

CPR in Schools

Training a generation of lifesavers



**American
Heart
Association**

**American
Stroke
Association®**

Sudden Cardiac Arrest in America

Nearly **424,000** out-of-hospital sudden cardiac arrests occur annually, and **88 percent** of cardiac arrests occur at home.

- Many victims appear healthy with no known heart disease or other risk factors.
- Sudden cardiac arrest is not the same as a heart attack.
 - Sudden cardiac arrest occurs when electrical impulses in the heart become rapid or chaotic, which causes the heart to suddenly stop beating.
 - A heart attack occurs when the blood supply to part of the heart muscle is blocked. A heart attack may cause cardiac arrest.

Cardiac Arrest Survival Rates

United States:

- Each year, nearly **424,000** people have sudden cardiac arrest outside of a hospital, and only **10.4%** of these victims survive.

Oregon:

- No statewide survival rate as of now; some data collection efforts occurring regionally
- 15% survival rate – Portland Metro area – but it varies across the state

Bystander CPR Saves Lives



- If you suffer sudden cardiac arrest, your **best chance at survival** is receiving bystander CPR until EMTs arrive.
- When a CPR-trained bystander is near, they can **double, even triple** these victims' survival rates by giving victims the help they need until the EMTs arrive.
- Bystanders should be trained so they can act quickly and effectively. **Three to five minutes is a matter of life and death** for sudden cardiac arrest victims.
- CPR training can teach them what to do. People who have had CPR training are **more likely** to give high-quality chest compressions and are more confident about their skills than are those who have not been trained (or have not been trained in the past five years).*

**Data on skills performance are from the 2005 CPR Anytime study using an "untrained" control group. Data about confidence/willingness to act are from a 2007 national survey in which Americans who were trained within the past five years were almost twice as likely as those not trained or not trained in the past five years (45% vs. 24%) to say they'd begin CPR immediately in a real emergency.*

CPR – Easy to learn, simple to teach



Easier than ever: Contemporary Hands-Only CPR training is much easier than training of the old days. Now CPR training includes a video and practice on a mannequin that can easily be learned in approximately 30 minutes and does not need to be taught by a certified instructor.

Hands-Only CPR: Hands-Only is CPR without mouth-to-mouth breaths. It is recommended for use by people who see a teen or adult suddenly collapse in an “out-of-hospital” setting (such as at home, at work or in a park).

Two steps: It consists of two easy steps: 1) Call 9-1-1 (or send someone to do that). 2) Push hard and fast in the center of the chest.

Hands-Only CPR Science Advisory: The American Heart Association works with some of the world’s leading CPR scientists and medical professionals. Their continuous review of published research studies on CPR resulted in the following American Heart Association Science Advisory, published in April 2008 in the medical journal *Circulation*: [“Hands-Only™ \(Compression-Only\) Cardiopulmonary Resuscitation: A Call to Action for Bystander Response to Adults Who Experience Out-of-Hospital Sudden Cardiac Arrest \(opens new window\)”](#).

CPR – Easy to learn, simple to teach



- Hands-Only CPR (CPR with just chest compressions) has been proven to be **as effective as CPR with breaths** in treating adult cardiac arrest victims.
- When a CPR-trained bystander is near, they can **double, even triple** these victims' survival rates by giving victims the help they need until the EMTs arrive.
- You **do not have to be certified** to perform CPR on someone. Basic CPR training gives you the skills needed to save someone's life and does not require certification.

LIFESAVERS IN SCHOOL

Here are the 20 states that have passed laws requiring CPR as a high school graduation requirement.



Annual HS Graduates

AL	44,400
AR	28,170
DE	8,320
IA	32,580
ID	16,840
GA	91,980
LA	35,210
MD	58,560
MS	26,710
MN	57,250
NC	89,820
NJ	93,880
OK	37,800
RI	9,650
TX	292,940
TN	60,180
UT	31,330
VA	81,870
VT	6,530
WA	66,790
Total	1,170,810

Source: National Center for Education Statistics.

Teaching CPR in School

Policies in the US:

20 states have already required that students receive hands-on CPR training before high school graduation, including WA & ID.

Senate Bill 79



Requires school districts to provide hands-on CPR training to students in middle or high school health class, beginning in the 2015-16 school year.

