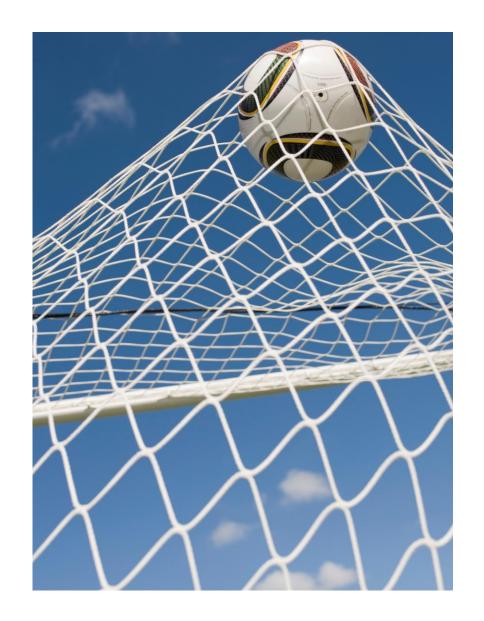
# Community Emergency Preparedness Program Hampton Soccer Club

MEGAN TOMAINO, MPAS, PA-C
UPMC PASSAVANT DEPT. OF ANESTHESIA







# Goals

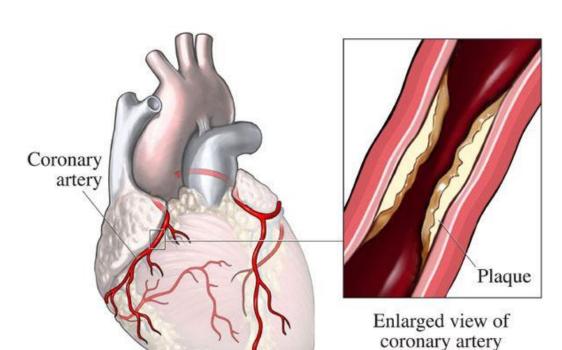
- Learn how to respond to cardiac emergencies, perform hands-only CPR, and use an AED
- Learn how to stop bleeding, use an Epi-Pen
- Learn what to do with a head injury, seizure, diabetic emergency, broken bone, nosebleed, shock
- Discuss how to form a Team safety plan and assign roles during an emergency

# Good Samaritan Act

42 PA CSA § 8331-8338

- Covers citizens acting in *good faith* to help someone who cannot help themselves.
  - CPR
  - AED
  - Basic first aid
- If the victim is unconscious and cannot give consent to care, proceed with helping assuming they would want resuscitated until you learn otherwise (such as in cases of DNR)
- > If the victim is conscious, you need consent to help the person
- If the victim is a minor and the parent/guardian is not available, assume the parent guardian would want care rendered and proceed with helping

## Heart Attack



- Plumbing issue with the blood vessels that supply the heart muscle with oxygen
- MI occurs from complete or partial blockage in the vessel
- Blockage can be from plaque build-up over time or sudden blood clot
- The result is decreased blood flow and oxygen to heart muscle
- Prolonged blood and oxygen deprivation to the heart muscle causes muscle injury and possible muscle death

# Warning signs of a heart attack



## Stroke

> Plumbing issue with the blood vessels supplying the brain

# B.E. F.A.S.T.

#### **B**ALANCE

 Sudden loss of balance or coordination

#### **E**YES

 Sudden blurred, double, or loss of vision

#### **FACE**

- Dropping, numbness of the face
- Lopsided smile

#### **A**RM

 Weakness or numbness of the arms or legs on one side of the body

#### **S**PEECH

 Slurred speech, unable to speak, or difficult to understand

#### TIME

- Time to call 911
- Time last known well/normal

### Sudden Cardiac Arrest

- > An electrical issue with the heart
- Normal heartbeat and circulation suddenly stops
- No signs of life are present- victim is unresponsive
  - breathing will be absent or irregular
- Sudden cardiac arrest will lead to death unless actively reversed

- Sudden cardiac arrest is different from a heart attack
  - Heart attack: victim is still conscious and responsive, but may be in distress
  - > SCA: victims are unresponsive

