

A Coach's Guide to Sudden Cardiac Arrest



What is the purpose of the sudden cardiac arrest (SCA) law, also known as Lindsay's Law, in Ohio?

Lindsay's Law (Ohio revised code 3313.5310, 3707.58, and 3707.59) promotes the protection of athletes related to SCA who are involved in sports activities at the youth, middle school, and high school levels. The law has three main components:

- Education on the risk factors, signs and symptoms of SCA for participants, parents, and coaches in interscholastic
 and youth sports
- Identification of a protocol for assessment and written clearance for return to athletic activity if the student is known to exhibit specific risk factors, including fainting or syncope, before, during, or after an athletic activity
- Definition of authorized licensed health care providers who can evaluate and make medical clearance decisions related to SCA

When did the law go into effect?

March 14, 2017

What is the Automatic External Defibrillator (AED) Law in Ohio?

The Ohio House passed the AED Bill (House Bill 47) which compliments and emphasizes Ohio's current efforts to aid in the recognition and treatment of SCA. The bill reinforces existing requirements of coaches to be certified in CPR while also requiring the following:

- AEDs to be placed in in each school as well as sports and recreational locations in Ohio
- Emergency Action Plans (EAPs) to be adopted at these sites and practiced quarterly
- Coaches and staff to be trained in CPR as well as effective use of a AED
- An informational meeting to be held for students and youth athletes on the symptoms and warning signs of sudden cardiac arrest



When did the law go into effect?

October 24, 2024

To whom do the laws apply?

All public or private schools operated by a school district board of education, chartered and non-chartered non-public schools, and youth sports organizations (YSOs). This also applies to any team participating in athletic competition in Ohio, regardless of where the athlete lives. The specific definitions of these entities can be found in the Ohio revised code. Ohio law includes the following in its definition of athletic activity:

- Interscholastic athletics
- Cheerleading
- Club-sponsored sports activities
- Sports activities sponsored by school-affiliated organizations

What is SCA?

SCA occurs when the heart suddenly and unexpectedly stops pumping blood, stopping blood flow to the brain and other vital organs. It is unlikely that the heart will regain normal activity on its own and, therefore, must be treated with urgency. SCA can be fatal if not treated promptly. The presence of an automatic external defibrillator (AED) is essential for the survival of someone experiencing SCA. Many times, SCA is caused by underlying issues or known risk factors, but it can occur in an otherwise healthy, physically active individuals of any age, including child and adolescent athletes.

What should a coach look for to help assess risk for possible SCA?

Determining risk factors for SCA requires an evaluation of the athlete's personal history and a detailed family medical history, as seen on the Pre-Participation Exam questionnaire, along with a physical evaluation conducted by a health care provider. Further evaluation and testing for a possible heart condition is necessary if any of the risk factors below are observed or occur during or after activity:

- Chest pain or discomfort with exercise/activity
- Fainting or passing out related to exercise/activity
- Excessive or unexplained shortness of breath with exercise/activity
- Unusual or unexplained fatigue or dizziness with exercise/activity
- · Palpitations associated with exercise, including a racing heart
- Prior history of a heart murmur, prior heart evaluation or prior restrictions from competitive sports due to a heart condition
- High blood pressure
- Family history identifying one or more relatives with unexpected death, before the age of 35, because of known heart disease or a sudden or unexplained death (such as a single-car accident or drowning)
- Special knowledge of family history of certain heart conditions, including hypertrophic or dilated cardiomyopathy, long QT syndrome, Brugada syndrome, Marfan's syndrome or other significant rhythm problems

The athlete who faints should be removed from activity until an evaluation is completed and a written clearance note has been provided to the coach or designated athletic individual or representative (i.e. athletic trainer, school nurse, athletic director), indicating safe return to activity from an authorized health care provider.

Despite the best efforts to identify those with risk factors and to educate people about SCA, sudden cardiac arrest and sudden cardiac death do occur in the general population, including youth athletes. In many cases, risk factors are not able to be determined before an SCA event. Being informed about SCA and prepared to respond with an AED at any time can help deliver the best outcomes for the child.

