

Evidence Collection Guidelines

Aims and Objectives:

1. Be able to gather forensic evidence from a simulated crime scene and post-mortem evidences using appropriate methods
2. Be able to use chemical techniques to analyse evidence from a simulated crime scene and post-mortem evidences
3. Be able to use physical techniques to analyse evidence from a simulated crime scene and post-mortem evidences
4. Be able to use biological techniques to analyse evidence from a simulated crime scene and post-mortem evidences
5. Be able to report the analysis of evidence from a simulated crime scene and post-mortem evidences

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Blood Stains:

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. It should be refrigerated or frozen as soon as possible and brought to the Laboratory as quickly as possible. Delays beyond 48 hours may make the samples useless.

If close to the Laboratory, deliver stained object immediately.

If unable to deliver to the Laboratory, or if the object must be mailed, allow the stain to air dry completely before packaging.

Do not heat stained material or place it in bright sunlight to dry. Hang clothing and similar articles in a room where there is adequate ventilation.

If not completely dry, label and roll in paper or place in a brown paper bag or box and seal and label container. Place only one item in each container. Do not use plastic containers.

Dried Blood Stains

On clothing, if possible, wrap the item in clean paper, place the article in a brown paper bag or box and seal and label container. Do not attempt to remove stains from the cloth.

On small solid objects, send the whole stained object to the Laboratory, after labeling and packaging.

On large solid objects, cover the stained area with clean paper and seal the edges down with tape to prevent loss or contamination. If impractical to deliver the whole object to the Laboratory, scrape the stain onto a clean piece of paper, which can be folded and placed in an envelope. Do not scrape directly into evidence envelope. 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.

Do not mix dried stains. Place each stain in a separate envelope.

Never attempt to wipe dried stains from an object using a moistened cloth or paper.

Standard Blood Specimens

Autopsy Blood Samples

Request that pathologist obtain the sample directly from the heart into a yellow (ACD) or purple stoppered vacutainer (some labs request both). In rare cases when no liquid blood is available, ask pathologist to collect a section of liver, bone, and/or deep muscle tissue and freeze for typing. In such cases, proceed also with collection of a secondary standard as described below.

Blood Samples from Live Individuals

For typing purposes, have sample drawn into yellow and purple stoppered vacutainers. Note these are distinguished from the BA tubes which have grey stoppers.

If the victim is injured to the extent that a transfusion is necessary, make an effort to obtain or begin necessary procedures to obtain the pre-transfusion sample collected by the hospital. These samples are not retained for long periods by the hospital, so it is important to act promptly. Also, make sure that some bloodstained garment worn by the individual has been air dried and frozen to serve as a secondary standard.

Handling and Storage of Physiological Fluid Evidence

(Obligation under People vs Nation and Hitch that a reasonable and good faith effort be made to preserve perishable evidence)

Stains and Controls

Air dry

Package in paper

Freeze

Consider special handling of non-absorbent items on (metal or plastic). Any condensation from thawing could disturb or destroy such evidence. Such items should be kept at room temperature and submitted to the lab as soon as possible.

Liquids (generally standards)

Blood

Refrigerate, do not freeze standards collected in yellow stoppered vacutainers.

Submit to the lab as soon as possible.

Saliva

Collect on a sterile gauze pad or swabs, allow to air dry and package in paper. Do not use plastic containers.

Seminal Stains:

Seminal stains are often, but not always, found on clothing, blankets, sheets. Allow any stains to air dry, wrap in paper, and package evidence in paper bags. Do not use plastic bags.

For sex offense cases, the victim should always be examined by a physician. A Sexual Assault Evidence Collection Kit is used to collect evidence from the victim. It is very important that the instructions on the kit be followed with care in order to gain the greatest benefit from the collected evidence.

Label all garments such as undershorts, panties, or other exhibits and package each garment separately.

If damp, allow fabric to dry completely before packaging.