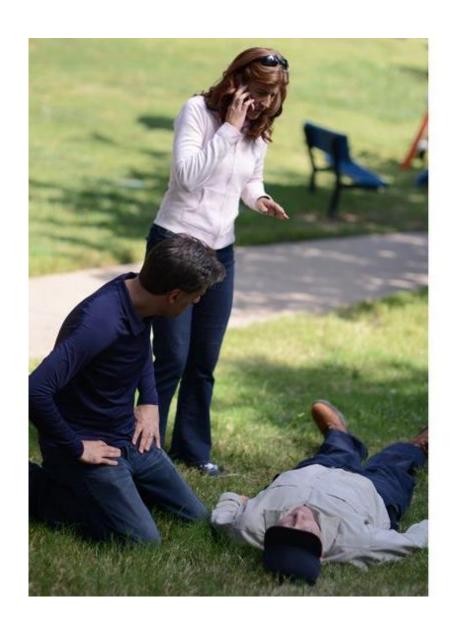


## Sudden Cardiac Arrest

Why are we talking about Sudden Cardiac Arrest?

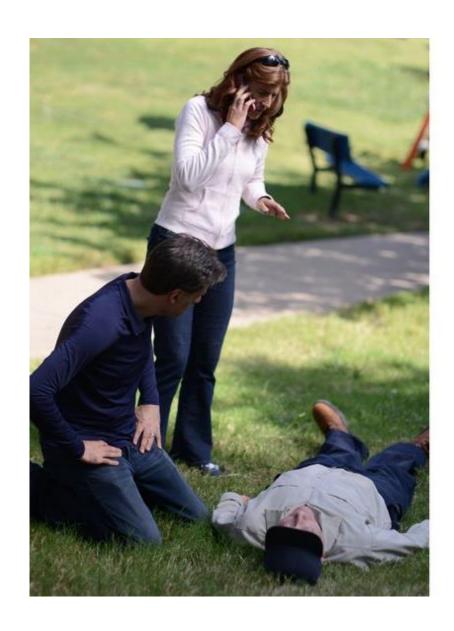
- > Children and Teens: SCA may occur during an athletic event due to congenital heart problems or chest trauma.
  - ➤ Often little or no warning.

- > Adults: SCA may occur to adult coaches, referees, or bystanders on the sidelines
  - > Adults may show signs of distress if they are having a heart attack before SCA



# What to do if you witness Sudden Cardiac Arrest

- ➤ Ensure scene safety
  - > Send players to the bench
  - Assign a parent/coach to keep the kids together, away from collapsed person

