

**Glucagon Administration by Emergency Medical Services Providers**

**Senate Bill 1244 of 2017**

**Virginia Department of Health**

**Office of Emergency Medical Services**

### **Executive Summary**

During the 2017 Virginia General Assembly, Senate Bill 1244 (SB1244) was introduced by Senator Siobhan S. Dunnavant to amend § 54.1-3408 of the Code of Virginia relating to glucagon administration by Emergency Medical Services (EMS) providers following concerns expressed by a constituent. Glucagon is a glucose elevating agent used to treat low blood sugar and is included in the scope of practice formulary for both Basic Life Support (BLS) and Advanced Life Support (ALS) EMS providers.

SB1244 provided as follows:

Pursuant to regulations of the Board of Health, emergency medical services providers who are certified and authorized to administer drugs and devices and who hold an advanced life support certificate or basic life support certificate issued by the Commissioner of Health may possess and administer glucagon for the emergency treatment of hypoglycemia in accordance with existing protocols.

(Code of Virginia, § 54.1-3408. Professional use by practitioners)

The Office of EMS in consultation with the Old Dominion EMS Alliance, Inc., the Goochland County Department of Fire Rescue and Emergency Services, and Hanover County Fire EMS leadership met to review the concerns that resulted in the introduction of SB1244. The meetings involved the EMS agency medical directors for Goochland and Hanover Counties and the State EMS Medical Director.

Existing EMS protocols allow for both BLS EMS providers (i.e., Emergency Medical Technicians (EMTs)) and ALS EMS providers (i.e., Advanced and Intermediates EMTs and Paramedics) to administer glucagon provided that the agency's Operational Medical Director (OMD) endorses this activity. A review of the EMS patient care reports for Goochland and

Hanover Counties indicated there were no adverse outcomes utilizing their current practice pertaining to the treatment of hypoglycemic patients with glucagon administered by ALS providers. The administration of glucagon by BLS providers has not been identified as a priority in these counties because ALS coverage and response is adequate, and there is no evidence of any incident where BLS providers would have needed the capability to administer glucagon.

Glucagon administration is included within the scope of practice for BLS and ALS EMS providers in the Commonwealth of Virginia. The Scope of Practice document may be accessed for reference through the Office of EMS website. (Virginia EMS Regulations 12VAC5-31-1050 - Scope of Practice)

Authorization to administer medications by EMS providers requires EMS providers to possess current certifications issued by the Virginia Department of Health, to be affiliated with a Virginia-licensed EMS agency, and to follow patient care protocols approved by their EMS agency OMD. Glucagon may be accessed through the Regional EMS Council (i.e., Old Dominion EMS Alliance, Inc.), an EMS drug kit, medications maintained on fire/rescue response apparatus outside of a drug kit with OMD approval, or in the personal possession of the EMS provider with approval of the EMS agency OMD. Glucagon is uniformly available in EMS medication kits across the Commonwealth and incorporated in regional patient care guidelines. Present operational standards, which have been utilized for decades, suggest the current patient care guidelines are safe and effective and serve the patient's best interest. (2015 Regional Prehospital Patient Care Protocols, n.d.)

The ability of basic and advanced life support EMS providers to possess and administer glucagon for the emergency treatment of patients with low blood sugar currently exists; and, therefore, it is not necessary to propose the statutory changes recommended in SB1244 to allow

this practice to occur or continue. (Scope of Practice - Procedures, 2013) (Scope of Practice - Formulary for EMS Personnel, 2015)

SB1244 was subsequently passed by indefinitely by the Senate Committee on Education and Health with a letter from the Clerk of the Senate to the State Health Commissioner directing the Virginia Department of Health to further study the matter (see Appendix A for the letter from the Clerk of the Senate to the State Health Commissioner).

### **Introduction**

This document will review SB1244, provide a brief synopsis of the bill's origin, and provide the current status of pre-hospital practice as it relates to SB1244.