Handle fabrics as little as possible.

Hair:

An examination of human hair can occasionally reveal the possible race of the individual from whom it came and the part of the body from which it originated.

Human hair can be compared to determine whether or not two samples could have had a common origin. The value of the Laboratory examinations of such specimens will depend upon the amount of hair recovered and the characteristics found in the examinations.

Recover all hair present. If possible, use the fingers or tweezers to pick up hair, place in paper bindles or coin envelopes which should then be folded and sealed in larger envelopes. Label the outer sealed envelope.

If hair is attached, such as in dry blood, or caught in metal or a crack of glass, do not attempt to remove it but rather leave hair intact on the object. If the object is small, mark it, wrap it, and seal it in an envelope. If the object is large, wrap the area containing the hair in paper to prevent loss of hairs during shipment.

In rape cases, the victim's pubic region should be combed prior to collecting standards. Obtain known hair samples from the victim, suspect, or any other possible sources for comparison with unknown specimens. The recommended method for collecting head hairs is to start by having the person from whom they are being collected bend over a large sheet of clean paper, rubbing or massaging their hands through the hair so that loose hair will fall out on the paper. More should then be gathered by plucking them from representative areas all over the head. A total of 50-100 hairs is desired. Do not cut the hair. This same method may be used to collect hairs from other parts of the body. 30-60 pubic hairs are required. When the person is a suspect, hair should be gathered from all parts of the body even though there may only be an interest in hair from the head at that particular time.

Fibers and Threads:

Such evidence is often found in fabric abrasions or caught in torn materials or other areas on hit-and-run vehicles. In some burglary cases, it may be found caught in torn screens, broken glass, or other locations .

Examination of fibers can normally be conducted to determine the type or color of fiber. Such examinations will sometimes indicate the type of garment or fabric from which they originated.

Fibers and threads can also be compared with suspects clothing to determine whether or not they could have come from this clothing.

If threads or large fibers are found, they can often be picked up with the fingers and placed in a paper bindle, then in a coin envelope, which can be sealed and marked. Never place loose fibers directly into a mailing envelope since they can be lost from this type of envelope.

If the fibers are short or few in number, and if it is possible to do so, wrap the area or the entire item containing the fibers in paper and send the whole exhibit to the Laboratory.

Pick up fibers on tape only if the laboratory in your jurisdiction allows it and gives you its requirements. When fibers or threads are recovered, always send all clothing of persons from which they might have originated to the Laboratory for comparison purposes.

In sex offenses, assaults, and some other cases, it may be possible to indicate or demonstrate contact between two individuals or between one other individual and some other object, such as a car seat, by comparing fibers. Such examinations are only of value when it is known no contact occurred between the two individuals or an individual and some other object prior to, or subsequent to, the offense. Extra care must be taken to keep each article of clothing of each individual or other object separated. Each garment should be laid on a clean sheet of paper, and separately rolled up in the paper after marking the exhibit. If the clothing of one subject touches the clothing of another, or if it is laid down on the table or placed on the car seat contacted by the clothing of the other suspect, the comparisons may be of no value.

Glass:

Windows are frequently broken in burglaries, headlights in hit-and-run cases, and bottles or other objects may break or leave fragments on personal belongings of suspects involved in various types of crimes.

Recovery of Evidence Samples

Shoes and clothing of suspects or other objects contaminated with glass should be wrapped in paper and submitted to the Laboratory for examination.

All glass found at hit-and-run scenes should be recovered. The search should not be limited to the point of impact, since headlight glass may be dropped off at some distance away as the car leaves the crime scene. Glass from different locations should be kept in different containers. All glass should be collected because more than one type may be present. In addition, if just a few representative samples are saved, individual pieces that could be physically matched with glass remaining in the headlight shell of the suspected vehicle may be overlooked.

Place small glass fragments in paper bindles, then in coin envelopes, pill boxes, or film cans which can be marked and completely sealed.