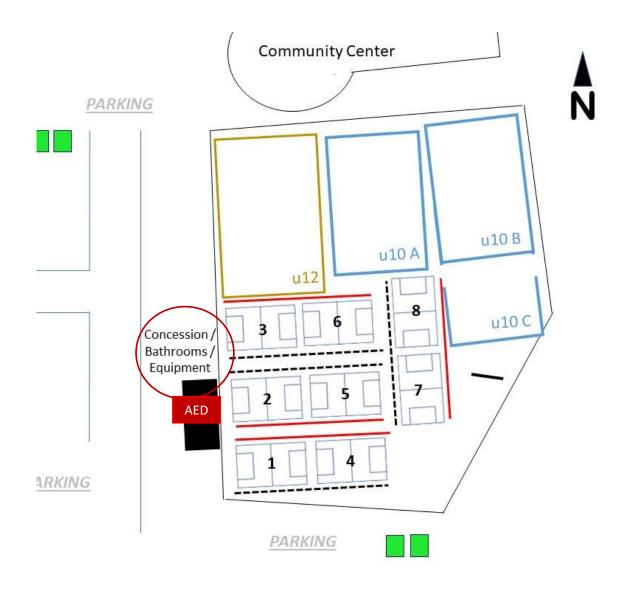


# What to do if you witness Sudden Cardiac Arrest

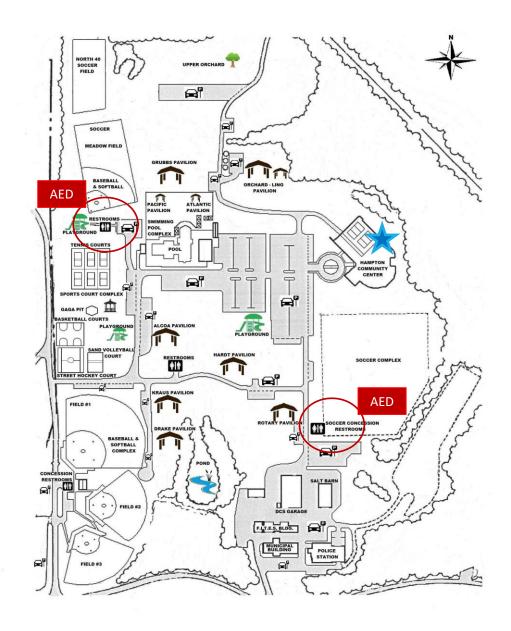
- > Shout "Are you OK?" and tap vigorously on the shoulder area
- ➤ If no response, send a parent or coach for the AED
- ➤ Check of breathing and a pulse. If no pulse or breath, immediately have a parent or coach call 911.
  - > Send another parent to flag down the ambulance
- > Begin compressions, call for a second rescuer to prepare

# Before any emergency: Have a plan

- Discuss injury plans with players and parents at the beginning of the season
  - > Players should be instructed to return to the bench if the referees pause the game for an injury
  - ➤ Let parents know how they can help if a player or adult is injured or having an emergency. Having a role/task helps reduce panic
- Know where AED and first aid kits can be accessed.
  - ➤ Make sure all coaches on your team are aware of these locations



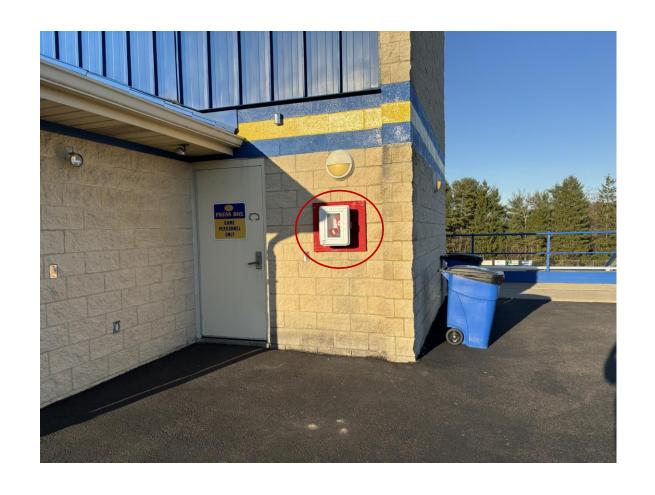
HAMPTON SOCCER FIELDS: AED IN THE MEN'S BATHROOM



MEADOW FIELD: AED IN THE BATHROOM



MEADOW FIELD: AED IN THE BATHROOM



FRIDLEY FIELD: AED BY THE DOOR TO THE PRESS BOX



FRIDLEY FIELD: AED AT THE

FIELD HOUSE



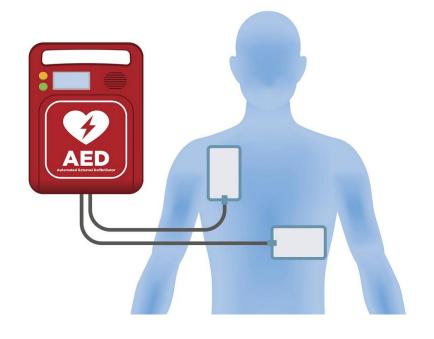
# Calling 911

- > Stay on the phone and follow all instructions while you wait for EMS to arrive
- Send a parent to flag down the ambulance and direct EMTs to the victim
- > DO NOT drive victim to the hospital on your own. EMS personnel are:
  - > Trained to assess patients
  - > Equipped with technology and medication to begin treatment
  - ➤ Can communicate with ED providers to initiate hospital protocols before victim arrives (ex: get cath team/lab prepped, get stroke team/CT scan ready)

