



9/9/2023- KY ACC
Meeting

SECONDARY PREVENTION OF SCD: PROJECT ADAM IN KY

Shaun Mohan, MD, FHRS, FAAP

Associate Professor Pediatrics
Medical Director- KCH Project ADAM

UK Healthcare/Kentucky Children's Hospital



Shaun Mohan, MD, FHRS

- Medical Director of Pediatric/Congenital Electrophysiology for UK- Kentucky Children's Hospital (2016-Present)
- Training- Children's Hospital of UPMC (Pediatrics), Children's Hospital of Philadelphia (Pediatric Cardiology), Texas Children's Hospital-Baylor College of Medicine (Pediatric/Congenital Electrophysiology)
- Interests- Catheter ablations in pediatric patients and congenital heart disease (pediatric and adult), channelopathies (LQT, Brugada etc), implantable cardiac devices (Pacemakers and ICDs), expanding Conduction System Pacing (HBE/LBB) in peds/CHD patients
- Dual Appointment at UK Healthcare (Lexington, KY) and CCHMC (Owensboro, KY)
- **Recent: Medical Director for Kentucky Children's Hospital Project ADAM program**



Disclosures

No Financial Disclosures

Medical Director for Project ADAM at UK
Healthcare/Kentucky Children's Hospital



Objectives

1. What is the current state of SCD prevention in the young in KY?
2. What is Project ADAM and the current state in the Commonwealth of KY.
3. Future Directions and anticipated barriers for Project ADAM



Sudden Cardiac Arrest/Death Statistics

350-360,000 out of hospital cardiac arrests (OHCA) annually in the US- *AHA Heart and Stroke Statistics 2022 update.*

1,000 SCA a day

Adult SCA: most occur at home (74%), followed by public settings (15%), then nursing homes (11%)

Pediatric SCA: 88% at home followed by public place (12%)

Survival in OHCA has remained ~10% for the past decade for the general population.



Sudden Cardiac Arrest/Death Statistics

On a given day 64 million students/staff are physically at a school.

20% of the US population

Sports related SCA Statistics

39% cases occur <18yo

13% cases occur 19-25yo

7% cases occur 25-34yo.

Survival improves when CPR + AED use to 30-50%



Fall 2022 KHSAA

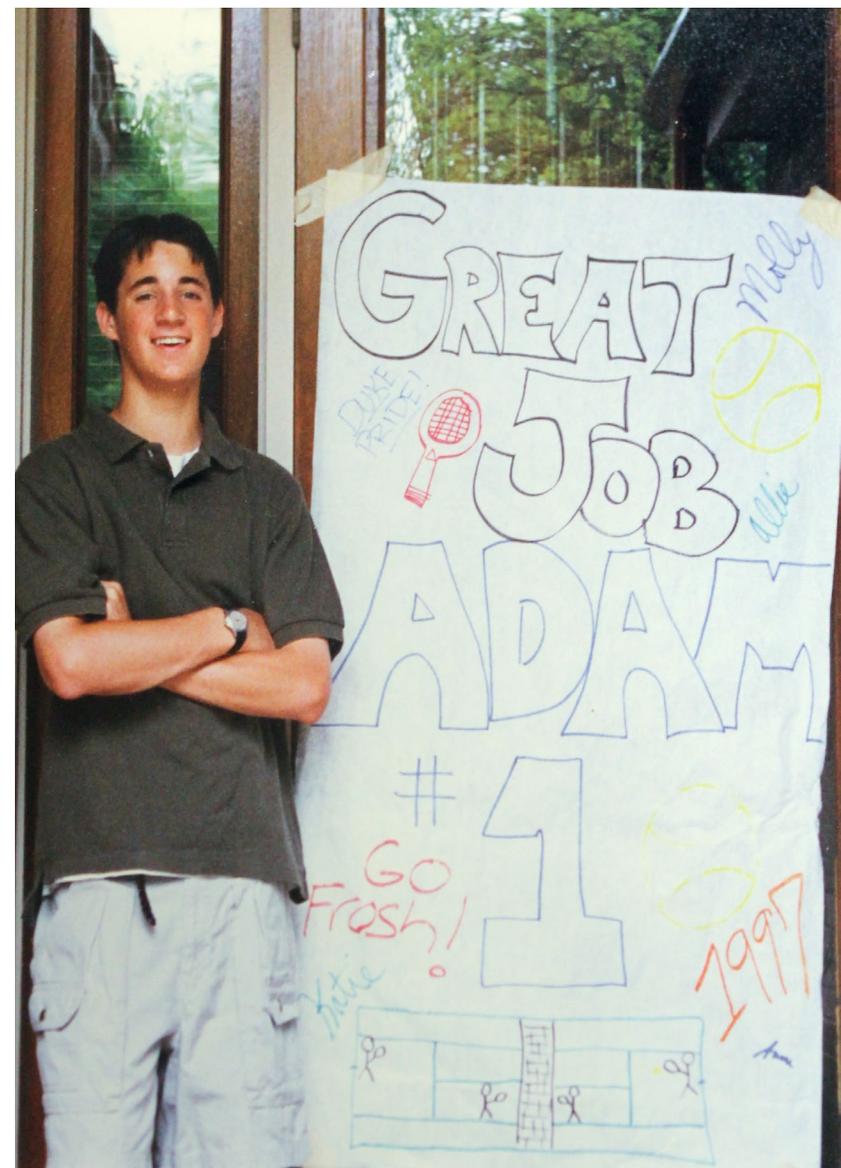
- Kentucky High School Athletic Association- nonprofit organization by Kentucky Department of Education to Manage High School Athletics in the Commonwealth.
- KHSAA Committee on Physical Education and Medical Aspects of Sports invited **Kentucky Children's Hospital** and **Norton Children's Pediatric Cardiologists** to one of their meetings
- Topic of Discussion: SCA in athletes and making schools/athletic venues "heart safe."



