



Frequently Asked Questions

What is Maine HeartSafe Communities?

The Maine Cardiovascular Health Council and the Maine Emergency Medical Services Office have partnered to assist Maine cities and towns improve the chances that anyone suffering a cardiovascular-related event will have the best possible chance for survival and recovery. HeartSafe Communities is a recognition program based on the “Chain of Survival,” which has been implemented in other states and countries to help obtain this goal. Its purpose is to recognize the excellent work being done by Emergency Medical Services (EMS) programs throughout Maine and to provide further opportunities to enhance community partnerships, resources, and services to improve cardiovascular health and decrease deaths and disability due to cardiovascular related events, including Sudden Cardiac Arrest (SCA), Heart Attack and Stroke.

The American Heart Association (AHA), in collaboration with the International Liaison Committee on Resuscitation (ILCOR), has established guidelines for response to SCA. The “Chain of Survival” is accepted worldwide and is an important piece of the *HeartSafe Community Program*. It includes the following components:

Early access to emergency care

- Bystanders recognize the warning signs and symptoms of cardiac arrest, choking, heart attack, and stroke and call 9-1-1 immediately.
- EMS dispatchers provide instructions for the caller and can get an Advanced Life Support response vehicle to the scene quickly.

Early CPR

- CPR, when properly administered, buys precious minutes until a defibrillator is available.
- Public knowledge and awareness must be increased so that those trained in CPR will be confident in their ability to perform it when needed.

Early defibrillation

- Defibrillation is the delivery of electric shock to restore the heart’s normal rhythm.
- Early defibrillation is a critical link in the chain of survival.
- New AEDs are safe, light-weight, sturdy, and easy to use by anyone who has been trained.

Early advanced care

- Advanced care is delivered as soon as possible – on-scene, en-route, or in the hospital Emergency Department.
- Medications and oxygen therapy delivered by paramedics can be critical to the survival of cardiac arrest victims.

What criteria must communities meet to become a HeartSafe Community?

Due to the diverse and rural regions of Maine, the program was developed to designate communities in a tiered fashion, based on population, funding, and personnel resources. The basic recognition signifies that the local Emergency Medical Services (EMS) program, whether it is made up of paid staff, volunteers, or both, has taken a comprehensive approach to ensuring that their community is HeartSafe.

The “Basic” criteria are as follows:

- The EMS program and/or their community partners must offer CPR (cardiopulmonary resuscitation) training to their community members.
- The EMS program and/or their community partners must offer cardiovascular related education and/or awareness activities in their community.
- At least one emergency response designated vehicle must be equipped with an Automated External Defibrillator (AED).
- Placement of at least one permanent AED with AED-trained personnel in public or private areas where many people are likely to congregate or be at higher risk for cardiac arrest (such as shopping malls, large employers, airports, etc.).
- Advanced Cardiac Life Support is dispatched to all priority medical emergencies, either as first responders or as Advanced Life Support (ALS) backup. ALS backup may occur on-scene, en-route, or at the hospital Emergency Department.
- The EMS program has an ongoing process to evaluate and improve the “Chain of Survival” in their community.

Those EMS programs and communities recognized at the Silver, Gold, and Platinum levels meet all of the Basic criteria, as well as having additional capacity and resources to treat cardiovascular events. For more information on the specific criteria for higher levels of recognition, please contact the program representative listed at the end of this document.

Why are these criteria important for the health of community members?

Ideally, early recognition and immediate action can help decrease the incidence of sudden cardiac arrest. However, should sudden cardiac arrest occur, early CPR and rapid defibrillation combined with early advanced life support care can improve long-term survival rates for witnessed cardiac arrest. In some communities with public access defibrillation or “community AED (automated external defibrillator) programs,” when bystanders provide **immediate** CPR and the first shock is delivered **within three to five minutes**, the reported survival rates from ventricular fibrillation Sudden Cardiac Arrests (SCA) are as high as 48 to 74 percent!

Similarly, heart attack and stroke are treatable cardiovascular events, but patient delay remains a significant barrier to ensuring that those suffering these events receive diagnosis and treatment in time to increase chances of survival and quality of life. By providing education to help their communities recognize the symptoms of heart attack and stroke and the importance of calling 911 immediately, Maine HeartSafe Communities are helping to decrease patient delay and improve outcomes associated with cardiovascular events.

