

# *AED Training Workshop*



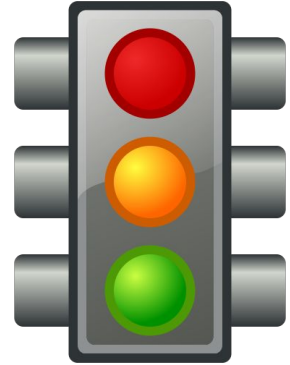
**Marcy A. Mullen, MSED, MPH, PhDc, EMT**

# AGENDA

- Overview of CA laws: Civic Duty, Good & Bad Samaritan, AED mandates
- Local stores and businesses that have installed AEDs onsite
- The truth behind AEDs on TV (Grey's Anatomy, Chicago Med, etc.)
- Differences between “automated” and “manual” units (aka, ‘crash cart’)
- How the device works and the cardiac emergencies that require one
- Inherent risks and dangers of improper or negligent use
- Live demonstration and mannequin practice



# “*Coulda, Shoulda, Woulda*”



## 1. *CAN YOU?*

- Laws that mandate, or prohibit?

## 2. *SHOULD YOU?*

- Ethics - all about the patient
  - autonomy, justice, beneficence, nonmaleficence

## 3. *WOULD YOU?*

- Morals - personal decisions

# California: **GOOD** Samaritan Law

**HS 1799.102** - “No person who, in **good faith** and **not for compensation**, who renders emergency or non-emergency medical care at the scene of an emergency shall be held **financially** responsible for any **civil** damages that result from any **act** or **omission** of care.”

**\*In 2000, President Clinton amended the law to include the use of an AED.**

**NOTE: This law protects laymen 24/7/365 and “off-duty” medical providers.**

- 1. Expressed/Implied consent is required**
- 2. No monetary gain/benefit**
- 3. 26 years-old, or older (if possible)**
- 4. Sound mind & body**
- 5. Provision of care is within limits of applicable training**
- 6. Rescuer cannot have caused, or contributed to, the medical issue**
- 7. Care is non-malicious, non-violent, and non-negligent**
- 8. No “on-duty”, licensed, or certified medical professional has yet arrived**



# *California: **BAD** Samaritan Law?*

**California residents do NOT have a legal duty to rescue, help, or assist during a medical emergency UNLESS acting as an “on-duty”, licensed, or certified medical professional.**

*The **ONLY** ‘duty to act’ that currently exists in CA is the ‘upstander’ law for crimes against children, the elderly, or those involving sexual assault.*

# California: Cell Phone Laws

*Freedom of Expression, even when coupled with an Individual's Right to Personal Property, RARELY (if ever) supersedes a Patient's Right to Privacy... especially during a medical emergency.*

**NOTE: Even if consent is expressed or implied, it refers to care and does not include photographs, audio or video recordings.**

- PEN CODE 632:** CA is a “two-party” / “all party” consent state.
  - *Photographs and video recordings are legal, but unethical.*
  - **Audio recordings are both illegal and unethical.**
- CIV CODE 56.10:** CA CMIA (confidentiality of medical information act) **applies to all citizens** (similar to HIPAA for healthcare providers).
- AB 2655 (“The Kobe Bryant Law”):** right to privacy after death, especially when preceded by a medical emergency; **law aims at ‘first responders’ (including GS)**



# *California:* **Do Not Resuscitate**

- Legal document developed by state AMA & EMS authorities
- Varies by state, and country; may be invalid when traveling
- Applicable when unresponsive, pulseless, and not breathing
- Different from POLST (physician orders for life-sustaining treatment)
- **Unless specifically stated, use of an AED does not apply**
- Must be authorized, witnessed (by 2), and tangible
- Can only be validated by EMS personnel
- Good Samaritans are usually exempt
- Negates organ/tissue donation

# California: AED Laws

**HS 104113; HS 116045; HS 1714.21; HS 1797.196; HS 19300** - Assembly buildings with 300+ capacity; Business, educational, institutional, mercantile, or residential buildings, and transportation environments (airplanes/airports, trains/train stations) with 200+ capacity.

EX: Big Box Stores (Costco, Sam's Club, IKEA, Walmart, Target, Home Depot, Lowe's); Schools, Colleges/Universities; Libraries; Gyms/Health Clubs, Public Pools, & Sport Complexes; Hotels/Motels (depending on size); Multi-Provider Medical Facilities

**NOTE: These laws only identify where AEDs must be located.**

**They do NOT specify who is required to operate them OR mandate any specific training!**

**THUS, those who operate an AED should be properly trained on how to use it. This includes the "on duty" pharmacist, store manager, a supervisor, a 'qualified' Good Samaritan, etc.**

**IF INSTALLED, IT MUST BE USED!**

- 1) Survival rates are significantly better than CPR alone.
- 2) The liability for not using one is HIGHER than using it improperly.



