

Bleeding Control Protections Within US Good Samaritan Laws

Matthew J. Levy, DO, MSc;¹ Christopher M. Wend, MD;¹ William P. Flemming, BS;² Antoin Lazieh, BS;² Andrew J. Rosenblum, MSPH;³ Candace M. Pineda, MBA, BSN, RN;⁴ Douglas M. Wolfberg, Esq;⁵ Jennifer Lee Jenkins, MD, MSc;¹ Craig A. Goolsby, MD, Med;⁶ Asa M. Margolis, DO, MPH, MS¹

Article last updated 15/05/2024.

1. Johns Hopkins School of Medicine, Baltimore, Maryland USA
2. Rutgers New Jersey Medical School, Newark, New Jersey USA
3. Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland USA
4. Memorial Regional Hospital, Hollywood, Florida USA
5. Page, Wolfberg & Wirth, LLC, Mechanicsburg, Pennsylvania USA
6. David Geffen School of Medicine, Los Angeles, California USA

Correspondence:

Matthew J. Levy, DO, MSc
Department of Emergency Medicine
Johns Hopkins University School of Medicine
Baltimore, Maryland, USA
E-mail: levy@jhmi.edu

Conflicts of interest/funding: This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors. MJL and AMM are consultants with Stryker Medical Education, Inc. MJL is a consultant with Cresilon, Inc. MJL is the uncompensated Stop the Bleed Coalition Chairperson. CAG has a patent pending for "tourniquet and method of use." The remaining authors have no conflicts of interest relevant to this article to disclose.

Keywords: 9-1-1 Good Samaritan Law; hemorrhage; liability; legal; Stop the Bleed; torts; tourniquets

Abbreviations:

AED: automated external defibrillator
AHA: American Heart Association
ARC: American Red Cross
CPR: cardiopulmonary resuscitation
EMS: Emergency Medical Services
GSL: Good Samaritan Law
TCCC: Tactical Combat Casualty Care

Abstract

Introduction: In the United States, all 50 states and the District of Columbia have Good Samaritan Laws (GSLs). Designed to encourage bystanders to aid at the scene of an emergency, GSLs generally limit the risk of civil tort liability if the care is rendered in good faith. Nation-wide, a leading cause of preventable death is uncontrolled external hemorrhage. Public bleeding control initiatives aim to train the public to recognize life-threatening external bleeding, perform life-sustaining interventions (including direct pressure, tourniquet application, and wound packing), and to promote access to bleeding control equipment to ensure a rapid response from bystanders.

Methods: This study sought to identify the GSLs in each state and the District of Columbia to identify what type of responder is covered by the law (eg, all laypersons, only trained individuals, or only licensed health care providers) and if bleeding control is explicitly included or excluded in their Good Samaritan coverage.

Results: Good Samaritan Laws providing civil liability qualified immunity were identified in all 50 states and the District of Columbia. One state, Oklahoma, specifically includes bleeding control in its GSLs. Six states – Connecticut, Illinois, Kansas, Kentucky, Michigan, and Missouri – have laws that define those covered under Good Samaritan immunity, generally limiting protection to individuals trained in a standard first aid or resuscitation course or health care clinicians. No state explicitly excludes bleeding control from their GSLs, and one state expressly includes it.

Conclusion: Nation-wide across the United States, most states have broad bystander coverage within GSLs for emergency medical conditions of all types, including bleeding emergencies, and no state explicitly excludes bleeding control interventions. Some states restrict coverage to those health care personnel or bystanders who have completed a specific training program. Opportunity exists for additional research into those states whose GSLs may not be inclusive of bleeding control interventions.

Levy MJ, Wend CM, Flemming WP, Lazieh A, Rosenblum AJ, Pineda CM, Wolfberg DM, Jenkins JL, Goolsby CA, Margolis AM. Bleeding control protections within US Good Samaritan Laws. *Prehosp Disaster Med.* 2024;39(2):156–162.

