

## **Notes to accompany School Nurse PowerPoint Presentation**

### **1. Project A.D.A.M.**

Tennessee is an outreach program of East Tennessee Children's Hospital. A.D.A.M. is an acronym for Automated Defibrillators in Adam's Memory and began in memory of Adam Lemel, a 17 year old athlete who died of Sudden Cardiac Arrest on the basketball court, in a school without an Automated External Defibrillator or AED. The goals of Project A.D.A.M. include helping schools become equipped with AEDs, supporting training for school staffs in CPR and AED use, and assisting with the development of school PAD (Public Access to Defibrillation) programs which include staff awareness training and AED/CPR drills. While Adam's story ended tragically, over 100 people, like Claire Crawford in the following video, have been saved, thanks to training similar to what we are doing today.

### **2. (Claire Crawford Video)**

Claire's school had an AED that was properly monitored and maintained, a response team trained in CPR, and a written, practiced plan. We, too, are making sure anyone who suffers Sudden Cardiac Arrest in (our school) has the best possible chance of having an outcome like Claire.

### **3. (It's The Law)**

In 2016, Tennessee mandated annual staff awareness training for all school personnel in AED use and the school's emergency medical response plan. This law requires all schools with AEDs to teach their use to all school personnel. This training also requires a review of (our school's) medical emergency response plan, review of the location and use of the AED(s), and introduction of the school's response team. The law also requires at least one AED/CPR drill be performed with students present, annually. An earlier law requires expected users of the AED to receive an American Heart Association or equivalent nationally recognized course in AED and CPR use.

### **4. (Startling Stats)**

If Adam's and Claire's stories and the state of Tennessee haven't convinced you, here are some compelling statistics. Students, faculty, staff, parents, grandparents, day care workers, basketball teams, scout troops... many folks use our school building(s) for many activities besides school. Our schools are the heart of our communities. By being informed ourselves and raising awareness among those who use our building, we can expect to dramatically reduce the rate of Sudden Cardiac Death.

SCA is the #1 killer of high school athletes on campus and death can often be prevented.

2-3 of the 1000 people per day suffering from SCA are children. More than likely, it will be an adult – a teacher, parent, volunteer or other adult visitor - who would be stricken.

Survival rates soar when a plan is in place and the plan has been practiced.

Competitive athletes are at a 3x greater risk... but it can happen to anyone, any time, any place.

## **5. (Impact)**

The impact of a death on school grounds is difficult to measure but we know it would be devastating to the entire community. The victim as well as the observers, particularly children, should be considered. Our drills consider management of bystanders, as well as the victim.

It will help to first understand what Sudden Cardiac Arrest is. The following video features pediatric cardiologists describing what it is, what may cause it, and how to recognize it.

## **6. (Understanding Sudden Cardiac Arrest Video)**

Sudden Cardiac Arrest (SCA) is different than a Heart Attack. There is usually little or no warning with SCA.

## **7. (What is Cardiac Arrest?)**

So again, the cause is often undetermined and it is a LIFE AND DEATH situation. Without treatment, the individual will die within minutes. The average EMS response time is 8-10 minutes; the brain can only wait 3-5 minutes before beginning to lose function.

It is CRUCIAL to have an AED that is properly maintained and a team who knows how to use it.

## **8. (AHA Chain of Survival)**

The American Heart Association suggests a Chain of Survival in the event of Sudden Cardiac Arrest. Remembering these four things will make the difference in life and death for many. EARLY RECOGNITION, 9-1-1, CPR, and the AED will give victims the best hope of surviving Sudden Cardiac Arrest. There are only two things we are looking for in victims of SCA: Unresponsiveness and Not Breathing Normally. They may not be breathing at all, or they may be gurgling, gasping, or appear to be having a seizure. This is not normal breathing. It may be a sign of Sudden Cardiac Arrest. Anyone who finds a person who is unresponsive and not breathing normally should begin our Medical Emergency Response Plan.

Now we'll talk about the different aspects of a good response. This next video is a dramatization and is a guide for us. We may see areas that need to be adjusted because of our size, the way we communicate, and the layout of our building.

## **9. (A Perfect Response Video)**

A perfect response...

## **10. (Begins with a Perfect Team)**

A perfect response begins with a perfect team. Our school response team is made up of: (a representative from each corner of campus, the school nurse, coach(es) or PE teachers, your S.R.O., office personnel, any one else you might think would be helpful). Will the emergency response team please stand?

Everyone needs to know who is on the response team. If you are a neighbor of one of these people and they have students in their care, you will need to take care of their students. You will all need to keep students inside the classroom and out of the hallway until you get an all-clear from the office. This is a soft lockdown and not only protects the victim, but allows EMS to come and go without interference. If you are trained in CPR and close to the victim, go and see if you can help with CPR until the team members arrive and take over.