Why is it important for a community to have this designation?

Early recognition of the symptoms associated with SCA, heart attack and stroke, immediate access to emergency services, and prompt medical treatment are all crucial to prevent future events, save lives and reduce medical costs and disability. *Maine HeartSafe Communities* designation promotes enhancements to each of these important links and recognizes a community's dedication to improving its "Chain of Survival" through partnerships with the local EMS program.

- On average, HeartSafe designated communities have increased the number of local CPR/AED trainings by 122%.
- HeartSafe Communities are also showing significant increases in the number of local cardiovascular related education and awareness initiatives being implemented (99% average increase).
- The number of publicly placed AEDs among HeartSafe Communities has increased by an average of 49%.
- HeartSafe Communities continue to increase their capacity to respond quickly and effectively to cardiovascular events, including addition of 12-lead electrocardiograms which enable EMS providers to conduct and interpret important testing in the field and save precious minutes by notifying the hospital team that a patient is on the way.

What effect do Cardiovascular Events and Disease have on Maine?

- Cardiovascular disease (CVD), which can lead to heart attack, stroke or cardiac arrest, is the leading cause of death in the United States and in Maine. In 2009, CVD was the underlying cause of 32.3% of all deaths in the United States, killing 787,931 Americansⁱ. Heart disease and stroke are currently the second and fourth leading causes of death in Maine.ⁱⁱ
- Combined, heart disease and stroke caused 3,292 deaths in Maine in 2009, 26% of all deaths that year.ⁱⁱ
- The total direct and indirect cost of CVD and stroke in the United States for 2009 is estimated to be \$312.6 billion.ⁱ
- An estimated 295,000 emergency medical services-treated out-of-hospital cardiac arrests occur in the United States each year.
 - About 60% of unexpected cardiac deaths are treated by Emergency Medical Services (EMS).
 - Only 31.4% of out-of-hospital cardiac arrests receive bystander CPR.
 - The incidence of lay responder defibrillation is low, only 2% in 2002, but this number is increasing over time.^{iii, iv}
- The percentage of Maine adults who could correctly identify all stroke symptoms increased significantly from 18.1% in 2001 to 23.2% in 2009; the percentage that could correctly identify all heart attack symptoms also increased significantly from 12.2% to 16.2% during the same time period, as did the percentage who said they would call 911 if they thought someone was having a heart attack or stroke (83.3% vs. 88.3%).^v These numbers are steadily improving over time, but more work needs to be done to improve state-wide awareness of cardiovascular events.

Which communities have been designated HeartSafe Communities so far?

As of January 2014, there are currently 71 EMS services designated, covering over 284+ Maine towns, cities and one college campus, and more than 948,623 residents!

For a full list of current designees, please visit the following link:

<http://www.maineheartiohealth.org/HeartSafeDesignatedCommunities.html>

Where can communities get more information on the HeartSafe program, as well as the risk factors and symptoms associated with sudden cardiac arrest, heart attack and stroke?

Please contact Tina Love, Cardiovascular Health Specialist with the Maine Cardiovascular Health Council.

207-622-7566, x226

tlove@mcdph.org

Or visit the HeartSafe Communities page on the Maine Cardiovascular Health Council's website: www.maineheartiohealth.org

Bibliography:

ⁱ AHA Heart & Stroke 2013 Statistical Update –

<http://circ.ahajournals.org/content/127/1/e6.full.pdf+html>

ⁱⁱ The Burden of Cardiovascular Disease in Maine 2012 –

<http://maineheartiohealth.org/sites/default/files/Full%20CVD%20Burden%20Report%202-7-13.pdf>

ⁱⁱⁱ Executive Summary: Heart Disease and Stroke Statistics – 2011 Update, American Heart Association. Available online at: <http://circ.ahajournals.org/cgi/reprint/123/4/459>

^{iv} American Heart Association - Sudden Cardiac Death Statistics. Available online at:

<http://www.americanheart.org/presenter.jhtml?identifier=4741>

^v Maine Behavioral Risk Factor Surveillance System, 2009

For more information:

Contact the Maine Cardiovascular Health Council:

HeartSafe Communities Program

207-622-7566, ext. 226

tlove@mcdph.org

<http://www.maineheartiohealth.org>

