



# CPR/AED Introduction

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# Outline

心脏骤停的高危险性

– Sudden Cardiac Arrest (SCA)

施救方的法律保护

--The Good Samaritan Law

心肺复苏/体外除颤器的基本知识

– CPR/AED basic

动手培训简介

– CPR/AED/First Aid/BBP certificates

# 心脏骤停的高危险性 – Sudden Cardiac Arrest (SCA)

- 突发性心律异常(90%室颤/心电异常)
  - 失去意识/呼吸停止/无脉搏
  - 如无有效救治
    - 每分钟死亡概率增加约10%
    - 4-6 分钟：不可逆脑损伤开始
    - 10分钟：脑死亡
    - 10分钟后，救护车才能赶到
  - 在医院外发病: 死亡率高达92%，美国发病人数约40万/年
    - 死亡人数 = 车祸+乳腺癌+直肠癌+前列腺癌+AIDS
    - 2-14人/万人
  - 88%在家里发生
  - 50%无任何先兆，剩下50%也无明确先兆
  - 目前无有效手段提前诊断
- 目前最有效发病后干预手段: **CPR+AED**
    - **CPR: 心肺复苏**
      - 每分钟死亡概率3%-7%
      - 推后脑损时间，使撑到救护车到达成为可能
    - **AED: 自动体外除颤器** → 让心脏恢复自主心律
  - **3-5分钟内CPR/AED，存活率可达75%\***

\*<https://www.thetravisfund.org/what-is-sca/>

# 施救方的法律保护 --Good Samaritan\* Law

## **Court: Good Samaritan law protects all who help in emergency**

**By Randy Ludlow, The Columbus Dispatch**

Posted Aug 30, 2016 at 12:01 AM

Updated Aug 30, 2016 at 2:45 PM



Ohio's Good Samaritan law protecting people from legal liability for rendering aid applies to anyone who provides assistance -- medical or otherwise -- at the scene of an emergency, the Ohio Supreme Court declared today.

## **Good Samaritan\* Law**

- Respond voluntarily
- Not paid to respond
- Provide care with good intentions
- Stay within limits of training
- Are not reckless or careless
- Don't abandon person

\*Luke 10:25-37

# Chain of Survival.



1. Immediate **recognition** and **assistance**.
2. Early **CPR** with an emphasis on chest compressions
3. Rapid **defibrillation**
4. Effective **advanced life support**
5. Integrated **post-cardiac arrest care**

Bystanders perform the **First 3 steps**

# SCA 急救流程

## Check scene

## Check response

- Tap and shout

## Call 911

- Send bystander
- Call **911**
- Get **AED**

## Check breathing

- Scan chest for 5-10 seconds
- Start CPR if no breathing or only gasping

## AED

- Power on AED once it arrives
- Place pads while continue CPR



# Compressions-Airway-Breathing

- **Provide 30 compressions**
  - Push hard: at least 2" for an adult/child (infant 1.5" w/ fingers)
  - Push fast: 100 – 120 compressions/minute
- **Give 2 breaths**
  - Open airway by lifting chin
  - 1 second each breath
  - Resume compressions within 10 seconds
- **Continue cycles of 30:2**
  - Use AED when available
  - If 2<sup>nd</sup> trained rescuer is present, that person can use AED
  - Take turns giving compressions

# 心肺复苏/除颤器的基本知识 – AED basic

- AED 简单易用，建议正规训练
- 3-5 分钟内用AED恢复自主心律，存活率75%
- 学校/机场/办公场所 都配有
- 三个1.5分钟
  - 取：来回单向不超过1.5分钟（1.5x2）
  - 用：到达现场后，一般1.5分钟才会实施第一次电击
- 要知道AED存放的位置





# 动手培训简介 – CPR/AED/First Aid/BBP certificates



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CPR/AED/First Aid certificates  
AED Consultation/Agent

Certificate Classes	Duration	Size	Price*	Red Cross
Adult/Child/Infant CPR/AED	2.5-3	6-12	30/40	95
First Aid/BBP	2-3	6-20	30/30	
Adult/Child/Infant First Aid/BBP/CPR/AED	4.5-6	6-12	50/60	115

- 地点：中文学校/可调整
- 时间：中文学校上课时间/可调整，开课时间等通知

谢谢CCCCA的支持！

\*including student book/material ~\$10  
中文学校现任老师，理事 / 其他人  
Subject to change