**Epinephrine Autoinjectors on Campus**

Substitute Senate Bill 6421 was signed into law on March 10th, 2016 and is codified in RCW 70.54.440 authorizing healthcare providers to prescribe epinephrine autoinjectors to authorized entities (rather than just to individual patients). This document provides an overview of the legislation and the pros and cons for implementing a program on the Eastern Washington University campus and within units of the campus.

***Anaphylaxis and Young Adults***

Anaphylaxis is a life-threatening medical emergency in which prompt medical intervention is critical. According to the Asthma and Allergy Foundation of America (AAFA), anaphylaxis is at least as common as 1 in 50-people in the U.S. based on a study by the organization. However, the foundation itself acknowledges this number could be a lot higher, around 1 in 20. Additionally, the number appears to be on the rise.

Food Allergy Research and Education (FARE) states that the increasing number of people with food allergies, coupled with the fact that teenagers and young adults with food allergies are at the highest risk of fatal food-induced anaphylaxis, makes access to epinephrine a critical issue for colleges and universities.

***Epinephrine and Autoinjectors***

Epinephrine is a medication used to treat anaphylactic reactions or sudden, life-threatening allergic reactions. Anaphylactic shock is a serious allergic reaction that is rapid in onset and may cause death. It typically causes a number of symptoms including an itchy rash, throat swelling, breathing problems, and low blood pressure. Common causes of an anaphylactic reaction include insect bites or stings, foods, and medications.

An epinephrine autoinjector is a medical device used most frequently for the treatment of acute allergic reactions to treat the onset of anaphylactic shock. These medical devices deliver a single, measured dose of epinephrine, also known as adrenaline, using a spring-loaded needle injected into a recipient's muscle.

In 2013 the Legislature authorized epinephrine autoinjectors to be placed on school property and used by the school nurse or a designated trained school employee to respond to an anaphylactic reaction by a student. Schools are moving forward with this process very slowly, preferring to have a nurse be responsible for giving the autoinjectros to those students already diagnosed and having one at school for anaphylaxis.

**Summary of Bill 6421:**

***Permission to Prescribe, Store, and Use Epinephrine Autoinjectors***
An authorized health care provider (provider) may prescribe epinephrine autoinjectors in the name of an authorized entity (entity), and a pharmacist, advanced registered nurse practitioner, or physician may dispense such a prescription.

Authorized entities are organizations at which allergens capable of causing anaphylaxis may be present, including restaurants, sports arenas, colleges, universities, and recreation camps. Pursuant to a valid prescription, an entity may maintain a supply of epinephrine autoinjectors stored in a location accessible in an emergency and consistent with the medication's instructions for use and rules set by the Department of Health (DOH).

Trained employees or agents of the authorized entity are responsible for storing, maintaining, and overseeing the use of epinephrine autoinjectors. Trained individuals may provide or administer an epinephrine autoinjector to any individual who the employee, agent, or other individual believes in good faith is experiencing anaphylaxis.

***Training***
Prior to providing or administering an epinephrine autoinjector prescribed to an entity, an individual must complete an online or in-person training program approved by DOH or conducted by a nationally recognized organization experienced in training laypersons in emergency medical treatment. The training must cover identification of symptoms of severe allergic reactions including anaphylaxis, best practices and procedures for storage and administration of an epinephrine auto injector, and emergency follow-up procedures. Upon completion of training, individuals must receive a certificate on a form developed or approved by the DOH. ***DOH has not completed the process of identifying training opportunities, but they are looking at the Red Cross Anaphylaxis and Epinephrine Auto-Injector Online Course. This course is $20.00 per person and takes approximately 30 minutes to complete.***

***Incident Reports***
Each time an entity's epinephrine autoinjector is used, the entity must submit an incident report to the DOH on a form that the agency develops. Annually, the DOH must publish a report that summarizes and analyzes the incident reports received during the reporting period.

***Liability***

Individuals or entities prescribing, providing, or administering an epinephrine autoinjector for an authorized entity are not liable for any injuries or damages that result from administration or failure to administer the medication unless such acts or omissions constitute gross negligence or willful or wonton conduct.

***Why is Eastern looking at this law?***

EPIC adventures brought this law to the attention of Trent Lutey in August of 2016 as they have an interest in carrying epinephrine autoinjectors on their trips. They are often in the backcountry, without immediate access to front country medical response services. They are also in environments where food allergies or insect bites may occur. There may also be an interest for this product to be more widely available on campus is dining or residence halls.

**Pros**

* Every 3 minutes, a food allergy reaction sends someone to the emergency department – that is more than 200,000 emergency department visits per year. The American College of Allergy, Asthma and Immunology estimate that 3% of adults have potentially life-threatening allergic reactions to insect bites or stings. Having ready access to epinephrine autoinjectors can minimize severe anaphylactic experiences. Failure to promptly (i.e., within minutes) treat food anaphylaxis with epinephrine is a risk factor for fatalities.
* Some people who experience anaphylaxis may not have ever had a previous episode and therefore not have an epinephrine autoinjector prescribed to them.
* It is not uncommon for those with anaphylaxis to not have their epinephrine autoinjector with them when they need it[[1]](#footnote-1). Additionally, a person to need more epinephrine than they have available through their own supply.
* Having access to an epinephrine autoinjector can save lives.
* There are no absolute contraindications medical to using an epinephrine autoinjector.
* EPIC Trip Lead staff (who are present on all trips) are Wilderness First Responder trained and receive both classroom and practical competence on administering an epinephrine autoinjector. Trip lead staff could also take any additional training required by the Washington State Department of Health per the WACs currently in development. It may makes sense to have these available in the back country as frontline emergency response services are not readily available. EPIC also has a system in place to for training, reporting and managing medical supplies. A roundtable panel from the Wilderness Medical Society endorsed the field administration of epinephrine under emergency conditions by wilderness instructors who have received adequate training in the field recognition and treatment of anaphylaxis[[2]](#footnote-2).

**Cons**

* Price: EpiPens, which are the brand name product, are available for $600 - $704 per package of two (based on three Cheney pharmacies). Two pharmacies also offer a generic product, at the cost of $549.39 - $581 per two. The pens are sold in two packs, because often a second dose is needed 20-30 minutes after the first dose is administered. They have a shelf life of 12-18 months. Mylan is producing an autohorized generic of their EpiPen that will be available for $300 per two pack.
* Epinephrine Autoinjectors are classified as both a drug and a device by the FDA. Because devices are operated in different ways, someone trained to utilize an EpiPen may have difficulty with a different device style.
* Cheney Fire Department carries epinephrine autoinjectors on their rigs and has a quick response time to sites on the EWU campus.
* Epinephrine autoinjectors should be kept at room temperature (77 degrees F) and not refrigerated or exposed to extreme heat or light.
* In addition, the university will need to determine the process for: training of staff; assuring epinephrine autoinjectors are not expired and replacing as necessary; and follow up procedures for completing an incident report if an epinephrine autoinjector is utilized.
1. Simons FER, Clark S, Camargo CA. Anaphylaxis in the community: learning from the survivors. J Allergy Clin Immunol 2009; 124:301–306. • In a unique population of 1885 survivors of anaphylaxis in the community, users of epinephrine auto-injectors for first-aid treatment were outnumbered by nonusers, who gave many reasons for not injecting epinephrine, including use of an H1- antihistamine, and no prescription for epinephrine. [↑](#footnote-ref-1)
2. http://www.wemjournal.org/article/S1080-6032(14)00266-X/pdf [↑](#footnote-ref-2)