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SAVES LIVES

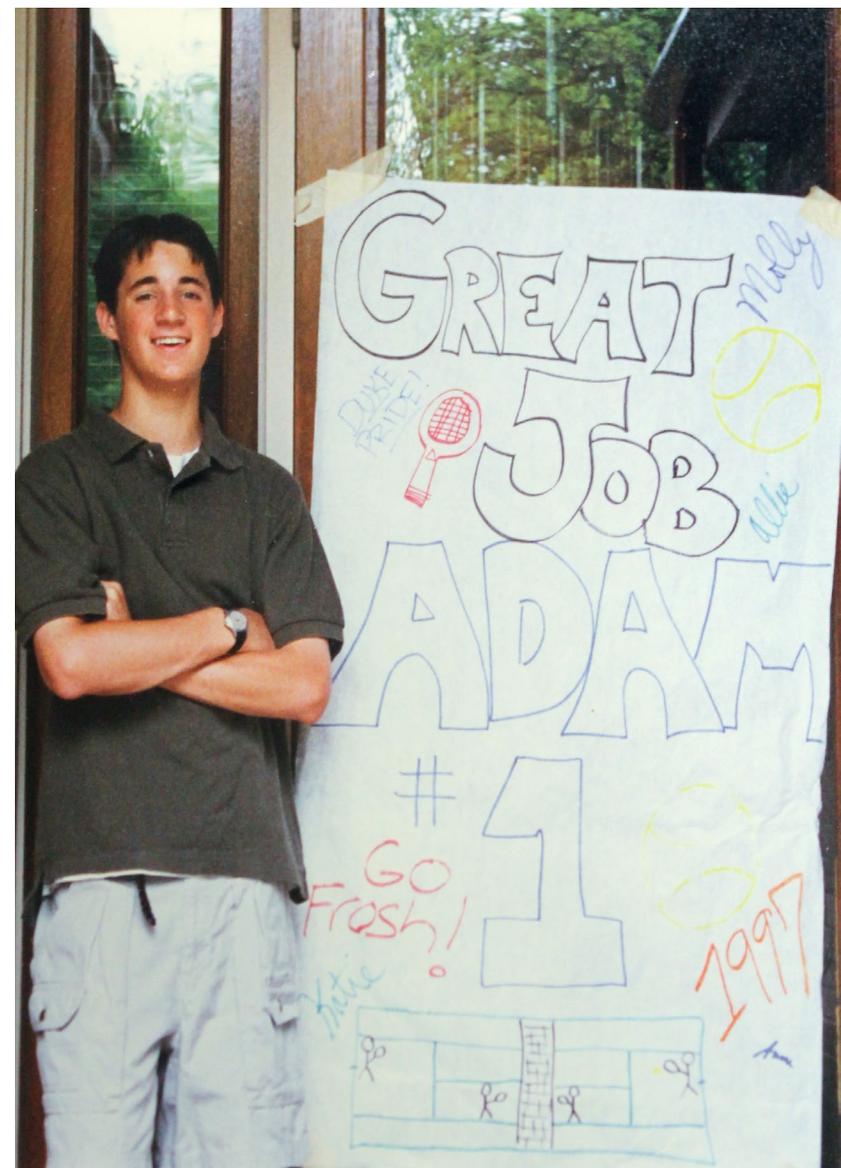
- In 1999 Adam Lemel, 17-year old, athlete collapsed and died while playing basketball
- An AED was not available
- Adam's parents created Project ADAM (Automated Defibrillators in Adam's Memory) - in collaboration with Children's Wisconsin's Herma Heart Institute



