

## NCBATE Epinephrine Auto Injectors Epi-pen Statement

Epinephrine is a drug used for the emergency treatment of severe allergic reactions to insect stings or bites, foods, drugs or other allergens and for basic life support treatment for severe asthma. Epinephrine mimics the responses of the sympathetic nervous system. It quickly constricts blood vessels to improve blood pressure, reduces the leakage from the blood vessels, relaxes smooth muscle in the bronchioles to improve breathing through bronchodilation and alleviate the wheezing and dyspnea, stimulates the heartbeat, and works to reverse the swelling and hives. The drug takes effect within seconds, but the duration of its effectiveness is short (about 10-20 minutes).

Most sports medicine and athletic training staff utilizes the epinephrine auto-injector pens (“epi-pens”), a disposable delivery system for self-administration. The epi-pen has a spring activated needle that is designed to deliver a single precise dose (0.3 mg of 1:1000 solution) of epinephrine to adults when activated. The “youth” version of the epi-pen has a spring activated needle that is designed to deliver a single precise dose (0.15 mg. of 1:1000 solution) of epinephrine to infants/children under 8 years old when activated. Epinephrine can also be administered through ampules or vials.

Athletic trainers are typically in a good position to administer emergency treatment to athletes and others they come in contact with in the performance of their duties. The Board has received a number of questions from licensed athletic trainers about the use of epinephrine to address emergency conditions they face in the performance of their duties. North Carolina law allows athletic trainers to carry out the prevention and rehabilitation of injuries through physical modalities, including heat, light, sound, cold, electricity, or mechanical devices related to rehabilitation and treatment. North Carolina law does not allow an athletic trainer to undertake medical diagnosis or to prescribe or dispense prescription drugs or prescription devices. However, an exception exists for the use of epi-pens when an individual is suffering or is believed to be suffering from anaphylaxis (1) at school or at school-sponsored events on school property (N.C. Gen. Stat. § 115C-375.2A); and (2) at facilities like recreation camps, colleges, universities, day care facilities, youth sports leagues, amusement parks, restaurants, places of employment, and sports arenas (N.C. Gen. Stat. § 90-21.15A).

The use of epi-pens is to be by an employee or agent of the school or above-referenced entities who are trained to provide emergency medical aid to persons suffering from an anaphylactic reaction, which training could include: (1) how to recognize signs and symptoms of severe allergic reactions, including anaphylaxis; (2) standards and procedures for the storage and administration of an epinephrine auto-injector; or (3) emergency follow-up procedures.

The school or other similar entity described above would designate those who are authorized to receive the training and administer epinephrine. A licensed athletic trainer can be one of the personnel designated by the Principal of the school or designated by the owner of the facilities described above to be trained in providing emergency medical aid through the use of an epi-pen. So an athletic trainer would need to ensure they are on the “approved” list to receive training and administer epinephrine.

In addition, the athletic trainer should ensure their written protocol includes the storage, possession, and ability to administer epinephrine in these circumstances. The administration of an epi-pen is within the knowledge, skill, and NATA Educational Competencies of an athletic trainer, and therefore, its administration falls within the scope of practice of an athletic trainer providing athletic training services, provided it is properly delegated by a physician to the athletic trainer through a written agreement/protocol. Therefore, it is recommended that an athletic trainer include the administration of an athlete's epi-pen in the written protocol by either specifically mentioning administration of an epi-pen in the protocol or more broadly providing that the athletic trainer may administer emergency medication legally prescribed to the athlete, where such administration is within the education, training, experience and continued competency of the athletic trainer.

If the athletic trainer would like to carry epinephrine or an epi-pen that has not been prescribed to a specific individual in the athletic trainer's own equipment in case of an emergency, the athletic trainer should consult with and have written permission from the school or similar entity described herein, and should have a written protocol that is approved by his/her physician supervisor allowing this practice.

The statutory exemption for the use of epi-pens in emergency situations does not specifically address or provide for the administering of epinephrine from an ampule or vial. Therefore, if the athletic trainer's employing or contracting agency uses epinephrine in emergency situations, the athletic trainer should consult with their employing or contracting agency for the legal permissions for this use – as well as ensure their protocol covers the administer of epinephrine in emergency situations from an ampule or vial.

In conclusion, athletic trainers are typically in a good position to administer emergency treatment to athletes and others they come in contact with in the performance of their duties. The North Carolina legislature has recognized the importance of having epi-pens available in schools, colleges, athletic fields, and other places youth could experience anaphylaxis, and recognized the benefit for having properly trained individuals, including athletic trainers, in possession of epi-pens and the ability to administer epinephrine in emergency situations. Athletic trainers should follow all requirements of their employing or contracting agency, ensure they comply with any and all training requirements in statutes and as required by their employing entity, and follow their protocol from their sponsoring physician.