- CPR training does not have to result in certification
- Teachers do not need to be fully certified in CPR to teach students
- Allows for volunteers to help train students
- The instructional program must be developed by the American Heart Association, American Red Cross or a nationally recognized program based on the most current national evidence-based emergency cardiovascular care guidelines for CPR/AED.
- CPR training must make students aware of the purpose of an AED and its ease and safety of use
- Instruction must incorporate hands-on practice of psychomotor skills related to CPR

Senate Bill 79



Increase the number of lifesavers in every Oregon community across the state:

- Equip approximately 45,000 graduates every year to save a life
- Empower students
- Save more lives in our communities

In less than the time it takes to watch a 30 minute TV sitcom, we can give students the skills they need to help save a life with CPR.

Reducing Disparities

High-Risk Neighborhoods are Less Safe:

- African-Americans are almost twice as likely to experience cardiac arrest at home, work or in another public location than Caucasians, and their survival rates are twice as poor as for Caucasians.
- Latinos and African-Americans are **30 percent less likely** to have bystander CPR performed on them in an emergency,
- People who live in lower-income, African-American neighborhoods are 50 percent less likely to have CPR performed.

According to a study in the American Heart Association journal Circulation: Cardiovascular Quality and Outcomes.

CPR in schools will help eliminate inequities:

School is a great equalizer, and teaching CPR in schools is an integral part of the solution that will help increase bystander CPR across all communities and save more lives.

AHA & Ross Partnership

- Ross Dress for Less (“Ross”) is supporting AHA’s efforts to help save more lives in all communities by providing free CPR training resources to public schools in **lower-income areas**.
- Ross raised and donated funds to train thousands of 7th and 8th grade students in lifesaving CPR across the U.S through its Help a Hero program.
- The American Heart Association paired each Ross store with a nearby public school that has **at least 50 percent of their students receiving free or reduced lunch**.
- 23 schools in Oregon received:
 - a CPR in Schools Training Kit™
 - teaching materials to implement the program
 - a school-based report card at the end of the year that shows how many students they have trained
 - access to AHA resources, volunteer mentors and CPR in Schools staff throughout the program

MEMORIAL MIDDLE SCHOOL	ALBANY
HILDA LAHTI ELEMENTARY SCHOOL	ASTORIA
WESTSIDE VILLAGE MAGNET SCHOOL	BEND
COQUILLE VALLEY MIDDLE SCHOOL	COQUILLE
SOUTH MIDDLE SCHOOL	GRANTS PASS
CLEAR CREEK MIDDLE SCHOOL	GRESHAM
SOUTH MEADOWS MIDDLE SCHOOL	HILLSBORO
JEFFERSON MIDDLE SCHOOL	JEFFERSON
CLAGGETT CREEK MIDDLE SCHOOL	KEIZER
BRIXNER JUNIOR HIGH SCHOOL	KLAMATH FALLS
PATTON MIDDLE SCHOOL	MCMINNVILLE
ROWE MIDDLE SCHOOL	MILWAUKIE
THE MADELEINE SCHOOL	Portland
SELF ENHANCEMENT, INC/SEI ACADEMY	PORTLAND
LEE ELEMENTARY SCHOOL	PORTLAND
PENINSULA ELEMENTARY SCHOOL	PORTLAND
ASTOR ELEMENTARY	PORTLAND
GEORGE MIDDLE SCHOOL	PORTLAND
LENT ELEMENTARY SCHOOL	PORTLAND
BOISE-ELIOT ELEMENTARY SCHOOL	PORTLAND
JOHN C FREMONT MIDDLE SCHOOL	ROSEBURG
PARRISH MIDDLE SCHOOL	SALEM
HAMLIN MIDDLE SCHOOL	SPRINGFIELD

Oregon's EMS community supports SB 79

- **Oregon Fire Chiefs Association**
- **Legacy Health Systems**
- **Oregon Health & Sciences University**
- **Oregon Chapter of the American College of Emergency Physicians**

Sherman County Emergency Services
Reach Air Medical Services
Bay Cities Ambulance
Blue Mountain Hospital Ambulance
Southern Wasco County Ambulance
Lifeguard Air Ambulance