Place large glass fragments in boxes. Separate individual pieces with cotton or tissue to prevent breakage and damaged edges during shipment. Seal and mark the box containing them.

Standards for Comparison

Windows: If the broken window is small, send the whole window or all glass remaining to the Laboratory. If the window is large, recover several samples from different areas of the window. If the evidence glass is large enough for physically matching the broken edges or comparing the fracture lines, hackle marks, surface abrasions or contamination, the whole broken window is necessary.

Auto Glass - Auto Headlights: All glass remaining in the shell should be recovered. If it is suspected that a new glass has been installed, this should be removed and a careful examination made for small chips remaining in the shell from the previous lens which is broken. In such cases, also submit the new lens to the Laboratory.

Other Glass: When bottles or other glass objects are broken, recover all remaining glass.

Headlights and Taillights of Motor Vehicles

As part of the investigation of vehicle accidents, it may be of importance to determine whether or not a headlight or taillight was illuminated at the time the light was broken.

Recovery of the filaments is of primary importance. These are quite small and their location may require a careful search. If recovered, they should be placed in a paper bindle or a small pill box sealed with tape. Whether or not the large filaments are located, all remaining parts of the lamp

socket, glass envelope, or sealed beam headlight unit should be wrapped in paper and saved for Laboratory study.

Paint:

Paint evidence is frequently encountered in hit-and run cases, on tools used by burglars, and occasionally in other types of cases.

Hit-and-Run Cases

Paint may be transferred to clothing of pedestrian victims . Examine all areas, with particular attention being paid to areas showing pressure glaze, tears, or other contact.

If found, do not remove the paint, but mark the garment, carefully wrap it by rolling it in paper and send it to the Laboratory.

Such paint will at least show the color of part of the responsible car. It must be remembered, however, that many modern cars have more than one color and the paint transferred only represents the color of the particular area on the car that made contact with the victims.

Rarely will an examination of paint transfer on clothing indicate the make and model of the vehicle involved, since only portions of the top oxidized layer on the cars are usually transferred. In addition, many vehicles are repainted using colors and types of paint which may be different from those specified by the automobile manufacturer. The color and type of paint selected by the car owner for repainting his vehicle may also be the same as that used by a different automobile manufacturer, which could cause confusion in the search for the responsible car.

Sometimes whole chips of paint will be transferred to the clothing. If these flakes contain several layers, and in particular if they come from a repainted car, such evidence may have great value when the responsible vehicle is located. Chips of paint may also be found on the ground near the point of impact in some cases.

Obtain samples for comparison from all areas showing fresh damage on suspected vehicles. This is very important since the paint may be different in type or composition in different areas, even if the color is the same. If the paint can be flaked off by bending the metal slightly, remove it in this manner. If not, scrape or chip the paint off, using a clean knife blade. Carefully wipe the blade before collecting each sample. Collect all layers down to the metal. Place each sample in a separate container.

Cross transfers of paint commonly occur in hit and-run cases of two or more vehicles. If loose paint chips are found, attempt to remove and place them in a paper bindle. If, however, the transfers are smeared on the surfaces, flake off chips or scrape paint from the vehicle, including the transferred paint, as well as the top layer of paint originally on the car. Keep all transfers recovered from different areas in separate containers. Do NOT place samples directly into envelopes -- place into paper bindles first.

When cross transfers occur, always collect contaminated samples from each vehicle from areas immediately adjacent to each transfer collected. This is of great importance, since such specimens permit the laboratory to distinguish between the transferred paint and the paint originally present on the vehicle.

Burglary Cases

Tools used to gain entry into building, safes, or other places often contain traces of paint, as well as other substances, such as plastic, safe insulation, etc. Care must be taken that such traces are not lost. If such transfers may be present, wrap the end of the tool containing the material in clean paper and seal with tape to prevent loss. In no case should attempts be made to set the tool into marks or impressions found. If this is done, transfers of paint or material can occur and any traces found later will have no significance as evidence.