Introduction

In the United States legal system, tort law protects and enables individuals to seek financial compensation for harms, including injuries, that they have suffered. These harms can lead to legal liability for the individual responsible for the wrongdoing. Likewise, in the United States, there is generally no legal duty for a layperson to render aid/rescue to another. Good Samaritan Laws (GSLs) provide qualified legal protection to those who act in good faith to aid injured or ill persons from tort claims of ordinary negligence, for example, failing to act as

Received: January 8, 2024

Revised: February 18, 2024

Accepted: March 14, 2024

doi:[10.1017/S1049023X24000268](https://doi.org/10.1017/S1049023X24000268)

© The Author(s), 2024. Published by Cambridge University Press on behalf of World Association

for Disaster and Emergency Medicine. This is an Open Access article, distributed under the terms of the Creative Commons Attribution licence (<https://creativecommons.org/licenses/by/4.0/>), which permits unrestricted re-use, distribution and reproduction, provided the original article is properly cited.

a reasonably prudent person would do under similar circumstances. At present, GLSs vary by state, including who is protected (health care personnel, first responders, or the lay public) and under what specific circumstances.¹ All 50 states and the District of Columbia have such laws to a varying degree. Federal protections exist in certain situations, such as in-flight emergencies or using an automated external defibrillator (AED).^{2,3} These GSLs help ensure that well-intended bystanders could provide immediate care in time-sensitive emergencies without fear of civil liability.⁴ The vast majority of GSL research has focused on the laws' ability to encourage 9-1-1 activation and, increasingly, naloxone use during opioid overdoses.⁵ Such expanded GSLs have shown some promise of increased bystander intervention and have been associated with lower rates of overdose deaths.⁶ Similar to an opioid overdose, life-threatening hemorrhage is a time-sensitive medical emergency in which bystander intervention can positively impact a patient's survival. However, bystanders may be deterred from performing bleeding control interventions for fear of causing harm or tort liability.

Hemorrhage may account for over 50% of potentially preventable prehospital deaths.⁷ Intentional acts of violence and unintentional injuries alike can cause severe hemorrhage. Public health interventions, including public bleeding control initiatives, have worked to combat preventable deaths from hemorrhage.⁸ Bleeding control initiatives aim to train the public in recognition of life-threatening external bleeding and life-sustaining interventions (including direct pressure, tourniquet application, and wound packing), and to promote access to bleeding control equipment to ensure a rapid response from bystanders. These programs seek to empower everyday laypeople to intervene in life-threatening bleeding and have called for placing bleeding control supplies in public areas, such as places of worship, airports, recreational facilities, schools, universities, and other significant gathering areas.⁹ Over three million people world-wide are estimated to have been taught the principles of bleeding control through standardized courses that include topics such as recognizing life-threatening bleeding, applying direct pressure, packing wounds, and placing tourniquets.¹⁰

Laypersons have a significant opportunity to save lives during the most acute moments following an injury that results in life-threatening hemorrhage. In the critical minutes from 9-1-1 call to prehospital Emergency Medical Services (EMS) arriving on the scene, Good Samaritans have a dramatic potential to save lives.¹¹ Their heroic interventions performed in good faith deserve Good Samaritan legal protection. To assess the current state of protections for Good Samaritan's actions, each state's GSLs were reviewed to assess their specificity and applicability to bystander bleeding control interventions.

Methods

The study began by compiling current GSLs nation-wide using a combination of a published legal treatise and primary sources such as a state's official website or third-party legal databases (eg, Justia; Mountain View, California USA).^{12,13} An initial screening was performed of all laws (WF and AB). The various sources were cross-referenced as of December 2023 to remove duplicates and irrelevant laws and accurately reflect each state's laws. Two reviewers (CW and AR) independently reviewed each state's law(s). A third reviewer (ML) was a tiebreaker for any reviewer disagreement. The study assessed if the laws expressly prohibit or specifically include legal protections for bleeding control

interventions, defined as any discussion about preventing blood loss. Any training or licensure requirements necessary to trigger these protections were also evaluated. There were no conflicts between reviewers requiring resolution. This study was determined to be Not Human Subjects Research by the Johns Hopkins Institutional Review Board (Baltimore, Maryland USA).

Results

The study successfully identified GSLs from all 50 states and the District of Columbia. Only one state, Oklahoma, had a GSL that explicitly mentioned bleeding control techniques (Table 1): "... any person who in good faith renders or attempts to render emergency care consisting of artificial respiration, restoration of breathing, or *preventing or retarding the loss of blood*... shall not be liable for any civil damages as a result of any acts or omissions by such person in rendering the emergency care."¹⁴ Among the GSLs identified, no state explicitly excluded bleeding control interventions from their Good Samaritan protections.

