

Law 12
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Blood Splatters

Large Spots- These spots fall at the speed of gravity, usually fall from an open wound or a spot that is saturated with blood. Most low force splatters are large spots usually about 4mm in diameter. These can include drops, flows and pools.

Small Spots- Very, very small spots. Usually 2mm in diameter, most of the time the object must be moving at more than 100 feet per second. This type of spot is associated with gunshots, explosions and high speed collisions. “Mist-Like” appearance. Gunshot wounds have an exit wound and an entrance wound.

Elongated- When the blood is elongated or stretched out it means the victim was moving in a certain direction, an example of this could be if you got punched in the nose and got sent to the left by the punch and the blood was sent in the way you got punched. The angle of impact is very important when investigating elongated blood spatter. The higher the angle the more stretched the blood will be, and the less the angle the less stretched the blood.

Contact (Transfer)- Transfer stains occur when the blood directly touches an object, an example could be if you stabbed someone and their blood got all over your hand so you rub it onto the couch cushions. When a baseball bat strikes your head it is also a transfer stain, the blood transfers from the victim to the weapon. There are two types of transfer stains, a swipe pattern which transfers the blood onto an uncontaminated surface. The second is a wipe pattern, this type of transfer stain goes straight through fresh blood, spreading it while it's still wet.

Void- A void is an area that is missing, an example of this could be if a lamp is on a table and someone gets shot in the stomach by a shotgun and the lamp is directly behind them and the blood splatters all over the lamp and the wall but the void where the lamp blocked the blood is still there.

Cast off- These are straight, elongated blood splatters, they help show that the blood was thrown in a certain direction, an example of this could be if someone slashed someone else's throat with a knife and the blood was sent in a certain direction. Forensic investigators can see what way the object was moving from the direction of the tails of the blood.

References

Bloodstains. (n.d). *Crime Scene Forensics LLC*.

http://www.crimescene-forensics.com/Crime_Scene_Forensics/Bloodstains.html

Bloodstain Pattern Analysis. (n.d). *Forensic Sciences Simplified*.

<http://www.forensicsciencesimplified.org/blood/how.html>

Principles of Bloodstain Analysis. (n.d). *Forensics Sciences Simplified*.

[http://www.forensicsciencesimplified.org/blood/principles.html#:~:text=Cast%2Doff%20%2D%20results%20when%20an,in%20the%20direction%20of%20motion\).](http://www.forensicsciencesimplified.org/blood/principles.html#:~:text=Cast%2Doff%20%2D%20results%20when%20an,in%20the%20direction%20of%20motion).)

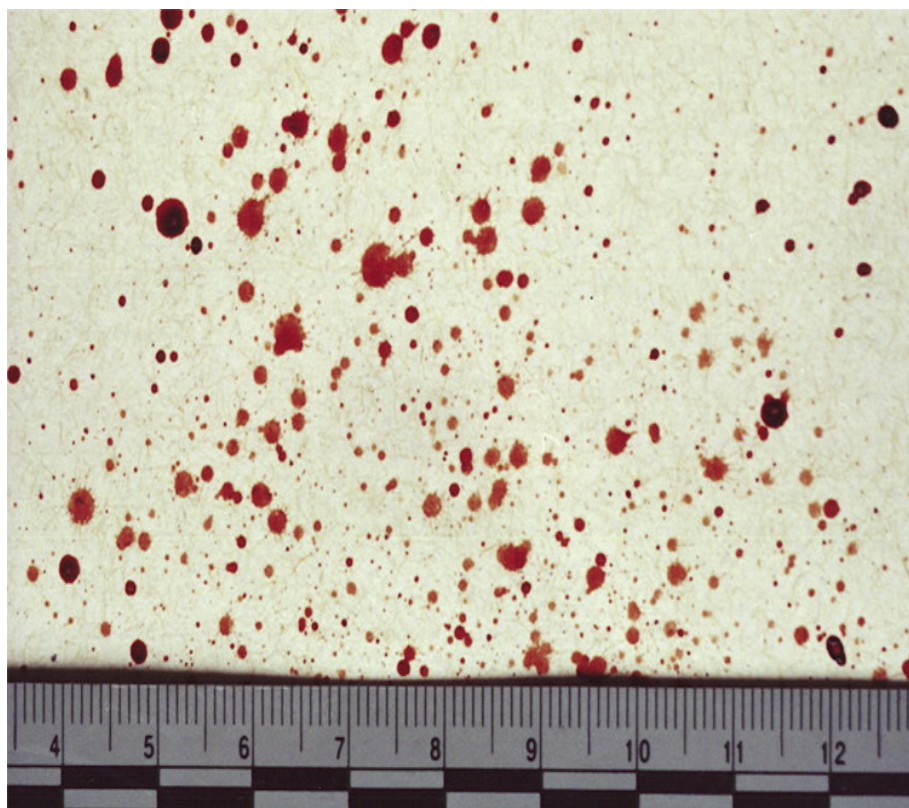
Images of the different types of Blood Splatter

Large spots





Small Spots



Elongated



Transfer Stains

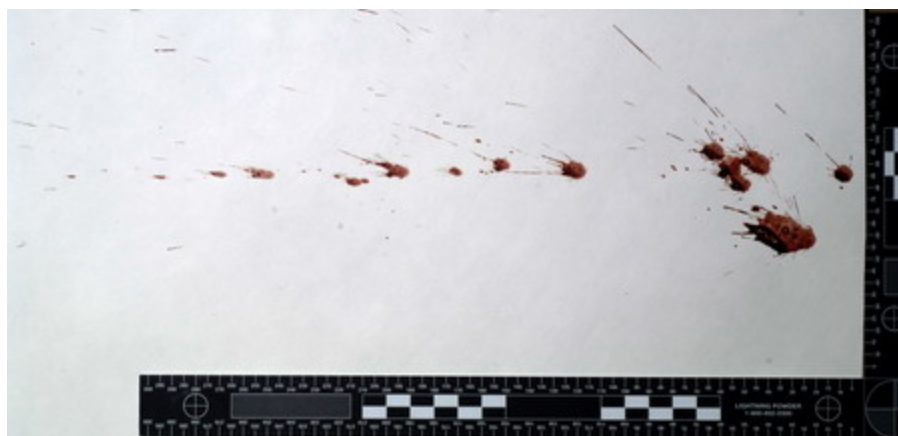




Void



Cast-off



References

Forensic scientists are now analyzing the chemical tags on DNA left in blood at crime scenes in order to predict the age of and other information about suspects, but this new technique raises privacy concerns. [Digital Image].

<https://www.science.org/content/article/crime-scene-dna-could-be-used-reveal-suspect-s-age-and-whether-they-have-cancer>

Impact bloodstain spatter smaller than passive bloodstains showing added force. [Digital Image].

<https://www.sciencedirect.com/topics/medicine-and-dentistry/bloodstain-pattern-analysis>

Large spots. [Digital

Image]. http://www.crimescene-forensics.com/Crime_Scene_Forensics/Bloodstains.html

Transfer Blood Stains. [Digital Image].

<https://sites.google.com/site/crimesceneanalysis/blood-5-transfer-bloodstains>

Transfer Stains Cont. [Digital Image].

<https://slidetodoc.com/blood-spatter-in-forensics-general-bloodstain-features-n/>

The pattern above is created by blood drops released from an object due to its motion, in this case from right to left. This is a Cast-Off Pattern. One characteristic of this type of pattern is the general linear configuration. [Digital Image].

<https://dps.mn.gov/divisions/bca/bca-divisions/forensic-science/Pages/forensic-programs-crime-scene-bpa.aspx>