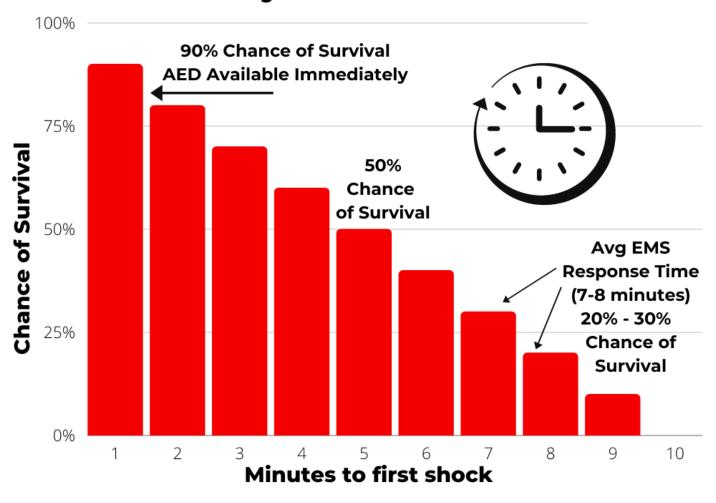
# AED (Automatic External Defibrillator)

#### Easy to use- AED talks you through the steps!

- > Turn on AED
- >Apply both pads to person's bare chest ASAP
  - ➤ Upper right chest
  - ➤ Lower left chest/side
- > AED will analyze heart rhythm
  - > AED will verbally instruct to shock or resume compres



#### **Every Minute Counts!**



**AED** 

# Chest Compressions

- > Lay victim on a flat surface
- > Place hand on center of chest between the nipples
- Place second hand on top of first hand
- Lock elbows
- > Push down with full body weight, depth at least 2 inches
- > Release and allow full recoil of the chest
- Continue compressions at a rate of 100-120 per minute
- Check pulse after 2 minutes and switch rescuers







Adult
About age 12 years or older



Child
Between the ages of 1 and 12 years



Infant Younger than 1 year

CPR Ch

Adults: 2 hand compressions

**Children:** 1 or 2 hand compressions, depending on

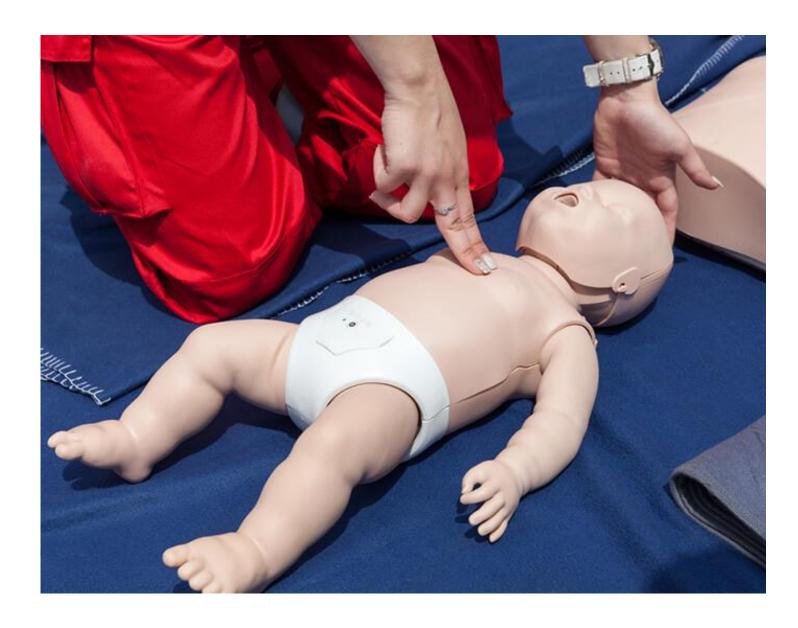
size

**Infants:** 2 finger compressions



# Child CPR

- > Use 1 hand for smaller children
- Use 2 hands for larger children and teens



# Infant CPR

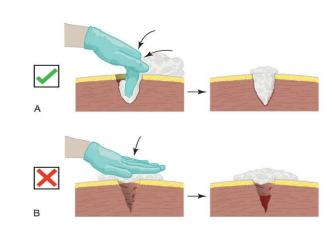
➤ Use 2 fingers for compressions

# Non-Cardiac Emergencies

- Bleeding
- Head Injuries
- Anaphylaxis (bee stings)
- Nose Bleeds
- Diabetic Emergencies
- Broken Bones
- > Shock