Six states – Connecticut, Illinois, Kansas, Kentucky, Michigan, and Missouri – had language in their GSLs that was unclear if it would protect un-trained laypersons who control life-threatening hemorrhage. Connecticut appeared to protect only those with a minimum of first aid training offered by the American Red Cross (ARC; Washington, DC USA), the American Heart Association (AHA; Dallas, Texas USA), "the Department of Health Services or any director of health, as certified by the agency or director of health offering such course."¹⁵ Illinois law required that the person be currently certified, at the minimum, in first aid by the ARC, AHA, or National Safety Council (Itasca, Illinois USA).¹⁶ Kansas similarly protected only those with a minimum of first aid training offered by the ARC, by the AHA, "by the Mining Enforcement and Safety Administration of the Bureau of Mines of the Department of Interior, by the National Safety Council, or by any instructor-coordinator."¹⁷ Kentucky protected only those with a minimum of first aid training offered by the AHA or ARC.^{18,19} Michigan appeared not to protect those with first aid training alone, regardless of the training source.^{20,21} Missouri protected only those with a minimum of first aid training by "a standard recognized training program."^{22,23} By interpretation, the remaining 44 states and the District of Columbia protected all trained and *untrained* bystanders.

Discussion

Good Samaritan Laws provide broad protection from civil liability throughout the United States. Forty-four states and the District of Columbia protect any person attempting to save the life of another. Most states also include a proviso that as a condition of the grant of qualified immunity, that the care be provided in good faith and with no expectation of compensation. Oklahoma is the only state to note that bleeding control techniques are explicitly immune from civil liability.¹⁴ Six states, however, appear to exclude untrained bystanders in their GSLs and have various restrictions on which first aid training courses would trigger GSL protections. Illinois, Kentucky, and Michigan contain wording for what is deemed eligible first aid training, leaving the question of whether a stand-alone bleeding control course alone would meet this definition. In the states where a GSL neither expressly includes nor excludes bleeding control techniques, qualified immunity may be found to exist as applied by a judge in the context of specific litigation. It is important to note that non-inclusion of bleeding control in a GSL

State	Statutes	Exclusive Language	Type of Exclusive Language	Specifically Mentions Bleeding Control, Stop the Bleed, Hemorrhage, Wound Care, or Similar
Alabama	Ala. Code § 6-5-332	No	N/A	No
Alaska	Alaska Stat. § 9.65.090 Alaska Stat. § 18.08.086	No	N/A	No
Arizona	Ariz. Code §§ 32-1471, -1472	No	N/A	No
Arkansas	Ark. Code § 17-95-101 Ark. Code § 20-9-603	No	N/A	No
California	Cal. Health & Safety Code §§ 1799.102, .104, .106-.108, .110 Cal. Bus. & Prof. Code §§ 2395, 2395.5, 2396, 2397, 2398 Cal. Bus. & Prof. Code § 2861.5 Cal. Gov't Code §§ 8659, 50086 Cal. Civ. Code § 1714.2	No	N/A	No
Colorado	Colo. Rev. Stat. § 13-21-108	No	N/A	No
Connecticut	Conn. Gen Stat § 52-557b	Yes	Excludes untrained laypeople. Civil immunity is provided for various scenarios, is generally contingent upon licensure as a health care professional or training in first aid by the American Red Cross, the American Heart Association, or the Department of Public Health.	No
Delaware	Del. Code Ann. tit. 16, §§ 6801-6802 Del. Code Ann. tit. 24, § 1767	No	N/A	No
District of Columbia	D.C. Code § 7-401	No	N/A	No
Florida	Fla. Stat §§ 768.13, .135	No	N/A	No
Georgia	Ga. Code Ann. §§ 51-1-29, 29.1, 29.2 Ga. Code Ann. § 26-2-374 Ga. Code Ann. § 52-7-14 Ga. Code Ann. §§ 31-9-3, 31-11-8	No	N/A	No
Hawaii	Haw. Rev. Stat. §§ 663-1.5, 1.6	No	N/A	No
Idaho	Idaho Code. §§ 5-330, 331	No	N/A	No
Illinois	745 Ill. Comp. Stat. 49	Yes	Excludes untrained laypeople. Does provide protections for those trained in CPR or first aid by the American Red Cross, the American Heart Association, or the National Safety Council, employers to/ for employees, and those following emergency medical dispatcher instructions.	No
Indiana	Ind. Code §§ 34-30-12-1, -2	No	N/A	No
Iowa	Iowa Code § 613.17	No	N/A	No