Project ADAM[®]

SAVES LIVES

- Since 2004: 4129 schools across the US have achieved Heart Safe designation through Project ADAM.
- Over 200 lives have been saved through ADAM's efforts since program was started.



Project ADAM[®]

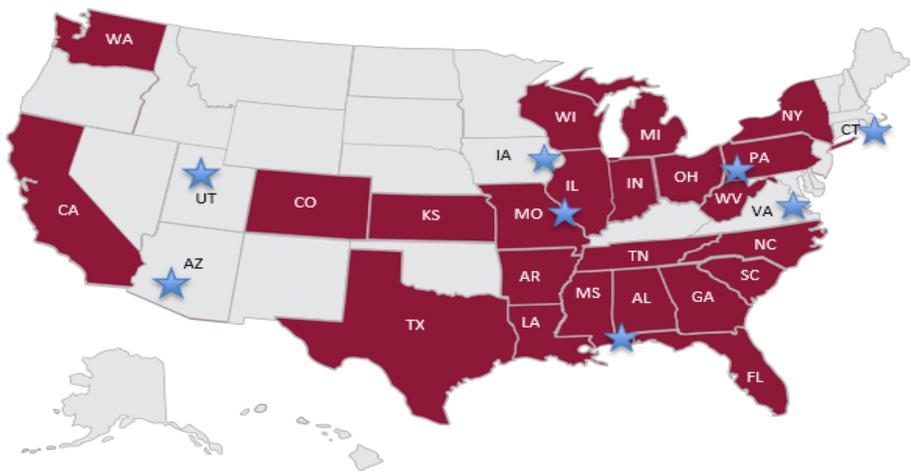
SAVES LIVES

 Herma Heart Institute	 Children's Hospital Colorado	 Cook Children's	 Arkansas Children's <small>HOSPITALS · RESEARCH · FOUNDATION</small>	 C.S. MOTT CHILDREN'S HOSPITAL <small>MICHIGAN MEDICINE</small>	 Monroe Carell Jr. Children's Hospital at Vanderbilt
 Children's Healthcare of Atlanta	 Sacred Heart Children's Hospital <small>A member of PROVIDENCE Health & Services</small>	 Children's Hospital of Philadelphia Cardiac Center	 <small>EAST TENNESSEE</small> Children's Hospital	 Children's of Alabama	 Cincinnati Children's
 NATIONWIDE CHILDREN'S <small>When your child needs a hospital, everything matters.™</small>	 UCDAVIS CHILDREN'S HOSPITAL	 Nicklaus Children's Hospital	 Ann & Robert H. Lurie Children's Hospital of Chicago	 musc Children's Health <small>Medical University of South Carolina</small>	 Texas Children's Hospital
 KU WICHITA PEDIATRICS <small>The University of Kansas</small>	 Duke Children's <small>Pediatric & Congenital Heart Center</small>	 Ochsner <small>Hospital For Children</small>	 Cleveland Clinic Children's	 Rady Children's <small>Hospital San Diego</small>	 Golisano Children's Hospital of Southwest Florida <small>LEE HEALTH</small>
 Children's Mercy KANSAS CITY	 WEST VIRGINIA CHAPTER OF THE AMERICAN ACADEMY OF PEDIATRICS	 Riley Hospital for Children <small>Indiana University Health</small>	 WMC Health Maria Fareri Children's Hospital <small>Westchester Medical Center Health Network</small>	 Children's of Mississippi <small>University of Mississippi Medical Center</small>	 Le Bonheur Children's Hospital



Project ADAM Affiliate Map 2021

Project ADAM[®]
SAVES LIVES



30 ESTABLISHED PROGRAMS **23** STATES

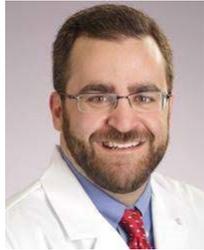
★ *USA In Progress Sites*
Canada In Progress Site; Alberta, Canada