Team members may be assigned specific duties, such as notifying the team, calling 9-1-1, bringing the AED, waiting on the ambulance, starting CPR; however, it is the responsibility of all team members to make sure these things have been done. Our plan is this: (you may modify as needed, but this is a generic description)

If you find a victim who is unresponsive and not breathing normally, you have made sure the scene is safe, you have assessed them by tapping and shouting, contact the front office and notify them. You may remember to say "Code Medical" or you may just remember to say you need the emergency response team and the AED. Get help. Attend to your victim, while the front office makes an announcement to the entire staff that the Medical Emergency Response Team should report to Room \_\_\_\_, Ms. \_\_\_\_'s Room, \_\_ hallway (give as much information as your particular school needs to easily identify where the victim is). If you are near the victim, remove any by-standers who are not part of the rescue from the scene. If you know CPR, begin while you wait for team members and the AED to arrive. Continue CPR until the AED has been turned on and the pads are ready to be placed on the victim's bare chest.

### **11. (CPR)**

Please raise your hand if you are current in your CPR training. Again, anyone who is trained in CPR is encouraged to begin CPR if you are the close to the victim. CPR training for our school staff is provided by \_\_\_\_\_. Our next training session will be \_\_\_\_\_. There will be an opportunity to sign up if you are interested.

### **12. (AED)**

There are many brands of AEDs. Ours is a \_\_\_\_\_. (If you have an AED trainer, demonstrate, but you may want to show the real machine up to the point before taking the pads out). If you can remember where it is located: \_\_\_\_\_, and how to turn it on: \_\_\_\_\_ (demonstrate), you can use it to save a life. The only decision you will have to make is to retrieve the AED, turn it on, and listen to the instructions. It will make all the decisions and it will not hurt anyone.

{Demonstrate items in your ready-kit (scissors, razor, gloves, mask, towels) and how to attach child pads for anyone under 55 lbs. or 8 years of age}. You will need to take pads from (usually) a foil pouch, remove plastic backing and place exactly as shown on the pictures.

Once the pads are properly attached, the machine will instruct you to not touch the victim and will analyze the heart rhythm. It will only shock a heart that will be helped by a shock. If a shock is advised,

do not touch the victim. The machine will either deliver the shock automatically or you will need to punch a button as directed by the machine. The machine will tell you when it is safe to touch the victim. As long as the victim is unresponsive and not breathing, whether a shock was delivered or not, you should continue CPR. Most machines have CPR prompts, including a metronome that counts the beat. Some machines have a sensor in the pads that measure your compressions and tell you to push harder. Every two minutes, you will be instructed to stop CPR so the machine can analyze the heart rhythm. Change CPR providers every two minutes, if possible. Continue in this manner as long as the victim is unresponsive and not breathing normally. You may stop CPR only if: the victim recovers, someone comes to relieve you, EMS arrives, or you physically can't continue. Once an AED has been attached, do not remove it, even if the victim recovers. Only EMS should remove the pads, once attached. The AED should be taken with the victim to the hospital by EMS. There is a chip which can be read by a computer and may help make a diagnosis. Pads should not be re-used.

We are covered under the Good Samaritan Law as long as we are acting to the best of our ability and training to do the best for the victim, with no malicious intent or expectation of financial reward.

Ok! We have assessed the victim, called for help, started CPR, attached the AED, listened to the voice instructions, made sure 9-1-1 has been called, removed bystanders from the scene and the hallways, and continue in this manner until EMS arrives. We will continue to compress the chest until instructed to move away by EMS.

We are ready, now, to practice with a drill!

### **13. (Let's Practice!)**

For our drill, everyone will return to your classroom or area where you are most likely to be during the day. We will place the manikin (victim) in a surprise location, so all of you will need to consider what you will do if it happens to be in your classroom or area. You will assess the scene, assess the victim, call via intercom or radio to the office, if no response yell for help. If you know CPR begin. The office will announce "This is a drill. There is a "Medical Emergency" in "room \_\_, Mr./Ms.\_\_'s room, etc.). The Medical Emergency Response Team report to Room \_\_\_\_." Repeat. The office will call 9-1-1, direct someone (often the SRO) to await arrival of EMS. The office will pull emergency information, if available.

The team will go immediately to the location of the victim, begin CPR, attach the real AED from it's wall-mounted case, allow the alarm to sound so all know it has been fetched (we will substitute with the AED trainer when the real AED arrives), listen to instructions.

We will time the event. Remember this is NOT A TEST! Consider it as an exercise that will potentially help us save a life. There will probably be things we need to think about doing differently, but we will also find we are better than we'd have imagined in a crisis! We will meet (at a later time) to review how we did.

Note to presenters: This is the end of the presentation. It is important to inform the staff, either at a meeting following the drill or by email, of the drill's outcome. A "drill record" form, as well as a Public Access to Defibrillation Program Implementation Checklist follows and is for the school's PAD coordinator's use.

**14. 15. 16.**

These slides are for the school's PAD Coordinator's use. They may be informative to share with the response team, but it is not necessary to review these with the entire staff.

**17. (How?)**

As we make our school communities aware of the safety of using an AED and the importance of knowing the Chain of Survival and CPR, this information and these skills will trickle out into our larger communities. Thank you for your interest.