# PulsePoint AED

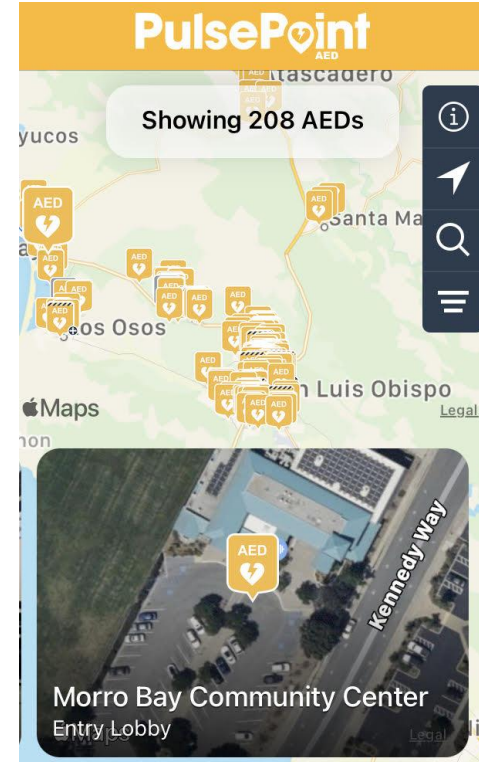
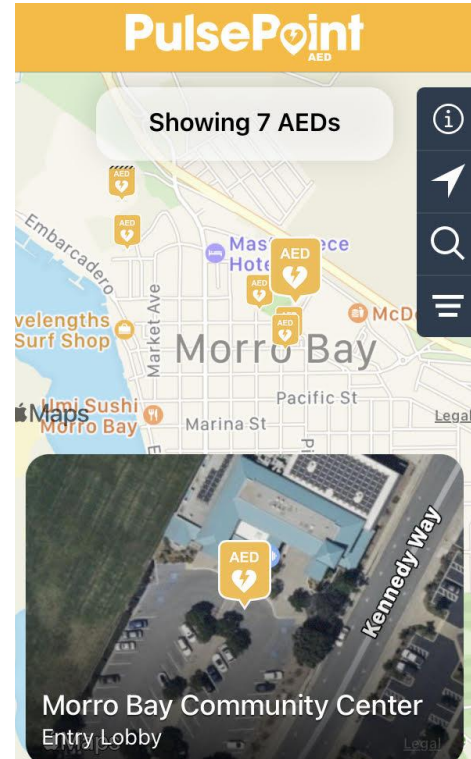


**PULSEPOINT AED**

When a cardiac emergency strikes, finding an Automated External Defibrillator (AED) can help save a life. But that takes knowing where AEDs are located.

PulsePoint AED lets you report and update AED locations so that emergency responders, including nearby citizens trained in CPR and off-duty professionals such as firefighters, police officers, and nurses, can find an AED close to them when a cardiac emergency occurs.

Describe the location, snap a picture, and the information is stored for local authorities to verify. After that, the AED location data is made available to anyone using the PulsePoint Respond.



# *TV Trivia*

1. AEDs are frequently shown on medical dramas such as *Grey's Anatomy*, *Chicago Med*, and *The Good Doctor*.
2. A 'heart attack' (MI) is corrected with a defibrillator.
3. A 'flatline' (asystole) is corrected with a defibrillator.
4. Defibrillator paddles are rubbed together just prior to use.
5. Defibrillator paddles are placed on the victim's chest in parallel (one to the left, and one to right of the heart).

# Automated Defibrillators (AEDs)





# *Manual Defibrillators*



# Compare & Contrast

## Manual

- Separate EKG unit
- On/Off switch
- Metal-bottomed paddles
- Requires conductive (protective) gel
- Pre-set Amps
- Programmable Joules
- Can be used for multiple cardiac Dx
- Device permits “stacked shocks”
- Often used in conjunction with Rx
- Slightly more effective due to continual medical evaluation, constant visual assessment, minimal CPR interruptions, and repeated pharmaceutical intervention (if necessary)

## Automated

- Built in EKG monitor
- On/Off switch or Pad removal (varies)
- Pre-Gelled Pads
- Pre-set Amps
- Pre-set Joules
- If ‘shockable’, one shock every two minutes for a maximum of five
- Shock button illuminates, with an alarm, for ~ 5 seconds
- Push button and immediately release
- Cannot shock a ‘non-shockable’ rhythm
- Never remove pads, even if patient gains consciousness
- Never turn off device
- EMS will disconnect pads from AED, to allow transport with the patient

**CURRENT** = *RATE of FLOW of ELECTRIC CHARGE*

- “Power”
- Measured in Amperes (amps)

**VOLTAGE** = *ENERGY*

- “Work” or “Pressure”
- Measured in Joules

Defibrillators use BOTH!