Albany Fire Department	Hoodland Fire District
Ashland Fire Department	Knappa-Svensen-Burnside Rural Fire Protection District
Astoria Fire Department	La Grande Fire Department
Clackamas County Fire District #1	McKenzie Fire & Rescue
Cloverdale Rural Fire Protection District	Medford Fire & Rescue
Cornelius Fire Department	Mid-Columbia Fire & Rescue
Corvallis Fire Department	Mt. Angel Fire District
Crooked River Ranch Fire & Rescue	North Douglas County Fire & EMS
Estacada Rural Fire District	North Lincoln Fire & Rescue District #1
Forest Grove Fire & Rescue	Pendleton Fire Department
Garibaldi Fire Department	Redmond Fire & Rescue
Grants Pass Fire & Rescue	Seal Rock Rural Fire Protection District
Gresham Fire & Emergency Services	Tillamook Fire Department
Harrisburg Rural Fire District	Tualatin Valley Fire & Rescue
Hood River Fire Department	Yamhill Fire Department

Current Oregon Efforts: CPR in Schools



Beaverton, Wilsonville, West Linn, Sherwood, Tualatin, & Tigard

School Partners:

- Tualatin Valley Fire & Rescue initiative
- Legacy Health Systems – “Saving One Million Hearts” program

Started: 2011

Reach:

- All middle schools in these cities – Health, PE, or Leadership classes
- **15,000** students trained since the program started (TVFR)
- Over 5,000 people (students and friends/family) this year from January to May (TVFR)

Current Oregon Efforts: CPR in Schools



Milwaukie, Clackamas, Happy Valley, Damascus, & Oregon City

School Partners: Clackamas Fire District

Started: 2013

Reach:

- 8 middle schools, Health & PE classes
- **2,323 students** trained, who in turn trained 9,061 friends and family. Total of **11,384 people** trained in 2013-14
- 7,453 total trained so far in 2014-15

Current Oregon Efforts: CPR in Schools



Southern Oregon CPR Initiative

School Partners - Collaborative effort created by:

- **Medford Fire-Rescue**
- Jackson County EMS
- local chapter of the American Association of Critical Care Nurses
- Ashland Fire-Rescue
- Jackson County Fire District #3
- local educators
- In partnership with the American Heart Association
- This program is funded thanks to Asante Health System, the John & Nora Darby Heart Fund, the Carpenter Foundation, Medford Fire-Rescue and other local contributors.



Current Oregon Efforts: CPR in Schools



Southern Oregon CPR Initiative

Started: 2012

Reach:

- 7th and 8th grade students within Jackson County
- 269 students in the first year of the program
- 1,205 students in the last school year (2013-2014), more than half of the seventh graders in the county.
- On average, each of these students has taught hands-only CPR to at least two other friends or family members as homework.





Current Oregon Efforts: CPR in Schools

Eugene & Springfield

School Partners: Eugene Springfield Fire & Rescue, Alpha Phi – University of Oregon

Started: Eugene Springfield Fire & Rescue's ACT C3: Cardiac Arrest Survival Program started Fall 2012

Reach:

- Approx. 3,000 students trained
- 1,500 community members trained
- 10 schools including middle school and high school in Eugene and Springfield
- Health class or PE class

Resources & Cost

Some schools have been able to provide training at no cost using community volunteers and donated equipment.

- School districts have developed various models for providing and paying for the training and equipment, including using volunteer instructors or video-based programs, and drawing support from businesses, foundations, civic organizations and public agencies.

Costs can vary depending on the type of training utilized but estimates show the per student cost being approximately \$1.00. Example equipment:

- 10 CPR kits w/ training DVD and more costs \$600; kits will train hundreds of students lasting approximately 3 to 4 years depending on how many students are trained.
- A single CPR kit w/ DVD costs \$38.50

Resources for Implementation

American Heart Association (AHA)

- [CPR in Schools Training Kit](#) – several training options
- [Family & Friends CPR Anytime](#)
- [Heartsaver CPR AED](#)
- Schools may contact a local AHA CPR Training Center to explore training site options or volunteers
- [Hands-Only CPR Video](#) – Free YouTube video
- [Be the Beat](#) – a free video at the bottom of page “In the Spotlight” Hands-Only CPR. Games and videos to supplement the psychomotor training

Others

- [Nick of Time Foundation](#) – NoTF has done great work with trainings at their school screenings.
- [American Red Cross Trainings](#)
- Local EMS or Fire Departments – If a school is not already familiar with their local EMS or Fire, they could likely reach out to the state/county health department to find contacts.
- Local Hospitals - especially public hospital districts looking to expand their community benefit impact.