Collect specimens of paint from all areas which the tools may have contacted at the crime scene. These samples should include all layers present. Do not destroy the tool mark in collecting the paint. If possible, cut out around the mark, and send it to the Laboratory.

The tool itself may contain paint or other coatings, tracings of which may be left at the crime scene. A careful search should be made for such matters, particularly in each tool mark.

Collection and Preservation of Paint Specimens

Keep all samples collected in separate containers.

Small paper bindles can be used to collect and hold many paint samples. A satisfactory method is to tape one side of the bindle to the side of the vehicle, building, or safe just under the area where the sample is to be collected. By holding the bindle open with one hand, and using a clean knife blade, paint can be scraped loose and into the bindle. With the sample in the bindle, scotch tape can be removed and the open end of the bindle folded several times. It can be placed in a coin or mailing envelope, which can be marked and sealed. Scotch tape may be used to seal the bindle, but such containers should never be stapled.

Glass vials or other suitable containers are used only as a last resort.

Never place paint directly into envelopes unless large pieces are enclosed. Most envelopes have unsealed cracks in the corners and loss or contamination can occur.

Flammable Fluids:

The search for flammable fluids in arson cases should include a thorough examination of the entire fire scene. This should extend to areas where no burning occurs, since flammable fluids may have been placed in other locations where ignition failed.

Traces of flammable fluid may be found in cans at the fire scene in arson cases. Mattresses, rugs, upholstery, wallboard, and other objects at the scene may also contain fluids which can be separated and identified in the Laboratory, even though these objects are partially burned. Wood

upon which such fluids have been poured and ignited may still contain detectable traces of the liquid, if the wood has not been completely charred by the fire. Even where a large and hot fire has occurred, traces of such liquid are sometimes found where they have seeped into the ground through cracks in the floor or flowed under baseboards and sills.

While most flammable fluids commonly used have characteristic odors, some substances commonly available are almost odorless and quite easily escape detection. These include some alcohols, deodorized kerosene, charcoal lighter fluids, and others.

If volatile liquids are found in open containers, pour a small amount of the material into a clean glass vial with an airtight seal so no loss will occur. Do not use any rubber-lined lids or plastic containers.

Small samples of soil, wood, cloth, paper, etc., should be placed in small, clean metal cans and sealed immediately to prevent loss of additional volatile components by evaporation.

Large pieces of wood, upholstery, wallboard, and similar exhibits which will not fit in cans should be placed in heat-sealed KAPAK plastic. Be sure the Laboratory has examined a sample of the plastic from each order before you use it.

When the exhibits themselves can be marked, this should be done. In all cases, the package or container should be marked.

Samples of flammable fluids normally present at fire scenes should also be submitted for comparison with any material recovered from partially burned substances.

Samples of flammable fluids in the possession of any suspects should be submitted for comparison purposes. This includes any clothing, rags, or other materials which have suspicious stains or odors. These should be packaged in the same manner as materials recovered at the fire scene.

It is possible, in many cases, to isolate flammable fluids from various, partially burned articles through means of gas chromatographic analysis and other studies to determine the type of flammable fluid present. Normally, however, the manufacturer or brand name of the material cannot be determined.

Firearms Evidence:

Firearms

Never submit a loaded gun to the Laboratory, unless it is delivered in person. Unfired cartridges may be left in the magazine of a weapon, provided the magazine is removed from the gun. A firearm with the cartridge in the chamber should never be shipped by any method, even if the weapon is not cocked or on safety.

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.

Never pick up a weapon by placing a pencil or other object in the end of the barrel.

Record serial number, make, model, and caliber of the weapon, and mark it in some inconspicuous manner that does not detract from its value before sending it to the Laboratory. Marking firearms is important since duplicate serial numbers are sometimes found on different guns of the same make and general type. Do not confuse model numbers or patent numbers with serial numbers.