What are the signs and symptoms associated with increased risk for SCA?

Signs and symptoms commonly occur before an SCA event. Do not ignore symptoms. Youth athletes, parents, and those supervising athletes must be educated and instructed to immediately report any suspicious symptoms so an appropriate evaluation for a possible underlying heart condition can occur. If an athlete faints or has a known episode of fainting, the coach is required by law to remove the athlete from activity. Please recognize the signs and symptoms of SCA are the same as the risk factors that increase SCA from occurring.

What if an athlete exhibits the signs and symptoms of heart disease that can cause cardiac arrest?

The legislation states that if an athlete exhibits fainting (syncope) related to sport/activity, the athlete must be removed from participation by their coach and/or present authorized licensed healthcare provider. Additionally, the athlete cannot return to play until both of the following conditions are met:

- 1. The athlete is evaluated by a physician or authorized health care provider as defined by Ohio state law.
- 2. The athlete provides written clearance from the medical professional that an appropriate evaluation has occurred and the authorized health care provider has determined it is safe to return to sport/activity and competition.

All other worrisome signs and symptoms observed by a coach (chest pain or discomfort during exercise, excessive fatigue or dizziness related to exercise, excessive shortness of breath during exercise, palpitations or a racing heart during exercise) should be reported immediately to the parents to allow for review by their chosen health care provider to determine the risk of SCA.

When should an athlete be held from athletic participation for evaluation for conditions that cause SCA?

According to Ohio law, an athlete shall not be allowed to participate in an athletic activity in the case of the following:

- The athlete's biological parent, biological sibling, or biological child has previously experienced SCA, and the athlete has not been evaluated and cleared for participation in an athletic activity by an authorized physician.
- The athlete is known to have exhibited fainting (syncope) at any time before, during, or after an athletic activity and has not been evaluated and cleared for return by an authorized health care provider. This includes before, during, or after activity, physical education, weight lifting, conditioning, practice, competition, or other school-affiliated activity or recreational physical activity.

The parent, assistant coaches, school nurse, physical education teacher, any other individuals supervising physical activity, and the licensed athletic trainer should be informed of the athlete's removal from activity and be advised when the athlete has been cleared with a written note to return to activity by an authorized health care provider.



Who can make medical decisions related to return-to-play?

A physician, defined as an individual authorized to practice medicine and surgery or osteopathic medicine and surgery (i.e., MD or DO, including a physician who specializes in cardiology) or other licensed health care professionals authorized by the legislation may make return-to-play decisions. Other authorized licensed health care providers include:

- Certified nurse practitioner
- Clinical nurse specialist
- Certified nurse-midwife
- Licensed physician assistant
- Licensed certified athletic trainer

Authorized licensed health care providers may consult with any other licensed or certified health care providers in order to determine whether an athlete or student is ready to return to participation. Athletes must provide a written letter of clearance from an authorized medical professional that he/she may return to activity.

A family's pediatrician or primary care physician is an invaluable resource in assessing a child's risk factors and health status. They are trained to make the appropriate referral for additional testing or further evaluation based on a 14-Element Cardiovascular Checklist for Congenital and Genetic Heart Disease (https://www.medicaldaily.com/american-heart-association-releases-14-step-screening-process-reduce-sudden-cardiac-arrest-303168). These guidelines set forth by the American Heart Association were developed by a team of leading pediatric cardiologists from around the country and will direct the child's care.

What action should a staff member take if an athlete has SCA?

SCA should be treated immediately to save the athlete's life. Recognize acute symptoms of SCA:

- Fainting or collapsing and unresponsive
- Gasping, moaning, labored breathing, eyes may be open
- Seizure-like activity
- No pulse

Activate the emergency action plan (EAP):

- Call 9-1-1, report symptoms to dispatcher
- Immediately begin CPR
- Retrieve AED immediately and place AED on the athlete, following prompts as soon as possible
- Use AED as soon as possible, ideally within 3 to 5 minutes, to have the best success in restoring proper heart rhythm and have the best outcome for the athlete

Time is precious when dealing with an SCA episode. It is crucial that coaches, assistant coaches, referees/officials, administrators and athletic trainers work as a team to communicate, collaborate and initiate use of the AED immediately in order to provide the best outcomes for the athlete. It is best to have a plan in place that is practiced regularly and understood by all parties before an emergency occurs.