Levy © 2024 Prehospital and Disaster Medicine

Table 1. States and Associated Good Samaritan Statutes Related to Bleeding Control (*continued*)

State	Statutes	Exclusive Language	Type of Exclusive Language	Specifically Mentions Bleeding Control, Stop the Bleed, Hemorrhage, Wound Care, or Similar
Kansas	Kan. Stat. Ann. § 65-2891	Yes	Excludes untrained laypeople. Immunity is only available to licensed health care providers and those trained in first aid provided by the American Red Cross, the American Heart Association, the Mining Enforcement and Safety Administration of the Bureau of Mines of the Department of Interior, the National Safety Council, or any instructor-coordinator.	No
Kentucky	Ky. Rev. Stat. § 311.668 Ky. Rev. Stat. § 411.148	Yes	Any person using an AED is civilly immune. All other persons must be an otherwise licensed/certified health care professional, or trained and currently certified in CPR or first aid by the American Heart Association or American Red Cross.	No
Louisiana	La. Rev. Stat. Ann. § 9:2793, 2799.5 La. Rev. Stat. Ann. §§ 37:1731, 1735	No	N/A	No
Maine	Me. Stat. tit. 14, § 164	No	N/A	No
Maryland	Md. Code. Ann., Cts. & Jud. Proc. §§ 5-603, 606, 607	No	N/A	No
Massachusetts	Mass. Gen. Law. ch. 112, §§ 12B, 12V	No	N/A	No
Michigan	Mich. Comp. Laws § 41.711a Mich. Comp. Laws §§ 691.1501-.1507	Yes	Immunizes only CPR and administration of opioid antagonists by lay responders. Health care providers broadly defined have more extensive civil immunity.	No
Minnesota	Minn. Stat. § 604A.01	No	N/A	No
Mississippi	Miss. Code Ann. § 41-60-33 Miss. Code Ann. § 73-25-37	No	N/A	No
Missouri	Mo. Rev. Stat. § 537.037 Mo. Rev. Stat. § 190.092	Yes	Excludes untrained laypeople. Does provide protection for those trained in first aid by a standard recognized training program.	No
Montana	Mont. Code Ann. § 27-1-714 Mont. Code Ann. § 41-1-405 Mont. Code Ann. § 50-6-206	No	N/A	No
Nebraska	Neb. Rev. Stat. § 25-21,186	No	N/A	No
Nevada	Nev. Rev. Stat. §§ 41.500, 505	No	N/A	No
New Hampshire	N.H. Rev. Stat. § 508:12	No	N/A	No
New Jersey	N.J. Stat. §§ 2A:62A-1, A-2, A-3	No	N/A	No
New Mexico	N.M. Stat. §§ 24-10-3, 10-4	No	N/A	No
New York	N.Y. Educ. Law §§ 6527, 6545, 6611, 6909, 7006 N.Y. Pub. Health Law § 3000-a	No	N/A	No

Levy © 2024 Prehospital and Disaster Medicine

Table 1. States and Associated Good Samaritan Statutes Related to Bleeding Control (*continued*)

