

# ZOLL®

CASE STUDY

## Vancouver High School Gets A+ in Saving Lives



During her third-period leadership class at Evergreen High School in Vancouver, Wash., Heidi Stewart was helping to hang 1,950 Valentine's Day paper hearts—one for each student—to encourage school spirit. All of a sudden, she started to feel faint.

The 18-year-old senior couldn't hear and started experiencing tunnel vision. Then everything went dark. The last thing Heidi remembers is seeing her hand on the door handle to Dianna Lynch's office. Dianna, a school secretary, saw Heidi collapse onto the carpet, her head just missing the counter and the copy machine. Dianna quickly radioed out, "I have a student down."

Nurse Debbie Fowler instinctively grabbed her emergency bag, and as she was hurrying down the hall, pulled the ZOLL® AED Plus® from its cabinet. When Debbie reached the office, one of her colleagues was checking Heidi's pulse. Heidi's lips and face were blue. Debbie immediately began cardiopulmonary resuscitation (CPR). She was told that the school resource officer had already called 911.

Dean for Students and Safety Officer Marshall Pendleton quickly opened the AED, and Debbie snipped Heidi's bra and attached the electrodes to her chest. The AED Plus advised a shock. In between shocks—three total—Debbie and Mr. Pendleton took turns administering CPR.



"In the beginning, I was not doing compressions deep enough, and the AED Plus instructed me to 'Push Harder,'" said Debbie. "Then the AED reassured my effort when it announced, 'Good Compressions.' It was encouraging to hear a prompt telling me that I was doing well in the middle of a stressful situation."

When the ambulance arrived, Heidi had a pulse and was beginning to breathe on her own. The paramedics took over, rushing her to Peace Health Southwest Medical Center. As she was being transferred into the hospital, she remembers being unable to see and hearing her father's voice saying, "Fight, Heidi, fight."

Heidi's cardiologists diagnosed her with a rare heart condition called arrhythmogenic right ventricular dysplasia/cardiomyopathy (ARVD/C). Surgeons implanted an internal defibrillator with a built-in pacemaker ready to shock her heart if she goes into cardiac arrest again. Because there is no known cure for

The ZOLL AED Plus, the first and only Full-Rescue AED that provides Real CPR Help® for depth and rate of chest compressions, audibly coaches rescuers with prompts that say "Push Harder" or "Good Compressions" during CPR.



*"Learning CPR and how to use an AED is extremely vital. The AED and CPR saved my life."*

*Survivor Heidi Stewart*

ARVD/C, Heidi has had to change her lifestyle. She can no longer lifeguard but is teaching swimming, which she loves. She will be studying to become a delivery nurse at Clark College, near home, instead of attending Eastern Washington University, more than five hours away.

### Three Saves at Evergreen High

Three is a lucky number at Evergreen High School. In the last few years, three people, including Heidi, have been saved with the help of the school's two AEDs and its trained staff. The others were a 14-year-old student and a teenage visitor.

Almost every school in the Evergreen School District, which has a student population of more than 26,000, has an AED. The secondary schools have two. The AEDs were donated by the Vancouver-based Quinn Driscoll Foundation. The foundation was started by Scott Driscoll, whose 13-year-old son Quinn died after suffering sudden cardiac arrest while running on a middle school track during gym class. Heidi has been volunteering with the Quinn Driscoll Foundation as well as Spencer's HeartStrong Foundation, also Washington based.

"If we didn't have the AEDs, these students would not have made it," said Debbie. "I thought we were going to lose Heidi. The impact of trying to save a young person's life is huge. When I went in and saw Heidi in the cardiac care unit, her color looked good, and she was back. Having used the AED on two students myself, I see the value. I'm all for AEDs, and our protocol is to grab it immediately since it saves precious time."

After the first incident, both Debbie and Mr. Pendleton determined that someone must always secure the AED as part of the emergency kit and radio others that it's on the way during a medical emergency.

### County Steps Up CPR Training

Heidi's save was a catalyst for Clark County to undertake efforts to train 30,000 to 45,000 residents in CPR over the next two years. The county began its campaign by training Evergreen High School's approximately 850 juniors and seniors in compression-only CPR in one hour! Next year, the county plans to train every Evergreen student in compression-only CPR. The county is also participating in a program that uses a Smartphone® app to alert people about where the nearest AED is as well as the location of a person trained in CPR.

"I really encourage people not to be intimidated by the idea of using an AED and performing CPR," said Heidi. "I can totally put myself in that position since I was a lifeguard and was always thinking it would be terrifying. What if I mess up and a person's life is in my hands? Learning CPR and how to use an AED is extremely vital. The AED and CPR saved my life. If not for those two things, I would not be here."

Every morning since waking up in the ICU, Heidi said she wiggles her fingers and toes and says, "I am so blessed to be here."



Heidi Stewart is surrounded by her rescuers: (L to R) Evergreen High School Dean of Students Marshall Pendleton, secretary Dianna Lynch, Heidi, Police School Resource Officer Erik McCaleb, school nurse Debbie Fowler, and 12th Grade Associate Principal Reuben Dohrendorf.

For more information on the ZOLL AED Plus, please call 800-804-4356 or go to [www.zoll.com/aedplus](http://www.zoll.com/aedplus).

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