July 2021

ESTABLISHED AFFILIATE SITES

- | | |
|---|--|
| Children's Wisconsin (& National Office) | Golisano Children's Hospital, Southwest Florida |
| U.C. Davis Children's Hospital | KU Wichita Pediatrics |
| Children's Healthcare of Atlanta | Nicklaus Children's Hospital |
| Children's Hospital of Philadelphia | Duke Children's Hospital |
| Cook Children's Medical Center | Ann & Robert H. Lurie Children's Hospital of Chicago |
| Texas Children's Hospital | MUSC Children's Hospital |
| Children's of Alabama | Cleveland Clinic Children's |
| East Tennessee Children's Hospital | Ochsner Hospital for Children |
| Monroe Carell Jr. Children's Hospital at Vanderbilt | Children's Mercy Hospital - Kansas City |
| Providence Sacred Heart Children's Hospital | West Virginia Chapter of the American Academy of Pediatrics |
| C.S. Mott Children's Hospital | Rady Children's Hospital - San Diego |
| Children's Hospital Colorado | Riley Hospital for Children at IU Health |
| Nationwide Children's Hospital | Maria Faren Children's Hospital |
| Arkansas Children's Hospital | University of Mississippi Medical Center/Children's Hospital |
| Cincinnati Children's | Le Bonheur Children's Hospital |