State	Statutes	Exclusive Language	Type of Exclusive Language	Specifically Mentions Bleeding Control, Stop the Bleed, Hemorrhage, Wound Care, or Similar
North Carolina	N.C. Gen. Stat. § 20-166 N.C. Gen. Stat. § 90-21.14	No	N/A	No
North Dakota	N.D. Cent. Code § 23-27-04.1 N.D. Cent. Code § 32-03.1, -03-40 N.D. Cent. Code § 39-08-04.1 N.D. Cent. Code §§ 43-17-37-38 N.D. Cent. Code § 43-12.1-12	No	N/A	No
Ohio	Ohio Rev. Code §§ 2305.23-.231	No	N/A	No
Oklahoma	Okla. Stat. tit. 76, § 5 Okla. Stat. tit. 59, § 518	No	N/A	Yes
Oregon	Or. Rev. Stat. § 30.800 Or. Rev. Stat. § 30.805	No	N/A	No
Pennsylvania	42 Pa. Cons. Stat. §§ 8331-32	No	N/A	No
Rhode Island	R.I. Gen. Laws § 9-1-27.1 R.I. Gen. Laws § 5-34-34 R.I. Gen. Laws § 5-37-14	No	N/A	No
South Carolina	S.C. Code § 15-1-310	No	N/A	No
South Dakota	S.D. Codified Laws § 20-9-3 S.D. Codified Laws §§ 20-9-4, 4.1 S.D. Codified Laws § 36-4A-26.3	No	N/A	No
Tennessee	Tenn. Code § 63-6-218	No	N/A	No
Texas	Tex. Civ. Prac. & Rem. Code §§ 74.151-.152	No	N/A	No
Utah	Utah Code Ann. § 58-13 Utah Code § 26-8a-601 Utah Code § 78B-4-501	No	N/A	No
Vermont	Vt. Stat. Ann. tit. 12, § 519	No	N/A	No
Virginia	Va. Code §§ 8.01-225-225.1	No	N/A	No
Washington	Wash. Rev. Code §§ 4.24.300,.310 https://app.leg.wa.gov/rcw/default.aspx?cite=4.24.310	No	N/A	No
West Virginia	W. Va. Code § 55-7-15	No	N/A	No
Wisconsin	Wis. Stat. § 895.48	No	N/A	No
Wyoming	Wyo. Stat. § 1-1-120	No	N/A	No

Levy © 2024 Prehospital and Disaster Medicine

Table 1. (continued). States and Associated Good Samaritan Statutes Related to Bleeding Control

Abbreviations: AED, automated external defibrillator; CPR, cardiopulmonary resuscitation.

does not mean that qualified immunity cannot be applied in a specific case.

Given that hemorrhage remains a leading cause of preventable death, this may be a potential limitation in the public health preparedness framework. Those with bleeding control training and untrained bystanders are a critical mass of citizens who need legal protection to avoid discouraging their efforts to save lives. In one study evaluating laypeople's willingness to respond to bleeding emergencies before bleeding control education, 16% of participants were worried about being sued for their actions.²⁴ Research with focus groups assessing bystanders' willingness to respond to cardiac arrests similarly found a specific fear of legal repercussions.²⁵ Moreover, a growing body of literature shows laypeople can place tourniquets appropriately with bleeding control training or even just-in-time directions. Those with this training alone have been shown to perform tourniquet placement, wound packing, and direct pressure highly successfully immediately after training.²⁶ Portela, et al found laypeople given manufacturer instructions alone could place commercial tourniquets correctly in around 50% of cases.²⁷ In another study, laypeople who were given instructions via an emergency medical dispatcher applied tourniquets correctly around 80% of the time.²⁸ As bleeding control equipment continues to be placed in increasing public locations, and 9-1-1 telecommunicators provide life-saving instructions via phone, well-intended lay responders should not have to consider legal liability.

Analogous to civilians trained by bleeding control courses, the United States military has significant experience training non-medical personnel to control bleeding.²⁹ During the armed conflicts of the early 2000s in Iraq and Afghanistan, Tactical Combat Casualty Care (TCCC) training was broadened to medical and non-medical forces. The 75th Ranger Regiment uniquely taught TCCC to all soldiers, not just medical personnel. Compared to the Department of Defense overall, the 75th Ranger Regiment had markedly lower combat death rates.³⁰ This supports the notion that broad first aid training focused on hemorrhage control and provided to non-medical personnel can have a significant impact on trauma mortality and, indeed, was a catalyst that helped inform the creation of bleeding control programs.