# Bleeding Injuries

- Determine: Is it life-threatening bleeding?
  - > Life threatening bleeding: large volume or pooling of blood, dark colored blood, spurting blood
  - > Same steps as SCA: assign roles, get first aid kit, call EMS
- > All injuries, any place on the body: "Pack and press"
  - Pack wound with gauze
  - > Apply pressure until EMS arrives
- > Injuries to arms and legs: tourniquet
  - "High and Tight", but not over a joint
  - do not remove



# Head Injuries

- Determine: Is the person conscious?
  - > Unconscious: call EMS, check breathing and pulse. Do not move person unless they are in danger
  - > Conscious: player should be removed from play until they are evaluated (USA Soccer rule)
    - ➤ Player should be evaluated by a health care professional (USA Soccer Rule)

## Seizures

- > Electrical storm in the brain
- > Can have several triggers, including head trauma
  - > Other common triggers: heat, dehydration, fatigue, medication, stress, low blood sugar, epilepsy
- Partial seizure
  - > Shaking or weakness of one side of the body, staring, strange eye movements
  - > Person may remain conscious with a partial seizure
- Generalized seizure
  - > Person loses voluntary control of their body, becomes unconscious
  - Might have shaking movements, drooling, grunting, eye blinking

### Seizures

#### Do:

- > Note the time of onset
- Get the person safely to the ground
- Remove dangerous objects
- Roll the person to their side in case they vomit
- Stay with the person and send a parent/coach to find family
- > Call EMS

#### Do NOT:

- Do not hold the person down
- > Do not put anything in their mouth

# EPI-Pens for Severe Allergic Reactions

- Blue to the sky, Orange to the thigh!
  - > Remove blue safety cap
  - Firmly jab orange tip to outer thigh, hold in thigh until you hear a click (at least 3 seconds)



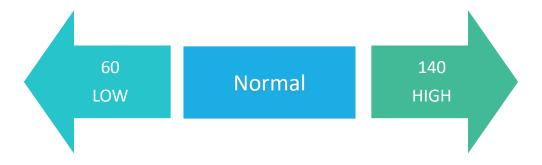


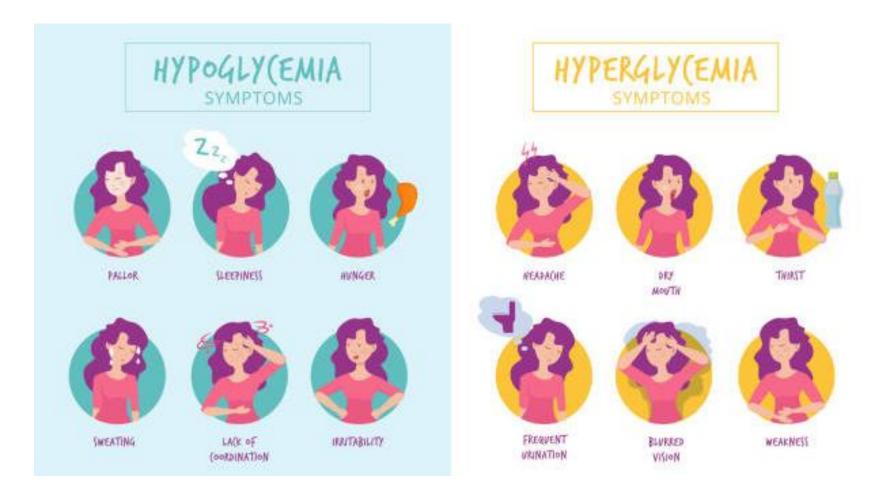
### Nose Bleeds

- > Can occur from trauma or spontaneously
- > Bleeding can look profuse and alarming, but rarely leads to a significant blood loss
- > Keep player as calm as possible -> adrenaline increases blood pressure, increases bleeding
- > Hold pressure, apply ice at the bridge of the nose
- > If concern for a broken nose or deviated septum, player should go to the ED