Place weapons in strong cardboard or wooden boxes, well packed, to prevent shifting of guns in transit.

Rifles or shotguns should not be taken apart.

If blood or any other material, which may pertain to an investigation is present on the gun, place a clean paper around the gun and seal it with tape to prevent movement of the gun and loss of the sample during shipment.

If the gun is to be examined for latent fingerprints, use procedures under that title in this Manual.

Bullets

Never mark bullets.

Wrap recovered bullets in paper and seal in separate labeled pill boxes or envelopes.

Submit all evidence bullets recovered to the Laboratory. A conclusive identification may be possible on only one of several bullets recovered even when they all appear to be in good condition.

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. Washing may destroy trace evidence.

Cartridge Cases

Wrap recovered cartridge cases in and seal in separate labeled pill boxes or envelopes.

Fired shotgun shells may be marked either on the inside or outside of the paper or plastic portion of the shell.

If an examination is required to determine if a shot shell or cartridge case was fired by a specific weapon, submit the weapon and all recovered unfired ammunition.

Submit all evidence cartridge cases or shotgun shells recovered to the Laboratory. Some cases contain more identifying detail than do others.

Wrap each cartridge in paper to prevent damaging the breech clock, firing pin, or other markings by contact with other cartridge cases. Place wrapped cartridge cases in envelopes or pill boxes. Label and seal container.

Ammunition

Always attempt to recover unused ammunition for comparison purposes when firearms are obtained as evidence. If not in the weapon itself, subjects often have additional ammunition in their cars, clothing, houses, or other locations. It may be important for test purposes to duplicate exactly the make, type, and age of the ammunition used in the crime. Other ammunition in the suspect's possession is identical to that fired during the crime.

Unfired ammunition should not be marked. The box with the ammunition may be marked without marking every round in the box.

Powder and Shot Pattern

Submit clothing or other material showing evidence of gun powder residue or shot holes to the Laboratory. The clothing should be carefully wrapped in clean paper and folded as little as possible to prevent dislodging powder particles. Photographs of the pattern will not suffice, as in most instances microscopic examination and chemical tests must be conducted on the exhibits themselves. Package each item separately.

For gunpowder or shot pattern tests to have significance, it is essential to obtain ammunition identical in make, type, and age to that used at the crime scene. This duplicate ammunition is necessary for firing in the weapon in question to determine the distance of the muzzle of the weapon from the victim or other object at the time the questioned bullet was fired.

Gunshot Residue

Gunshot residue is extremely fragile evidence and should be collected as soon as possible (preferably within three hours of the discharge of firearm). Use the laboratory-supplied GSR kits and carefully follow the directions. In the case of live subjects, if more than six hours have passed or if the subject has washed his hands, it is unlikely that meaningful results will be obtained. If a body is to be sampled, whenever possible, gunshot residue collection should be performed prior to moving the body. If this is not possible, protect the hands with paper bags.

Serial Number Restoration

In many cases, obliterated serial numbers can be restored if too much metal has not been removed in erasing the number.

Always advise the Department of Justice in Sacramento if, after restoring the serial number, the gun is to be numbered. If the original number can be restored, this is normally restamped on the gun. If it cannot be restored, a new number is assigned to the gun and stamped thereon by the Department of Justice or Numbering Station.

Tool Marks:

Nature of Evidence

Tool marks are encountered most frequently in burglary cases but may also be found in other types of crimes. The evidence consists of striations or impressions left by tools on objects at the crime scene and various types of tools found in the possession of suspects. In other cases, it is possible by means of physical and other comparisons to prove that parts of tools left at crime scenes were

broken from damaged tools found in the possession of suspects. In many cases, it is possible to identify the specific tool which made the questioned marks by means of a Laboratory comparison of tools and marked objects. In some instances, it is also possible to prove that marks of various types on tools were produced by objects which they contacted at crime scene.

