## PulseP@int W

## **PulsePoint Foundation**

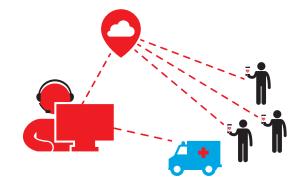
PulsePoint is a 501(c)(3) non-profit foundation based in the San Francisco Bay Area. Through the use of location-aware mobile devices PulsePoint is building applications that work with local public safety agencies to improve communications with citizens, empowering them to help reduce the millions of annual deaths from sudden cardiac arrest. Deployment of the PulsePoint app can significantly strengthen the "chain of survival" by improving bystander response to cardiac arrest victims and increasing the chance that lifesaving steps will be taken prior to the arrival of emergency medical services.

## **PulsePoint**

- PulsePoint Respond is a mobile app that alerts CPR-trained citizens to someone nearby having a sudden cardiac arrest.
- The app is activated by the local public safety communications center simultaneous with the dispatch of local fire and EMS resources.
- The purpose of the app is to increase the survival rates of cardiac arrest victims by:
  - Reducing collapse-to-CPR times by increasing citizen awareness of cardiac arrest events beyond a traditional "witnessed" area.
  - Reducing collapse-to-defibrillation times by increasing awareness of public access defibrillator (AED) locations through real-time mapping of nearby devices.
- The app is only activated if the event is occurring in a public place (the app is not typically activated for residential addresses).
- In addition to the life-saving CPR/AED functionality, the app provides a virtual window into fire and EMS activity in the community, offering a unique opportunity for civic engagement.
- Since the app requires a connection to the local public safety communications center, it is only available where adopted and implemented by the local Fire/EMS agency.
- Learn more at www.PulsePoint.org.







2 911 system sends PulsePoint alert





Users rush to help victim before professional help arrives





## **Sudden Cardiac Arrest**

- Sudden Cardiac Arrest (SCA) is a leading cause of death in the United States, accounting for an estimated 356,000 deaths each year (SCA kills nearly 1,000 people a day or one person every two minutes).<sup>1</sup>
- Survival rates nationally for SCA are less than 11%.<sup>1</sup>
- Delivery of CPR is life-saving first aid, and can sustain life until paramedics arrive by helping to maintain vital blood flow to the heart and brain.
- Only about a third of SCA victims receive bystander CPR.
- Without oxygen-rich blood, permanent brain damage or death can occur in less than 8 minutes. After 10 minutes there is little chance of successful resuscitation. Even in modern urban settings the response times for professional rescuers commonly approach these time frames.
- The American Heart Association estimates that effective bystander CPR, provided immediately after sudden cardiac arrest, can double or triple a person's chance of survival.
- SCA can happen to anyone at any time. Many victims appear healthy with no known heart disease or other risk factors.
- In April 2008, the American Heart Association revised its recommendations and encouraged lay bystanders to use compression-only CPR as an alternative to the combined rescue breathing and chest compression method. It is believed that this change will significantly increase the willingness of bystanders to perform CPR.
- American Red Cross

  1. Call For Help

   Ensure the scene is safe before proceeding.
   Check the victim for unresponsiveness.

  If the person is not responsive and not breathing or not breathing normally, call 911 and return to the victim.

  2. Begin Chest Compressions

  Hear Compression Rate

   Push firmly downwards in the middle of the chest and then release. Push hard and fast.
   Push at a rate of 100 compressions per minute, until help arrives.
   Let the chest rise completely before pushing down again.

  LEARN MORE

  THE RED CROSS FIRST AID APP
- In 2015, CPR guidelines issued by the American Heart Association (AHA) recommend that communities consider using mobile app technology to alert CPR responders when someone nearby suffers sudden cardiac arrest. The new guidelines cite studies that show emerging mobile technologies can result in a "higher rate of bystander-initiated CPR".
- Sudden Cardiac Arrest is not the same as a heart attack. A heart attack occurs when blood vessels in the heart get clogged, preventing blood flow to sections of heart muscle. A heart attack, however, can lead to SCA by triggering an abnormal heart rhythm. SCA may be compared to an electrical problem in the heart, in contrast to a heart attack, which is more of a plumbing problem.
- Fifty-seven percent of adults in the U.S. say they have undergone training in cardiopulmonary resuscitation (CPR), most often due to work or school requirements. Most say they would be willing to use CPR to help a stranger. Most say they would be willing to use an automated external defibrillator (AED). Eleven percent say they have used CPR in an actual emergency.

<sup>&</sup>lt;sup>1</sup> Heart Disease and Stroke Statistics - 2017 Update, American Heart Association