# Diabetic Emergencies

- > Helpful to know if your players have diabetes and any "rescue plan"
- > Juvenile diabetes typically type 1, adult-onset diabetes typically type 2
- > Type 1 diabetes is very different from type 2, only treatment for type 1 is insuling
- > Blood sugar highs and lows, triggers can be less predictable in type 1
- > Emergencies can happen from both LOW or HIGH blood sugar



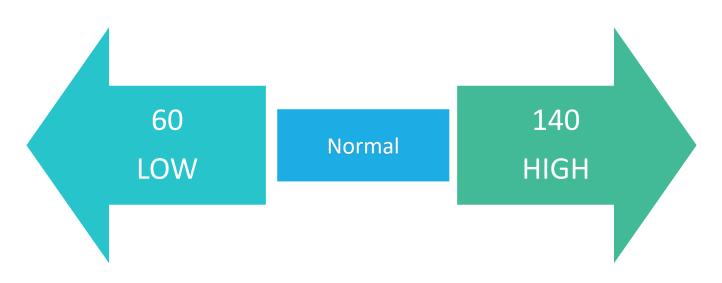


Diabetic Emergencies

# Diabetic Emergencies

- Low blood sugar: **glucose** in first aid kits, contact parents, consider EMS
- > High blood sugar: needs treatment ASAP, typically insulin. Call parents, consider EMS

> If player becomes sleepy, uncoordinated, difficult to arouse: CALL EMS





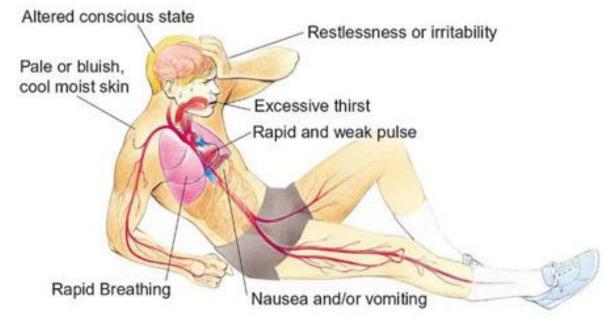
Glucose gel packet

### Broken Bones

- ➤ If you suspect a fractured bone, pull player from the game
- ➤ Player should seek emergency treatment. EMS optional depending on level of pain, distress, type of fracture
  - ▶ leg or spine fracture -> EMS
  - ➤ <u>If spine fracture is suspected, DO NOT MOVE the player.</u>
- > Splinting materials available in the first aid kit

# Shock

- Shock can occur from diabetes, heart problems, anaphylaxis, severe trauma, bleeding, and severe dehydration
- A person going into shock is in distress, sometimes unconscious
- ➤ Always call EMS, support the victim, and prepare to begin CPR/AED
- During shock, blood shunted to vital organs, away from arms/legs. Rescue blankets in first aid kit to keep victim warm



# Assigning roles during an emergency

#### Coach(es)

- > Will be assessing, triaging the injured player
- Could potentially be the person initiating compressions

#### **Parents, Assistant Coaches**

- ➤ Get players to the bench, keep them away from the injured player or person
- > Wait for direction from head coach, referees
  - > Do not crowd around an injured player
- Get the AED or first aid kit
- ➤ Call 911 if instructed to do so by the coach
- ➤ Flag down the ambulance and direct EMS to the injured player or person
- Prepare to become a second rescuer if compressions are needed

# Learn about your team, have a plan

- Ask about any allergies and if your player carries an EPI-Pen.
- Ask parents if there are any medical conditions you should be aware, such as diabetes, asthma, or epilepsy.
  - If a player has a medical condition, is there a rescue plan if they suddenly become ill during practice or a game? Do they carry necessary medications, such as a rescue inhaler?
- Discuss injury event plans with players and parents at the beginning of the season
  - > Players should be instructed to return to the bench if the referees pause the game for an injury
  - ➤ Let parents know how they can help if a player or adult is injured or having an emergency. Having a role/task helps reduce panic
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