Preservation and Packaging of Tools

All areas on recovered tools which contain transferred paint, building material, or other contamination should be wrapped in paper and packaged to prevent the prying blades or cutting edges from contacting any other surface or object.

Make No Tests With Tools

Attempts should never be made to fit tools into questioned marks or to make test marks prior to Laboratory examination. If done, the questioned mark or tool may be altered and this may make any Laboratory examination valueless. In addition, traces of transferred paint or other stains on the tool may be lost or additional material may be transferred to the tool.

Preservation of Tool Marks

Whenever possible, submit the whole object containing tool marks to the Laboratory instead of just removing the area containing the mark. If this is not possible, carefully photograph and sketch the area containing the mark. Although this photograph will not be sufficient to allow the Laboratory to perform a toolmark comparison with the tool, it will assist the Laboratory to determine how the mark was made so that test marks can be made more easily.

Casts of tool marks can be made by a person who has had considerable experience in this work. Poor casts are useless for comparison purposes and some marks will be damaged if improper methods are used.

Pack the object containing tool marks so that no alteration or damage will occur during shipment. Small objects should be wrapped with clean paper and placed in envelopes or boxes, while important areas on larger objects can be protected with paper. Whole, large objects can be packed in cartons or crates, if not delivered in person.

Controlled Substances and Medical Preparations:

The Laboratory handles the analysis of marijuana and other drugs and medicinal preparations which may be involved in criminal cases or found in the possession of subjects involved in various crimes.

Each sample of material recovered should be placed in a paper container, which can be sealed and marked. Be sure to properly seal as loose material, particularly in the case of marijuana, can leak and spill. Some drugs, like PCP, should be packaged in heat-sealed KAPAK bags.

Medicinal preparations found in prescription boxes or bottles should be left in these containers which can be sealed and marked. The information on the prescription label may be of assistance to the Laboratory.

By means of chemical tests, most controlled substances and common drugs can be identified.

Many pills, tablets, and other medical preparations are very difficult to analyze and identify unless either large quantities are available for testing, or some clues are present as to the general type of material they contain. In all cases where prescriptions are involved and the drug store and prescription numbers are known, a check of possible container content should be made at the drug store named on the label. With this information, the Laboratory will often be able to determine whether or not the contents of the containers are the same as the material described.

While controlled substances can be identified in routine cases, the Laboratory does not normally attempt to identify all medicinal preparations which may be encountered in criminal investigations. Unless specific instructions to the contrary are received, such materials are usually tested only for common preparations and their possession may violate of the law.

All evidence of this nature should be brought to the Laboratory in a sealed package.

Questioned Documents:

Questioned Material to be Submitted

All questioned documents involved in a particular investigation should be submitted to the Laboratory for examination. This is important since questioned documents are identified by a comparison of similarities, plus an absence of divergences or dissimilarities. In order to make an identification, sufficient handwriting, typewriting, or other evidence must be available on which to base an opinion. This means that all questioned material is needed, as well as sufficient exemplars or known specimens.

Exemplars

It is very important to have sufficient handwriting exemplars for comparison with the questioned document. One or two signatures on a suspect's driver's license or a draft card, in many cases, does not contain sufficient individual characteristics on which to base a conclusion. In some instances, such an examination may substantiate a suspicion and this should be considered as an investigational lead. To support this, it is necessary to obtain and examine additional standards.

Collected specimens that were made in business transactions such as receipts, promissory notes, credit and employment applications, letters, booking card, and fingerprint card signatures are writings that, in most cases represent the individual's most normal writing. It is significant in many cases that these writings be of the same date as the questioned document. It is important to obtain request specimens from a suspect at the first interview; the suspect may be uncooperative at a later date.