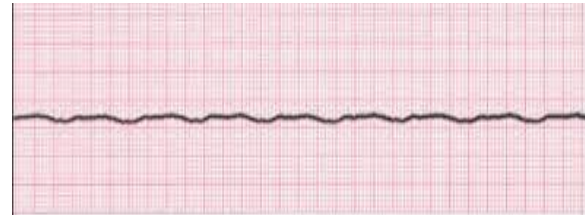


# *How do AEDs work?*

**AEDs attempt to correct ventricular fibrillation (Vfib), or pulseless ventricular tachycardia (V-tach), by interrupting the electrical conductivity of the heart to allow the brainstem to reset it.**

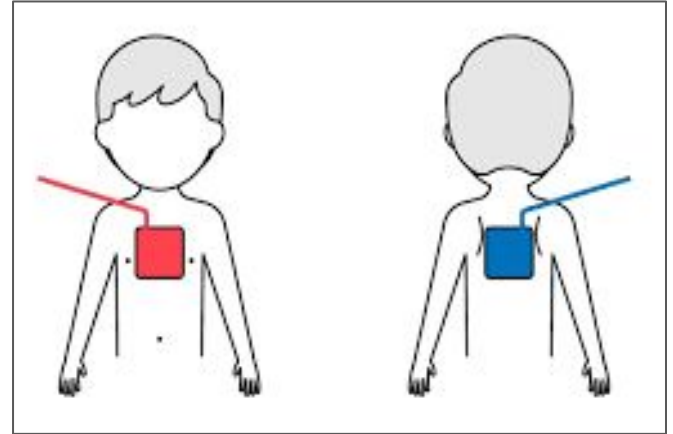
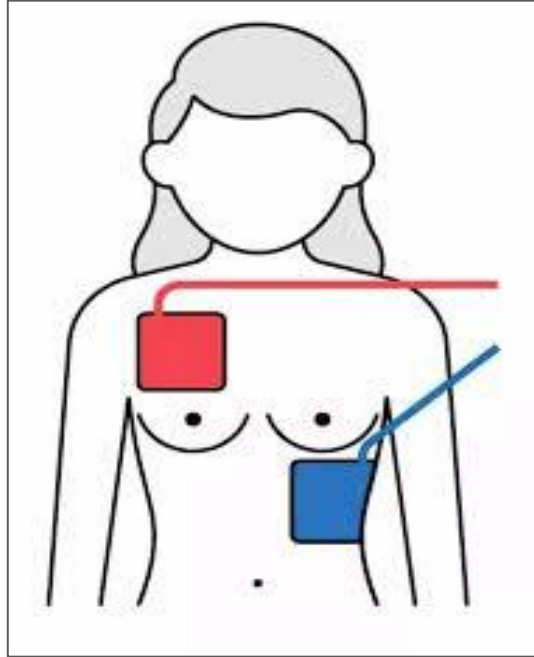
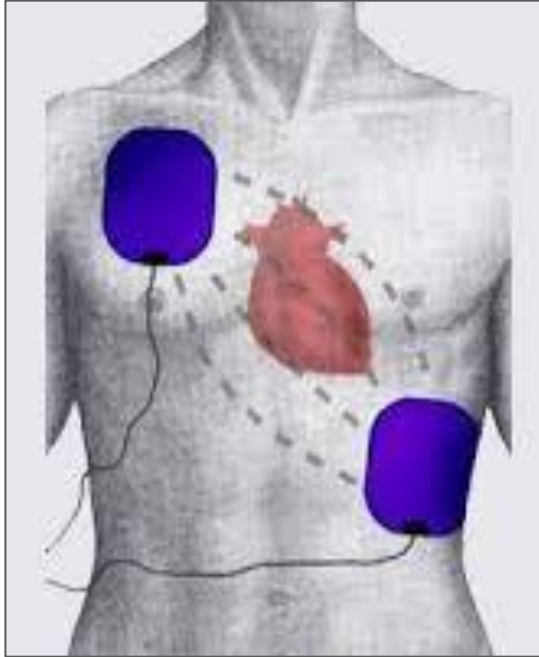


**AEDs will NOT shock ‘non-shockable’ rhythms: normal heartbeat (systole), atrial fibrillation (Afib), supraventricular tachycardia (SV-tach), a heart attack (MI), or cardiac arrest (‘flatline’).**





# *AED Pad Placement*





A top-down photograph of a silver stethoscope resting on a light blue surface. A yellow sticky note is placed over the chest piece of the stethoscope. The note has the words "THANK YOU!" written in black, bold, cursive-style capital letters. Below the text is a small, bright red heart-shaped sticker. The stethoscope's tubing and earpieces are visible on the right side of the frame.

**THANK YOU!**