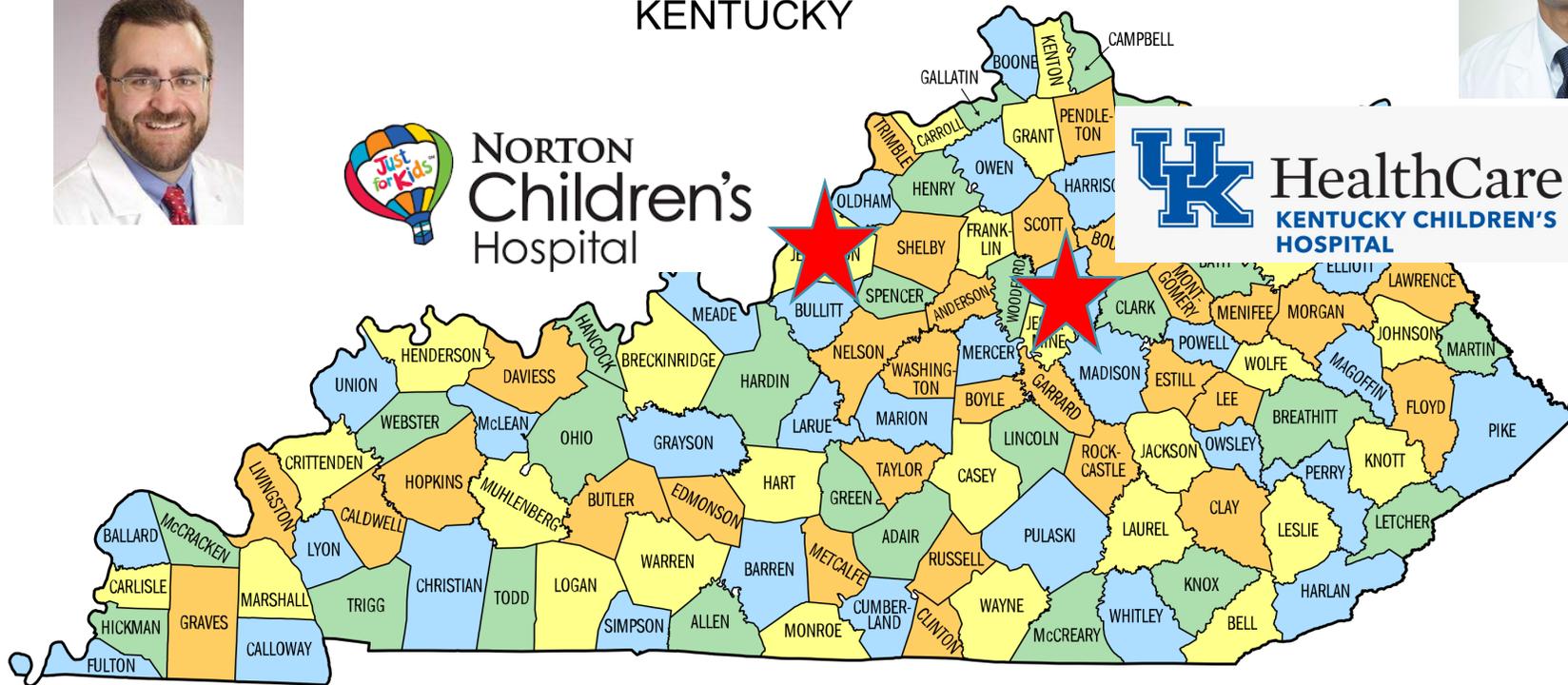
KENTUCKY



NORTON
Children's
Hospital



HealthCare
KENTUCKY CHILDREN'S
HOSPITAL



January 2, 2023- The “Damar Hamlin effect”



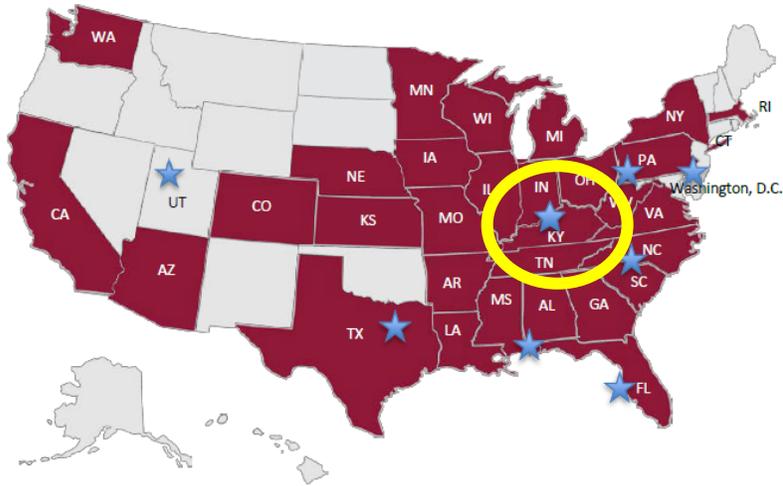
HB 331- Passed in KY State Legislature

- Requires all schools to have a portable AED in a public, accessible, well marked location in every middle and high school building
- Develop an event-specific emergency action plan for each school sanctioned nonathletic event
- Each plan to be rehearsed by simulation prior to beginning of athletic season



July 2023- KY is now on the ADAM map- Norton Children's Program will be joining soon..

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40 ESTABLISHED PROGRAMS **31** STATES

★ USA In Progress Sites
Canada In Progress Site; Alberta, Canada

Updated July 25, 2023

ESTABLISHED AFFILIATE SITES

Children's Wisconsin/National Office	MUSC Shawn Jenkins Children's Hospital
Children's Healthcare of Atlanta	Cleveland Clinic Children's
Children's Hospital of Philadelphia	Ochsner Hospital for Children
Children's of Alabama	Children's Mercy Kansas City
Providence Sacred Heart Children's Hospital	West Virginia Chapter of the American Academy of Pediatrics
Cook Children's Medical Center	Rady Children's Hospital
East Tennessee Children's Hospital	Riley Hospital for Children at IU Health
U-M Health C.S. Mott Children's Hospital	Maria Fareri Children's Hospital
Children's Hospital Colorado	University of Mississippi Medical Center/Children's Hospital
UC Davis Children's Hospital	Le Bonheur Children's Hospital
Nationwide Children's Hospital	University of Iowa Stead Family Children's Hospital
Texas Children's Hospital	Yale New Haven Children's Hospital
Monroe Carell Jr. Children's Hospital at Vanderbilt	Children's Minnesota / Children's Heart Clinic
Arkansas Children's	St. Louis Children's Hospital
Cincinnati Children's	USA Women and Children's Hospital
Golisano Children's Hospital, Southwest Florida	Children's Hospital & Medical Center
KU Wichita Pediatrics	Hasbro Children's Hospital
Nicklaus Children's Hospital	Children's Hospital of Richmond at VCU
Duke Children's Hospital	Phoenix Children's Hospital
Ann & Robert H. Lurie Children's Hospital of Chicago	Kentucky Children's Hospital