The conditions surrounding the preparation of the questioned document should be duplicated as nearly as possible when the request exemplars are obtained. If yellow-lined paper and blue ink were used to produce the questioned document, the same or similar color and type of paper and instrument should be used. If the suspect document is a threatening letter and the note is either handwritten or block lettered, the same style should be requested from the writer. Have subjects write their names and addresses several times and brief personal histories. This should be removed

and another sheet of paper furnished. Dictate the exact words and numbers which appear on the questioned document. This should be done at least 12 times, removing the specimens from the writer's view as they are produced. If it is a check case, the specimens should be taken on blank checks or slips of paper of the same/appropriate size. The number of specimens necessary for an identification in any specific case cannot be determined; therefore, at least twelve specimens should be obtained for each questioned document.

When securing typewritten exemplars, several copies of the questioned documents should be made on the suspected machine using light, medium, and heavy touches. At least one copy should be made with the ribbon removed from the machine, or the ribbons set on stencil, and the keys allowed to strike directly on a sheet of new carbon paper, which should be inserted on top of the paper used for the specimen. This provides clear-cut exemplars of any machine's type face, showing disfigurements in type characters. Always type the exemplars on the same type and color of paper as that used on the questioned document.

Preservation of 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.

Shipment of Evidence

Questioned documents may be submitted personally or left in previously described lockers at the Laboratory entrance.

Such evidence sent to the Laboratory by mail must be sent by certified or registered mail. If there is a massive amount of material, it may be sent some other way, but the package must always be sealed.

Charred Documents

Where examination and decipherment of charred paper is involved, great care must be taken to prevent any additional crumbling or breaking apart of the burned material. Normally it should be placed on top of loose cotton in a box and delivered in person to the Laboratory. No matter how it is packaged, such material will be damaged if attempts are made to ship it by mail.

Other Questioned Document Evidence

In addition to handwriting and typewriting comparisons and the decipherment of charred documents, many other related examinations can be conducted by the Laboratory. These include, but are not limited, to:

Restoration or decipherment of altered, obliterated, or erased writing.

Comparison of check protectors and rubber stamps with questioned printing.

Identification of embossed or indented writing or typing.

Comparison of paper and commercially-printed material, such as checks, coupons, receipts, and others.

Physical matching of cut or torn paper of various types.

Problems relating to inks.

Latent Fingerprints:

Marking of Latent Fingerprint Evidence

All such evidence should be marked in some distinctive manner, such as is the case with any other type of physical evidence. Precautions should be taken, when marking evidence, not to damage or destroy potential latent fingerprints.

Lifted, developed latents should also be marked or sealed in marked envelopes.

Photograph-developed latents with and without identifying markings and scale.

Preservation of Fingerprint Evidence

The primary precaution in all cases is the prevention of adding fingerprints to evidence, or of destroying those already present.

Most fingerprints submitted will be on paper, glass, metal, or other smooth surfaced objects. When articles containing latents must be picked up, touch as little as possible, and then only in areas least likely to contain identifiable latents, such as rough surfaces.

While gloves or handkerchiefs may be used to pick up such exhibits, any unnecessary contact should be avoided. Although using a cloth to pick up exhibits prevents leaving additional prints on the articles, the cloth will frequently wipe off or smear any prints originally present, unless great care is taken.

Large articles containing latents such as glass, metal articles, and firearms should be placed on wood or heavy cardboard and fastened down with string to prevent shifting and contact with other objects in transit. Where such evidence is to be examined frequently, a pegboard should be obtained on which wooden pegs can be moved as desired to support exhibits and keep them from moving. Bottles and glasses may be placed vertically on a board and placed in the bottom of a box. The base of the bottle or glass can be surrounded with nails to hold it in place, and the top can be either inserted through a hole in a piece of cardboard or held in position with a wooden board nailed to the container's lid.

Papers and documents containing latent prints should be placed individually in a cellophane or manila envelope. Such a container can be sandwiched between two sheets of stiff cardboard, wrapped, and placed in a box for mailing.