

Non-Fatal Strangulation/Suffocation Four Common Myths

Myth: Strangulation and choking are the same thing.*

Fact: Strangulation is the external application of physical force that impedes either air or blood to or from the brain. Choking is an internal obstruction of the airway by a foreign object.

*Many court participants and victims use the word "choke" rather than the correct legal and medical term "strangulation." Judges should consider the facts described rather than the terminology used.

Myth: Strangulation always leaves visible injuries.

Fact: Studies show that over half the victims of strangulation lack visible external injury. A victim without visible external injury can still die from strangulation.¹

Myth: If the victim can speak, scream, or breathe, they are not being strangled.

Fact: Because strangulation involves obstruction of the blood and/or air, a person can have complete obstruction of blood flow yet continue breathing until the moment they die from lack of oxygenated blood flowing to the brain.²

Myth: Strangulation victims should be able to detail their attacks.

Fact: Trauma impacts the brains ability to store memory. In addition, the hippocampus (part of the brain where memory is stored) is the most sensitive to oxygen deprivation. When a victim is strangled, both factors can impact the ability to recall.³

¹ Strack, G., McClane, G., & Hawley, D. (2001). A review of 300 attempted strangulation cases - Part I: Criminal legal issues. Journal of Emergency Medicine, 21(3), 303–309.

Law, A. C., Weissman, G. E., Iwashyna, T. J., & Pulmonary Critical Care Anti-Racism Working Group (2020). A dangerous myth: does speaking imply breathing? *Annals of Internal Medicine*, *173*(9), 754–755. <u>https://doi.org/10.7326/M20-4186</u>
Valera, E., & Kucyi, A. (2017). Brain injury in women experiencing intimate partner-violence: neural mechanistic evidence of an

³ Valera, E., & Kucyi, A. (2017). Brain injury in women experiencing intimate partner-violence: neural mechanistic evidence of an "invisible" trauma. *Brain Imaging and Behavior*, *11(6)*, 1664–1677. <u>https://doi.org/10.1007/s11682-016-9643-1</u>; Rosenthal, *Three ways trauma affects your brain* (Nov. 27, 2013), <u>https://www.healthyplace.com/blogs/traumaptsdblog/2013/11/three-ways-trauma-affects-your-brain</u> (accessed Aug. 16, 2024) [<u>https://perma.cc/US9E-EGW4</u>].

Physiological Consequences of Strangulation

Strangulation with the pressure of a firm handshake can result in death in 1–3 minutes.



Non-fatal strangulation and suffocation is a felony level offense in Ohio. For more information about handling these crimes on your docket, see the Non-Fatal Strangulation/Suffocation Benchcard.



The Supreme Court of Ohio gratefully acknowledges Alliance for HOPE International and Gerald Fineman; Dr. William Green; Ruth Carter; Dr. Bill Smock; Gael Strack; Dr. Sean Dugan; Marison Martinez; Yesenia Aceves; and Ashley Peck for allowing us to reproduce, in part or in whole, *Five Myths About Strangulation and Physiological Consequences of Strangulation*. The documents were accessed through the online Resource Library hosted by the Training Institute on Strangulation Prevention. Certain documents and products were supported in part with funding from the Office on Violence Against Women in the U.S. Department of Justice. This website and a portion of the documents in this Resource Library are supported in part by Grants No.2014-TA-AX-K008 and No.2016-TA-AX-K067 awarded by the Office on Violence Against Women, U.S. Department of Justice. The opinions, findings, conclusions, and recommendations expressed in this publication/program/exhibition are those of the author(s) and do not necessarily reflect the views of the Department of Justice, Office on Violence Against Women.

- 4 Kabat, H. & Anderson, J.P. (1943). Acute arrest of cerebral circulation in man: Lieutenant Ralph Rossen (MC). Archives of Neurology & Psychiatry, 50(5), 510-528. doi:10.1001/archneurpsyc.1943.02290230022002
- 5 Smith, B.A. Clayton, E.W. & Robertson, D. (2011). Experimental arrest of cerebral blood flow in human subjects: The Red Wing Studies revisited. Perspectives in Biology and Medicine, 54(2), 121-131. https://dx.doi.org/10.1353/pbm.2011.0018
- 6 Reay, D. T., & Holloway, G. A., Jr (1982). Changes in carotid blood flow produced by neck compression. The American Journal of Forensic Medicine and Pathology, 3(3), 199–202. https://doi.org/10.1097/00000433-198209000-00002
- 7 Sauvageau, A., Laharpe, R., King, D., Dowling, G., Andrews, S., Kelly, S., Ambrosi, C., Guay, J. P., Geberth, V. J., & Working Group on Human Asphyxia (2011). Agonal sequences in 14 filmed hangings with comments on the role of the type of suspension, ischemic habituation, and ethanol intoxication on the timing of agonal responses. *The American Journal of Forensic Medicine and Pathology*, 32(2), 104–107. https://doi.org/10.1097/PAF.0b013e3181efba3a
- 8 Mitchell, J. R., Roach, D. E., Tyberg, J. V., Belenkie, I., & Sheldon, R. S. (2012). Mechanism of loss of consciousness during vascular neck restraint. *Journal of Applied Physiology*, 112(3), 396–402. https://doi.org/10.1152/japplphysiol.00592.2011
- 9 Stellpflug, S. J., Menton, W. H., Dummer, M. F., Menton, T., Corry, J., & LeFevere, R. (2020). Time to unconsciousness from sportive chokes in fully resisting highly trained combatants. *International Journal of Performance Analysis in Sport*, 20(4), 720–728. <u>https://doi.org/10.1080/24748668.2020.1780873</u>
- 10 Kabat & Anderson (1943)
- 11 Smith, Clayton & Roberton (2011).
- 12 Copley, A.L. and Kozam, G. (1951). Capillary fragility and the ecchymosis test in man. *Journal of Applied Physiology* 4(4), 311-327. <u>https://doi.org/10.1152/jappl.1951.4.4.311</u>; Ely, S. F., & Hirsch, C. S. (2000). Asphyxial deaths and petechiae: a review. Journal of *Forensic Sciences*, 45(6), 1274–1277. <u>https://doi.org/10.1520/JFS14878J</u>
- 13 Anscombe, A. M., & Knight, B. H. (1996). Case report. Delayed death after pressure on the neck: possible causal mechanisms and implications for mode of death in manual strangulation discussed. Forensic Science International, 78(3), 193–197. <u>https://doi.org/10.1016/0379-0738(95)01886-7</u>; Armstrong, M., Jr, & Strack, G. B. (2016). Recognition and Documentation of Strangulation Crimes: A Review. JAMA Otolaryngology– Head & Neck Surgery, 142(9), 891–897. <u>https://doi.org/10.1001/jamaoto.2016.0293</u>
- 14 Stapczynski, Emergency Medicine Reports: Strangulation Injuries (Aug. 1, 2010), https://www.reliasmedia.com/articles/19950-strangulationinjuries (accessed May 28, 2024) [https://perma.cc/X8W5-FHR]]
- 15 Kabat & Anderson (1943).
- 16 Smith, Clayton & Roberton (2011).
- 17 Taliaferro, E., Hawley, D., McClane, G. & Strack, G. (2009). Strangulation in intimate partner violence. In Mitchell, C & Aglin, D. (Eds.) Intimate partner violence: A health-based perspective (pp. 217-235). Oxford Academic. https://doi.org/10.1093/oso/9780195179323.003.0016