches or air tight pouches. Sealed pouches can safely contain potent drug evidence and protect personnel against unnecessary exposure.
- Choose an appropriate sized plastic pouch for the packaging of drug evidence.

Note: A paper envelope and paper is not appropriate for packaging drug evidence.

**10.5.18. Digital Evidences:**

- A proper and suitable size material should be chosen for packaging of digital evidences.
- They should not be dropped or wrapped into common plastic/gunny bags.
- Good quality evidence envelops and temper proof containers should be used.

**Note:** If digital evidences are packed loosely and strike each other during transit, they could be damaged and the data could be lost. Hence, each piece of evidence should be packaged and sealed separately.

### 10.5.19. Questioned documents

- Under no circumstances should either the questioned document or the exemplars be marked, defaced, or altered.
- No new folds should be made, nor should marks or notes be placed on such material.
- Personal marks for identification purposes should be made as small as possible on the back or other area of the document where no handwriting or typewriting is present.
- Whenever possible, all documents should be protected by placing them in cellophane or plastic envelopes.

## 10.6. Do's and Don'ts for Specific type of Evidences:

### 10.6.1. Biological evidences

| Do's | Don'ts |
|---|---|
| Liquid blood with EDTA in sterile vials and container having tissues, fetus and other similar samples should be kept in thermos flask/thermocol box stuffed with ice/coolant packs. | Never send such samples without ice/coolant pack. |
| Always wrap stained clothes and fabrics in paper sheet after completely drying and pack in cotton cloth or aerated container. | Do not pack clothes/garments, stains and swab in wet condition. |
| If there is more than one samples, pack them separately. | Never dry stains, swabs in direct sunlight, by use of heater, hot air blower etc. |
| Always use paper bag as packaging material for biological evidence. | Never use polythene bag as packing material for biological evidence. |
| To establish identity of deceased from skeletal remains, always collect intact long bones (femur, humerus)/ molar teeth in duplicate. | Never prefer to collect the clavicle bone. |
| Preserve tissue, fetus and other similar samples in 0.9% DNS and keep it in refrigerator for a short period if there is any delay in completing legal formalities for forwarding the samples to the laboratory. | Never use formalin to preserve tissues and bones. |

### 10.6.2. Firearms evidences

| Do's | Don'ts |
|---|---|
| Make it a habit to point the barrel either upwards or downwards. Even if you know that the chamber is empty, the barrel should always be pointed upwards or downwards. | Never keep he barrel of the firearm horizontal. |
| Always use a magnifying glass to read the serial number. | Never attempt to clean the firearm. |
| Put the finger on trigger guard. | Never put the finger on trigger. |
| The firearm should be handled from the chequered portion of the stock or from sling, or from trigger guard in case the investigating officer wants to get the firearm examined for latent fingerprints of the suspect. | Never scratch the inside of the barrel with knife as it may destroy individual characteristics of the barrel . |

**10.6.3. Documents evidences**

| Do's | Don'ts |
|---|---|
| Look for abnormalities in text of the documents. | Do not ignore alterations in documents. |
| Make the suspect comfortable while obtaining sample writings. | Do not threaten the accused at the time of furnishing specimens. |
| The specimen writings should be written in normal conditions. | Do not send disguised writings as standards for comparison with normal writings. |
| Every document at crime scene may be useful in investigation which should be collected. | Even the blank document should not be discarded. It may contain secret writings or indentations marks useful for investigation. |
| The writings/signatures should be properly encircled by colored pencils and marked at appropriate places. | Do not mark the relevant portions of disputed document abruptly. Do not mark with pen/ball point pen. |

**10.6.4. Digital evidences**

| Do's | Don'ts |
|---|---|
| Keep all items away from magnetic sources. | Do not expose to excessive UV radiation |
| Store at room temperature. | Do not expose to excessive heat. |
| Use breathable, paper bags and sacks. | Do not label the connecting point of device. |
| Keep main system unit in upright position. | Do not switch on any device which is already powered off. |
| Use Faraday bags for mobiles. | Do not bend or fold floppy disks/CD/DVD. |

**10.6.5. Explosives evidences**

| Do's | Don'ts |
|---|---|
| Cordon off the area as quickly and as effectively as possible up to the point where projectiles and splinters are found and the surrounding area, as some unexploded devices may be present. | Police officer should not leave the scene unguarded. |

| | |
|---|---|
| During examination, the original condition of doors, windows, stair-case, lighting, routes of entry/exit should be preserved to the maximum extent. | Do not shift anything from its place. It has to be described and located by sketches and photographs. |
| In case of use of high explosives, physical evidences get scattered to a great distance, so areas surrounding the explosion scene should also be searched thoroughly. | Do not cut wires or pour water on any suspected device. |
| Start search from the seat of explosion. | Do not use wireless communication system, mobile phone and do not light a cigarette. |

### 10.6.6. Toxicological evidences

| Do's | Don'ts |
|---|---|
| Choose an appropriate sized plastic pouch for the packaging of drug evidence. | A paper envelope and paper is not appropriate packaging for drug evidence. |
| Do not handle anything bare handed as it can result in destruction of latent finger prints | The IO should not leave any work pending e.g. collection of samples, statement of witness, relative etc. |
| Adhesive tape on seal should not be used. | No coin shall be used as a seal. |
| Visceral material from the hospital should be collected immediately after post-mortem. | Formalin as preservative should not be used in viscera taken for chemical examination. |

### 10.6.7. Physical evidences

| Do's | Don'ts |
|---|---|
| Keep all samples collected in separate containers. Small paper can be used to collect and hold many paint samples. It can be placed in an envelope, which can be marked and sealed. | Never place paint directly into envelopes unless large pieces are enclosed. |
| Casts of tool marks can be made by an experienced person. | Attempts should never be made to fit tools into questioned marks or to make test marks prior to laboratory examination because the questioned mark or tool marks may be altered. |
| Soil samples placed into a dark, refrigerated storage space. | Do not dry the samples prior to taking them to the laboratory as this can lead to crumbling and sample destruction. |

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4. Dr Ajay Sharma, Director , SFSL, Jaipur, Rajasthan

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*Reference: Some pictures and content of the Manual has been referred from the book,"A Forensic Guide for Crime Investigators' by LNJN-NICFS.*