### **Background**

A constituent who identifies herself as a caregiver for a friend who has diabetes is concerned that glucagon, a medication used to reverse low blood sugar, is not available to basic life support providers (EMTs) in Goochland and Hanover counties for which the friend lives. The caregiver contacted Delegate O'Bannon about her concerns, as well as Secretary Brian J. Moran. Ultimately, Senator Dunnivant introduced SB1244. At the request of the patron and during a meeting with the Senate Education and Health Subcommittee on Health Professionals, the Office of EMS provided information explaining that the current scope of practice formulary for BLS and ALS EMS providers allows the administration of glucagon, which is what SB1244 sought to authorize. It was further explained that EMS providers do not have the authority to independently administer medications and must act under the direction of a licensed physician serving as the OMD for a licensed EMS agency. It is the OMD for the EMS agency who has ultimate discretion and authority to determine which skills, procedures, and techniques can be performed and what medications can be administered by each level of certified EMS provider.

There was discussion with the patron about §54.1.3408 that allows in specific circumstances an employee of a school board, employees/contractors of the Department of Behavioral Health and Developmental Services, a school for students with disabilities, and private schools to administer insulin or glucagon to a person diagnosed as having diabetes and who requires insulin injections or for whom glucagon has been prescribed for the emergency

treatment of hypoglycemia (low blood sugar) provided such employee or person providing services has been trained in the administration of insulin and glucagon.

It was further discussed that the concept of getting emergency medications out into the community has received increased attention in recent years, specifically in the case of epinephrine and naloxone; and there is significant grassroots support for additional efforts among affected populations. The use of glucagon by non-licensed persons, however, should be considered only after examining the potential for adverse effects, estimating the frequency of use, and determining whether there is any firm data that supports a derived benefit to the patient. The administration of glucagon by non-licensed persons typically is limited to the use of glucagon kits that have been prescribed by a physician for diabetic patients to keep at home to be administered by family members after some training. In contrast, EMS providers are exposed to many situations and environments where patients can present with symptoms similar to a diabetic but are, in fact, a result of another emergent medical condition. As such, EMS patient care protocols exist; and the practice of pre-hospital care delivered by EMS personnel is closely monitored by EMS agency OMDs to reduce the risk of adverse outcomes due to medication errors.

### **Findings/Recommendations**

Glucagon administration is included within the scope of practice for BLS and ALS EMS providers in the Commonwealth of Virginia. The Scope of Practice document may be accessed for reference through the Office of EMS website. (Scope of Practice - Procedures, 2013)

Authorization to administer medications by EMS providers requires possessing current certification in the Commonwealth of Virginia, affiliation with a Virginia-licensed EMS agency, and practice following patient care protocols approved by the EMS agency's OMD. In

cooperation with the OMD, each EMS agency is encouraged to examine the need for a policy related to glucagon administration for individual EMS providers, including a patient care protocol approved by the agency OMD or regional medical control committee. Glucagon may be accessed through the agency drug kit, medications approved by the OMD and maintained on fire/rescue response apparatus outside of a drug kit, or in the personal possession of the EMS provider with OMD approval. Present operational standards suggest that current practice is safe, effective, and serves the patient's best interest. Current practice reflects pre-hospital practice that SB1244 seeks to authorize.

### **Conclusion**

The ability of BLS and ALS EMS providers to possess and administer glucagon for the emergency treatment of patients with low blood sugar currently exists; and, therefore, it is not necessary to adopt the proposed statutory changes recommended in SB1244 to allow this practice to occur or continue. (Scope of Practice - Procedures, 2013)