Like bleeding control techniques, cardiopulmonary resuscitation (CPR) and defibrillation are also bystander interventions with a significant opportunity to save lives. Bystander CPR and AED use have both been associated with significantly increased survival in out-of-hospital cardiac arrest/OHCA.^{31,32} These interventions, in contrast to bleeding control techniques, have much broader protection in state GSLs. The use of AEDs is further singled out for protection under federal law.³ Tourniquet placement and wound packing/pressure are at least comparable to CPR/AED use in terms of impact on survival and should have similar GSL protections.^{33,34}

In the United States, since around 2015, publicly accessible bleeding control training for lay people, who are often in the most immediate position to save a life, has been emphasized. Bleeding control training continues to permeate the general population with a campaign goal to train bystanders as immediate responders.¹⁰ Coupled with frontline training are its efforts to enact legislative changes, including state-level funding for bleeding control equipment in schools and other public gathering sites.³⁵ In 2023, Colorado became the latest state to fund bleeding control kits in schools.³⁶ While Colorado's general GSL would cover bleeding

control interventions, the state could further emphasize their importance by protecting them in its GSL. Rhode Island, for example, also has a broad GSL that covers all "emergency assistance," but with one specifically included condition: anaphylactic shock added to the statute in 1995.³⁷ In doing so, the legislature intended to encourage Good Samaritans to act in response to anaphylaxis. Likewise, in 2014, Michigan responded to the on-going opioid crisis by adding broad civil liability protection for any person administering an opioid reversal agent.³⁸ Increasingly, the principles of bleeding control are also being incorporated into standardized first aid training curricula, such as for ARC and AHA. State legislators around the United States can draw attention to the importance of bleeding control through explicit inclusion in their GSLs.

From a public policy perspective, lawmakers should consider the utility of conditioning GSL qualified immunity protections upon laypeople possessing specific certifications or credentials. There is no correlation between the possession of such a certification and the ability to effectively intervene as a bystander, and state GSLs with such conditions have the effect of potentially limiting the pool of potential bystanders who may choose to act in an urgent, life-threatening situation.

Limitations

This analysis is subject to several limitations. First, as states scatter their statutes among multiple code sections, a relevant law may have inadvertently been excluded. However, by utilizing a legal treatise and various primary sources, checked by multiple reviewers, helped to ensure the dataset broadly encompassed all state-level GSLs. Second, the analysis of each law is subject to the reviewers' reasonable interpretations. As GSLs modify the common law, it is possible a court could interpret, or has interpreted, these laws differently in actual litigation. By using a plain reading of the statutes, the study sought to apply the most logical interpretation. Finally, the scope of state GSLs may not encompass the full protections available under federal and local laws. Certain classes of responders, such as EMS clinicians or school employees, may have varying protection depending on the circumstances. However, given most civil liability is a matter of state law, and the states are the major political subdivisions for litigation purposes, they were intentionally chosen to provide a baseline for nation-wide GSL coverage.

Conclusion

Across the United States, most states have broad bystander coverage within GSLs for emergency medical conditions of all types, including bleeding emergencies. No state explicitly excludes bleeding control interventions from their GSLs. Only one state specifically mentions bleeding control in its GSLs, whereas six states' GSLs exclude untrained laypeople, and in three additional states, it is unclear if Good Samaritan protections would extend to those who have solely taken a bleeding control class. Opportunity exists for additional research into those states whose GSLs may not be inclusive of bleeding control interventions.

Author Contributions

MJL conceived the project. MJL, WPF, AL, CMW, and AJR conducted background research and analysis and drafted the initial manuscript. All authors refined the manuscript, crafted the discussion, and contributed substantially to the manuscript's revision. MJL takes responsibility for the paper as a whole.

