

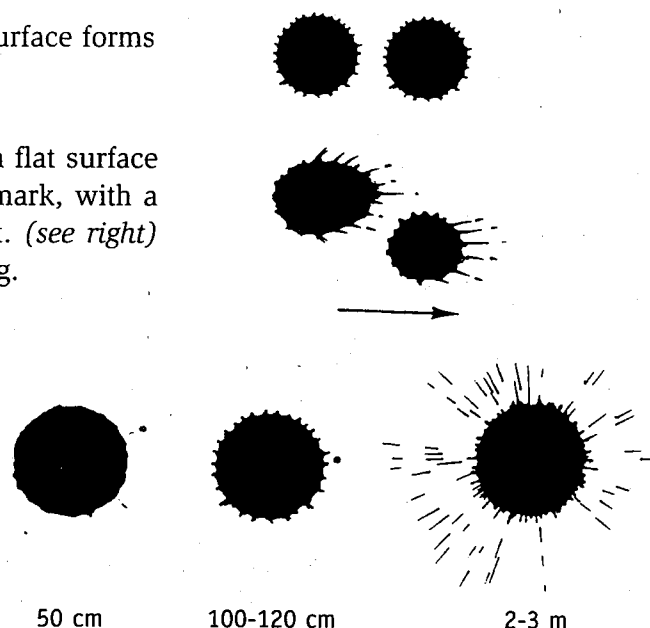
Examination of blood splashes and smears at a crime scene is an essential part of a murder investigation. The position and appearance of blood marks on the body and surroundings will help the investigator to reconstruct the crime.

For example, because blood cannot flow uphill against gravity, it may indicate to the investigator that a body was moved after the victim was killed. French criminologist, Alexander Lacassagne, is credited with linking the shape of blood spots with the position of the victim.

Blood dropped vertically, onto a stationary, flat surface forms a circular mark with a serrated edge. (*see right*)

Drops of blood falling from a moving object hit a flat surface at an angle, leaving a spot like an exclamation mark, with a smaller spot showing the direction of movement. (*see right*) The arrow shows the way the person was moving.

It is sometimes possible to make a rough estimate of the height from which blood fell by inspecting its edges. As the height increases, so does the length of the spines or serrations. (*see right*)



Examination of the shape of obliquely falling blood splashes yields information about the direction and speed of impact. Such evidence helps to determine the positions of the victim and assailant at the time of the assault and may indicate the degree of violence, the type of weapon used and which person was the attacker and who was in a position of self-defence.

The shape of the blood splashes is approximately related to the steepness of the angle of fall. (*see right*) The thickness of the blood, due to the degree of clotting, also has some affect on the shape.

Blood smears tend to start as drops, which become ragged at one edge, indicating direction of travel of the smear. (*see right*) The arrow shows the direction in which the blood was smeared.

When a bloodied surface, like hair, is brushed against a clean surface a distinctive 'swipe' pattern results.

If a clean surface moves against a bloodied one, a slightly different 'wipe' pattern is produced. This commonly occurs when an attempt has been made to clean blood away.