## References

- Code of Virginia. Administrative Code. Title 12 Health. Agency 5 Department of Health. Chapter 31 Virginia Emergency Medical Services Regulations. 12VAC5-31-1040 *Operational Medical Director Authorization to Practice*. Retrieved from <https://law.lis.virginia.gov/admincode/title12/agency5/chapter31/section1040/>
- Code of Virginia. Administrative Code. Title 12 Health. Agency 5 Department of Health. Chapter 31 Virginia Emergency Medical Services Regulations. 12VAC5-31-590 *Operational Medical Director Requirement*. Retrieved from <https://law.lis.virginia.gov/admincode/title12/agency5/chapter31/section590/>
- Code of Virginia. Administrative Code. Title 54.1 Professions and Occupations. Chapter 34 Drug Control Act. 54.1-3408. *Professional use by practitioners*. Retrieved from <https://law.lis.virginia.gov/vacode/title54.1/chapter34/section54.1-3408/>
- Code of Virginia. Administrative Code. Title 12 Health. Agency 5 Department of Health. Chapter 31 Virginia Emergency Medical Services Regulations. 12VAC5-31-300 *Requirement for EMS Agency Licensure and EMS Certification*. Retrieved from <https://law.lis.virginia.gov/admincode/title12/agency5/chapter31/section300/>
- Code of Virginia. Administrative Code. Title 12 Health. Agency 5 Department of Health. Chapter 31 Virginia Emergency Medical Services Regulations. 12VAC5-31-1050 *Scope of Practice*. Retrieved from <https://law.lis.virginia.gov/admincode/title12/agency5/chapter31/section1050/>
- Code of Virginia. Administrative Code. Title 32.1-111 Health. Chapter 4. Health Care Planning. Article 2.1. *Statewide Emergency Medical Services System and Services*. Retrieved from <https://law.lis.virginia.gov/vacode/title32.1/chapter4/>
- Commonwealth of Virginia. (Offered January 11, 2017, Prefiled January 10, 2017) Senate Bill No. 1244. *A BILL to amend and reenact 54.1-3408 of the Code of Virginia, relating to glucagon; administration by emergency medical services providers*. Retrieved from <http://leg1.state.va.us/cgi-bin/legp504.exe?171+ful+SB1244+hil>
- Department of Planning and Budget. *2017 Fiscal Impact Statement*. Bill Number SB1244. Retrieved from <http://leg1.state.va.us/cgi-bin/legp504.exe?171+oth+SB1244F601+PDF>



Dunnavant, Siobhan S. Senate Bill 1244. *Glucagon; administration by emergency medical services providers*. Retrieved from

<http://leg1.state.va.us/cgi-bin/legp504.exe?ses=171&typ=bil&val=sb1244>

Old Dominion EMS Alliance, Inc. *2015 Regional Prehospital Patient Care Protocols*. Sections 3.8 and 9.6. Retrieved from

[http://odemsa.vaems.org/index.php?option=com\\_content&view=article&id=5&Itemid=50](http://odemsa.vaems.org/index.php?option=com_content&view=article&id=5&Itemid=50)

Virginia Department of Health Office of Emergency Medical Services. (August 7, 2015). *Scope of Practice – Formulary for EMS Personnel*. Retrieved from

[www.vdh.virginia.gov/content/uploads/sites/23/2016/05/ScopeOfPractice-Formulary.pdf](http://www.vdh.virginia.gov/content/uploads/sites/23/2016/05/ScopeOfPractice-Formulary.pdf)

Virginia Department of Health Office of Emergency Medical Services. (November 6, 2013).

*Scope of Practice - Procedures for EMS Personnel*. Retrieved from


[www.vdh.virginia.gov/content/uploads/sites/23/2016/05/ScopeOfPractice-Procedures.pdf](http://www.vdh.virginia.gov/content/uploads/sites/23/2016/05/ScopeOfPractice-Procedures.pdf)

## Appendix A

### Letter from Clerk of the Senate to State Health Commissioner Regarding Senate Bill 1244

COMMONWEALTH OF VIRGINIA

**SUSAN CLARKE SCHAAR**  
CLERK OF THE SENATE  
POST OFFICE BOX 396  
RICHMOND, VIRGINIA 23218



SENATE

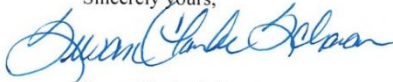
March 9, 2017

Marissa Levine, M.D.  
State Health Commissioner, Department of Health  
James Madison Building  
109 Governor Street  
Richmond, VA 23219

Dear Commissioner Levine:

This is to inform you that, pursuant to Rule 20 (o) of the Rules of the Senate of Virginia, the Senate Committee on Education and Health has referred the subject matter contained in Senate Bill 1244 to the Department of Health for study. It is requested that the appropriate committee chair and bill patron receive a written report, with a copy to this office, by November 1, 2017.

With kind regards, I am

Sincerely yours,  
  
Susan Clarke Schaar

SCS:dhl

cc: Sen. Stephen D. Newman, Chair, Senate Committee on Education and Health  
Sen. Siobhan S. Dunnavant, Patron of SB 1244  
Mark Vucci, Director, Division of Legislative Services