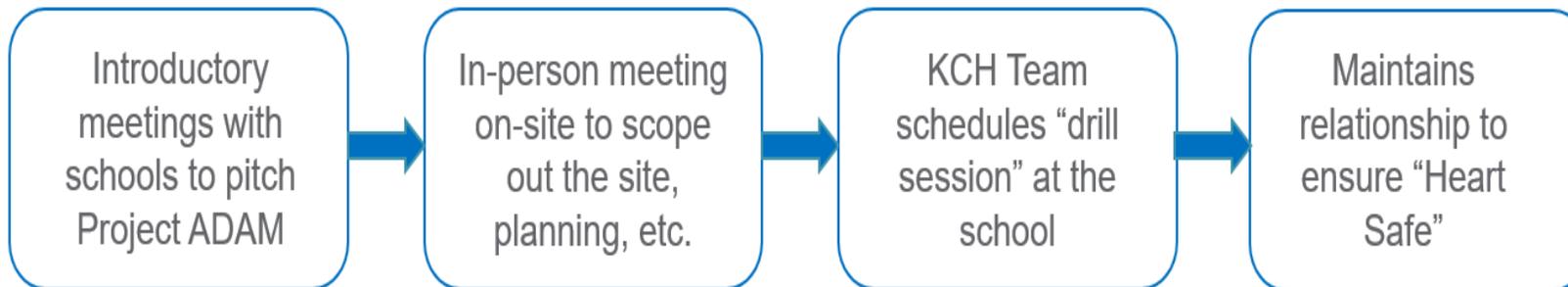


KY's own ADAM Stories

- "One Shot": Matthew Mangine Jr. Foundation
- "Cameron's Cause"



Project ADAM – KCH Approach



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Project ADAM Heart Safe School Designation Checklist.

A comprehensive school program for prevention of sudden cardiac death.

This tool will serve as a roadmap through the Heart Safe School designation process. Program quality criteria reflect recommendations outlined in the [Cardiac Emergency Response Planning for Schools: A Policy Statement](#).

Instructions:

- 1) Please fill out one checklist per school as an initial assessment of your school's cardiac emergency preparedness.
- 2) Collaborate with your local Project ADAM program site and utilize our customizable resources: www.projectadam.com/heartsafeschools.
- 3) Once all criteria are met, submit one checklist per school to your local Project ADAM representative to attain designation. Retain a copy in your school files.

Today's date: _____ Name of person completing this form: _____

Name of school: _____ Name of district: _____

Preschool Elementary Middle High School Private Other

CPR-AED site coordinator or contact person: _____

Email: _____ Phone: _____ Main school phone: _____

AUTOMATED EXTERNAL DEFIBRILLATORS (AEDs)		YES	NO	NEED HELP	COMMENTS
1	The placement of the AED(s) makes it accessible from any part of the building or campus within 2-3 minutes.				
2	AED(s) have clear signage.				
3	The AED(s) is checked for performance readiness at least monthly, or per manufacturer's directions and documented each time.				
4	We keep a first responder kit near or attached to the AED which includes: CPR barrier device, scissors, gloves, razor, and towel.				
CARDIAC EMERGENCY RESPONSE TEAM		YES	NO	NEED HELP	COMMENTS
5	A CPR-AED site coordinator is identified, who oversees the CPR-AED program activities and training.				
6	There is a designated cardiac emergency response team comprised of at least 10% of staff or 5-10 people.				



HB 331 Deadline- July 1, 2025 for schools in KY to comply (Having AEDs, a cardiac readiness response plan, doing annual drills).

Since 7/2023: UK Project ADAM Team

- Engaged local Lexington Schools and had on site visits
 - Lexington Christian Academy- Rose and Emmanuel Campuses
 - Frederick Douglass High School
 - Upcoming school visits- Christ the King



Project ADAM – KCH Committee

- Dr. Shaun Mohan
- Dr. Callie Rzasa
- Laura Murphy, APRN
- Annie Sketch, APRN
- Shannon King, APRN, DNP
- Liv Prather, APRN
- Johnna Forman, APRN

- Morgan Dezarn
- Lori Donaldson
- Christina Briggs
- Madison Baugh
- Hilary Brown
- Tanya Edwards
- Jenni Jinright
- Alyssa Simon



Barriers and Future Initiatives

- HB 331 has no provision/instructions on funding for AEDs and helping schools become “heart safe”
- Philanthropy efforts and collaboration with local AHA and community organizations (“One Shot” and “Cameron’s Cause”).
- Healthy KY Initiatives- UK Healthcare – targeting underserved populations throughout the enterprise
- Working with Norton Children’s Project ADAM program to serve the entire commonwealth





Questions?