Blood stains at a crime scene are important evidence.

Blood stain patterns can be analyzed by experts, and may answer a number of questions:

Point of origin of the blood.

Distance the blood traveled or height of origin

How many gunshots were fired

Direction of travel by victim or suspect

Position of victim and suspect during bloodshed

Repositioning of objects or bodies after bloodshed

Whether a person was moved while shedding blood

Order of events occuring during the crime

Blood stain analysis can aid law enforcement in obtaining convictions. It can also help prevent conviction of the citizen wrongfully accused.

Because of this, blood stains at crime scenes must be documented.

The best way to document blood stain patters in photography.

Photograph all bloodstains and patterns with a rule included in the photograph for perspective.

Photograph at a 90-degree angle to the stain. Angular shots distort the appearance of the pattern.

Photographs depicting overall, medium-range and close-up views should be taken.

Besides photos, a rough sketch is useful to show the general appearance of the stains as well as their relative position to other areas of the crime scene.

The sketch should contain the location and direction of the stain.

Use high intensity lighting in locating bloodstain evidence. Normal lighting is insufficient for small stains such as high velocity.

After completing your scene investigation, go over it again with ultra-violet lgith. This may reveal stains possibly overlooked with the naked eye or with the use of high-intensity light.

Look for places where blood should be, but isn't.

The suspect may have left bloody footprints which are not visible. Luminol may later reveal footprints in the blood.

Luminol is a chemical which can be used to reproduce the original pattern of blood, and may get results even if the suspect has removed visible stains by cleaning up.

It can be applied as a spray and large areas can be easily covered.

It is not harmful to articles sprayed.

It is non-destructive to blood and will not hinder blood typing

It reveals bloodstains unnoticeable to the naked eye. Examples are drag marks , swipe marks, hand impressions.

Photographs recording the reaction can be taken in well-lighted or dark conditions.

It is reasonably specific for blood and will not react with any body fluids except blood. (It will react with certain vegetable peroxides, chemical and metals such as iron and copper).

Take all of the suspect's and victim's clothing for bloodstain examination. Lack of blood in certain areas may prove to be just as important as the location of stains.

Bloodstains can be lifted with fingerprint tape, if the pattern needs to be preserved rather than just documented and recorded photographically.

Blood also can be subjected to DNA testing to determine whose blood it is. At the scene of a multiple homicide, that information could be valuable in attempting to determine the sequence of events.

This requires that blood samples be collected.

Most blood found at crime scenes is already dried. It can be collected by scraping, if the deposit is crusty or flaky, and stored in a paper fold.

Dried blood smears can be collected on moist pieces of cotton cloth or cotton swabs.

Blood stained objects can be submitted whole to the lab. Packaging in airtight containers must be avoided.

It is a certainty that wet or damp bloodstains packaged in airtight containers, such as plastic bags, will be useless as evidence in a matter of days.

Biological evidence like blood, semen and saliva deteriorate with time and with exposure to heat. Once deteriorated, it may not be possible to get DNA or other typing results.

Drying and freezing samples slows down the deterioration.

Items such as damp bloodstained clothing should be allowed to airdry at room temp away from direct sunlight; then the items should be packaged separately any loosely in paper bags.