As a school-based coach, what are my requirements?

Ohio laws requires interscholastic coaches to complete the following:
☐ Complete the Ohio Department of Health approved training course on the signs, symptoms, and risk factors of sudden cardiac arrest. This course is available on the Ohio Department of Education's website.
☐ Verify course completion to school official or designated school district office. Coaches are required to renew the course each calendar year.
☐ Review and comply with ODE requirements for coaches regarding CPR/AED certification.
☐ Verify current OHSAA Athlete Pre-participation Physical Exam is on-file prior to athlete's participation in practice or games.
☐ Attend quarterly practice of Emergency Action Plans as indicated by school administration.
What if I am a Youth Sports Organization (YSO) coach?
Ohio laws requires YSO coaches complete the following:
☐ Complete the Ohio Department of Health approved training course on the signs, symptoms, and risk factors of sudden cardiac arrest. A free online training course is available at the Ohio Department of Health website.
☐ Verify course completion to the designated organization official. Coaches are required to renew the course each calendar year.
☐ Review and comply with ODE requirements for coaches regarding CPR/AED certification.
☐ Attend quarterly practice of Emergency Action Plans as indicated by school administration.

What are the requirements for parents?

Parents/guardians and athletes are required to review, sign and submit an Ohio Department of Health Parent-Athlete SCA Signature Form every year for each sport/activity. The form must be turned in to a designated school or YSO official before the athlete participates in ANY activity. Forms can be found on the Ohio Department of Health's website. As the law directs, no alternative forms may be signed or submitted. The Ohio Department of Health Parent-Athlete SCA Signature Form can be found on the school's website or at https://odh.ohio.gov/know-our-programs/lindsays-law-required-signature-form

Are my athletes educated on SCA?

Before each athletic season all interscholastic (school) and youth sport organization must hold an informational meeting for students and youth athletes regarding the symptoms and warning signs of SCA. It is essential that athletes, parents, coaches, and organization administrators are educated and prepared.

What are the AED requirements for Youth Sports Organizations (YSO) and schools?

According to Ohio law, House Bill 47, all public or chartered nonpublic schools and youth sport organizations are required to install and maintain at least one AED in various location of the school and/or sports and recreation areas, such as indoor recreation centers, gymnasiums, swimming pools, and playing fields.





What resources will help me implement this program?

Resources from the American Heart Association, the Ohio Department of Health, OHSAA, Ohio Department of Education, American Heart Association, Nationwide Children's, and Project ADAM are available:

- Ohio Department of Health documents related to Lindsey's Law odh.ohio.gov/know-our-programs/Lindsays-Law/welcome
- Ohio documents related to House Bill 47
 https://www.legislature.ohio.gov/download?key=20617
- Ohio High School Athletic Association ohsaa.org/medicine
- <u>CPR and AED information</u> odh.ohio.gov/know-our-programs/Lindsays-Law/welcome
- <u>Project ADAM for a Heart Safe School</u> NationwideChildrens.org/Project-Adam
- The Heart Center at Nationwide Children's Hospital NationwideChildrens.org/Heart

The Heart Center at Nationwide Children's Hospital provides pediatric and adult heart patients with outstanding diagnostic, treatment and research facilities. At Nationwide Children's Hospital, patients and families experience innovation and advancements unlike any other institution. For more information or to find a clinic near you, visit NationwideChildrens.org/Heart.



Sports Medicine at Nationwide Children's Hospital provides care at nine locations throughout central Ohio. Our comprehensive team of specialists work closely with coaches, athletic trainers, primary care physicians and parents to deliver age-appropriate care designed to get athletes back in the game as quickly and safely as possible. We emphasize the importance of early injury recognition and treatment, in order to prevent recurring injuries. To learn more or request an appointment, call (614) 355-6000 or visit NationwideChildrens.org/Sports-Medicine.

Engage With Us

NationwideChildrens.org/Sudden-Cardiac-Arrest