References

1. West B, Varacallo M. *Good Samaritan Laws*. Treasure Island, Florida USA: StatPearls Publishing; 2023.
2. *Pub. L. 105-170, 112 Stat. 47 (1998)*.
3. *Pub. L. 106-505, 114 Stat. 2338 (2000)*.
4. Veilleux D. Construction and Application of "Good Samaritan" Statutes. *ALR 4th*. 68:294.
5. Moallef S, Hayashi K. The effectiveness of drug-related Good Samaritan laws: a review of the literature. *Int J Drug Policy*. 2021;90:102773.
6. Hamilton L, Davis CS, Kravitz-Wirtz N, Ponicki W, Cerdá M. Good Samaritan Laws and overdose mortality in the United States in the fentanyl era. *Int J Drug Policy*. 2021;97:103294.
7. Drake SA, Holcomb JB, Yang Y, et al. Establishing a regional trauma preventable/potentially preventable death rate. *Ann Surg*. 2020;271(2):375-382.
8. Our Story. Stop the Bleed. <https://www.stopthebleed.org/our-story/>. Accessed June 7, 2023.
9. Wend C, Ayyagari R, Herbst L, Spangler S, Haut E, Levy M. Implementation of Stop the Bleed on an undergraduate college campus: the Johns Hopkins experience. *J Coll Emerg Med Serv*. 2018;1(2):2-9.
10. Levy MJ, Jacobs LM. A call to action to develop programs for bystanders to control severe bleeding. *JAMA Surg*. 2016;151(12):1103-1104.
11. Mell HK, Mumma SN, Hiestand B, Carr BG, Holland T, Stoppyra J. Emergency Medical Services response times in rural, suburban, and urban areas. *JAMA Surg*. 2017;152(10):983-984.
12. Bender M. *Medical Malpractice*. Vol 4. Newtonville, Massachusetts USA: Matthew Bender & Company, Inc.; 2023.
13. Justia. <https://www.justia.com/>. Published April 25, 2018. Accessed October 18, 2023.
14. *Okla. Stat. Tit. 76, § 5*.
15. *Conn. Gen Stat § 52-557b*.
16. *745 Ill. Comp. Stat. 49*.
17. *Kan. Stat. Ann. § 65-2891*.
18. *Ky. Rev. Stat. § 411.148*.
19. *Ky. Rev. Stat. § 311.668*.
20. *Mich. Comp. Laws §§ 691.1501-1507*.
21. *Mich. Comp. Laws § 41.711a*.
22. *Mo. Rev. Stat § 190.092*.
23. *Mo. Rev. Stat. § 537.037*.
24. Ross EM, Redman TT, Mapp JG, et al. Stop the Bleed: the effect of hemorrhage control education on laypersons' willingness to respond during a traumatic medical emergency. *Prehosp Disaster Med*. 2018;33(2):127-132.
25. Sasson C, Haukoos JS, Ben-Youssef L, et al. Barriers to calling 911 and learning and performing cardiopulmonary resuscitation for residents of primarily Latino, high-risk neighborhoods in Denver, Colorado. *Ann Emerg Med*. 2015;65(5):545-552.e2.
26. Schroll R, Smith A, Martin MS, et al. Stop the Bleed training: rescuer skills, knowledge, and attitudes of hemorrhage control techniques. *J Surg Res*. 2020;245:636-642.
27. Portela RC, Taylor SE, Sherrill CS, et al. Application of different commercial tourniquets by laypersons: would public-access tourniquets work without training? *Acad Emerg Med*. 2020;27(4):276-282.
28. Scott G, Olola C, Gardett MI, et al. Ability of layperson callers to apply a tourniquet following protocol-based instructions from an emergency medical dispatcher. *Prehosp Emerg Care*. 2020;24(6):831-838.
29. Rasmussen TE, Baer DG, Goolsby C. The giving back: battlefield lesson to national preparedness. *J Trauma Acute Care Surg*. 2016;80(1):166-167.
30. Kotwal RS, Montgomery HR, Kotwal BM, et al. Eliminating preventable death on the battlefield. *Arch Surg Chic Ill 1960*. 2011;146(12):1350-1358.
31. Blom MT, Beesems SG, Homma PCM, et al. Improved survival after out-of-hospital cardiac arrest and use of automated external defibrillators. *Circulation*. 2014;130(21):1868-1875.
32. Geri G, Fahrenbruch C, Meischke H, et al. Effects of bystander CPR following out-of-hospital cardiac arrest on hospital costs and long-term survival. *Resuscitation*. 2017;115:129-134.
33. Schroll R, Smith A, McSwain NE, et al. A multi-institutional analysis of prehospital tourniquet use. *J Trauma Acute Care Surg*. 2015;79(1):10-14.
34. Scerbo MH, Mumm JP, Gates K, et al. Safety and appropriateness of tourniquets in 105 civilians. *Prehosp Emerg Care*. 2016;20(6):712-722.
35. Legislative Updates: California Passes STOP THE BLEED® Bill. Stop the Bleed. <https://www.stopthebleed.org/learn-more/advocate-promote-support/>. Accessed December 17, 2023.
36. Stop The Bleed School Training And Kits | Colorado General Assembly. <https://leg.colorado.gov/bills/hb23-1213>. Accessed December 17, 2023.
37. *R.I. Gen. Laws § 9-1-27.1*.
38. *Mich. Comp. Laws § 691.1503*.