

Sudden Cardiac Death in the Community

Brandi Watts PharmD, BCACP, MHA
Clinical Evidence Director- Northwest
Zoll Cardiac Management Solutions

Ken Butler
Territory Manager
Zoll Cardiac Management Solutions



Agenda

- Sudden Cardiac Death in the Community
 - Understand Risk and Chance of Survival
 - Who's at increased risk?
- Zoll LifeVest Wearable Defibrillator
- Heart Failure Treatment
 - Asante's Health Care Pathway
- Questions

Sudden Cardiac Arrest is a Problem with Heart's Electrical System not the Plumbing

Sudden Cardiac Arrest has No Warning Signs



Electrical malfunction causes the heart to stop beating effectively



Heart cannot supply blood to body & brain



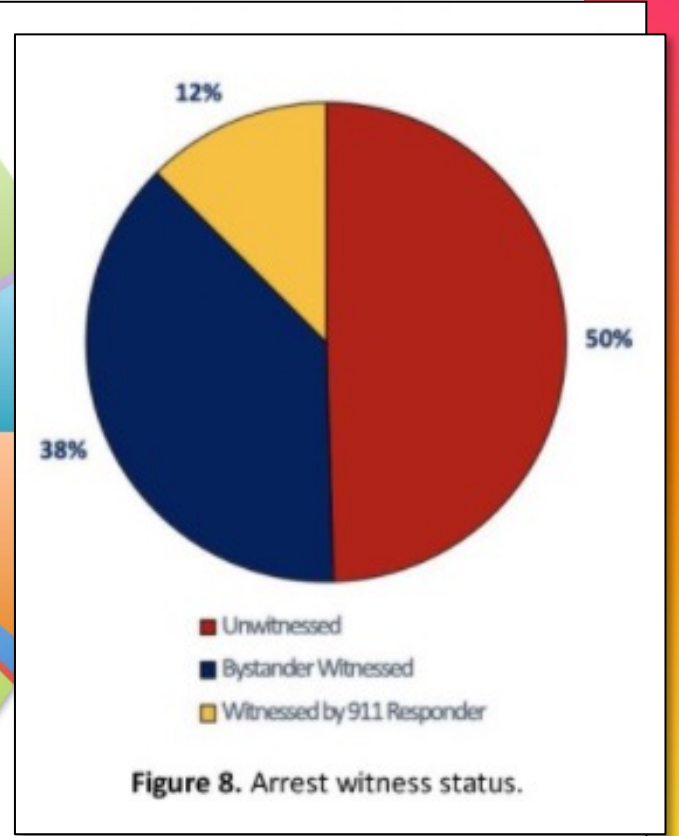
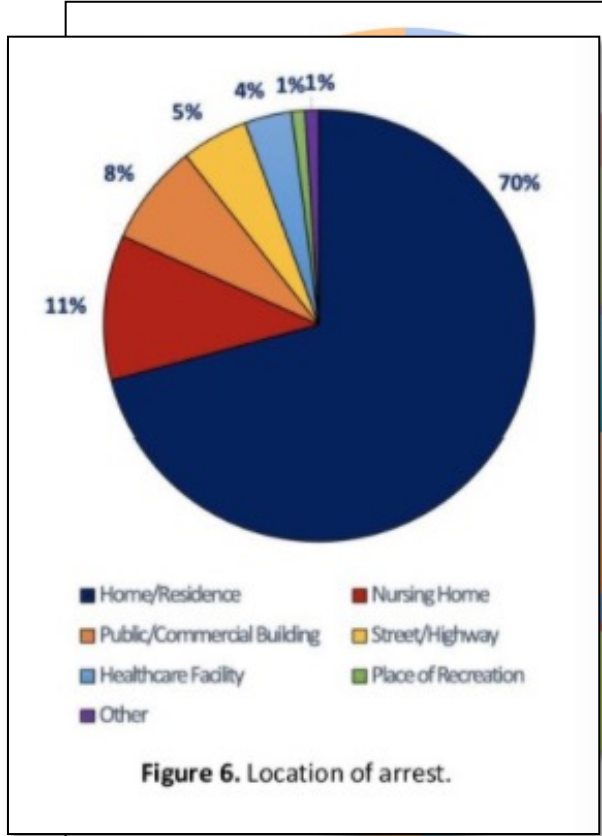
Unlike a heart attack, no signs or symptoms



Victims pass out suddenly & can't call for help

Understanding the Risk of Sudden Cardiac Death

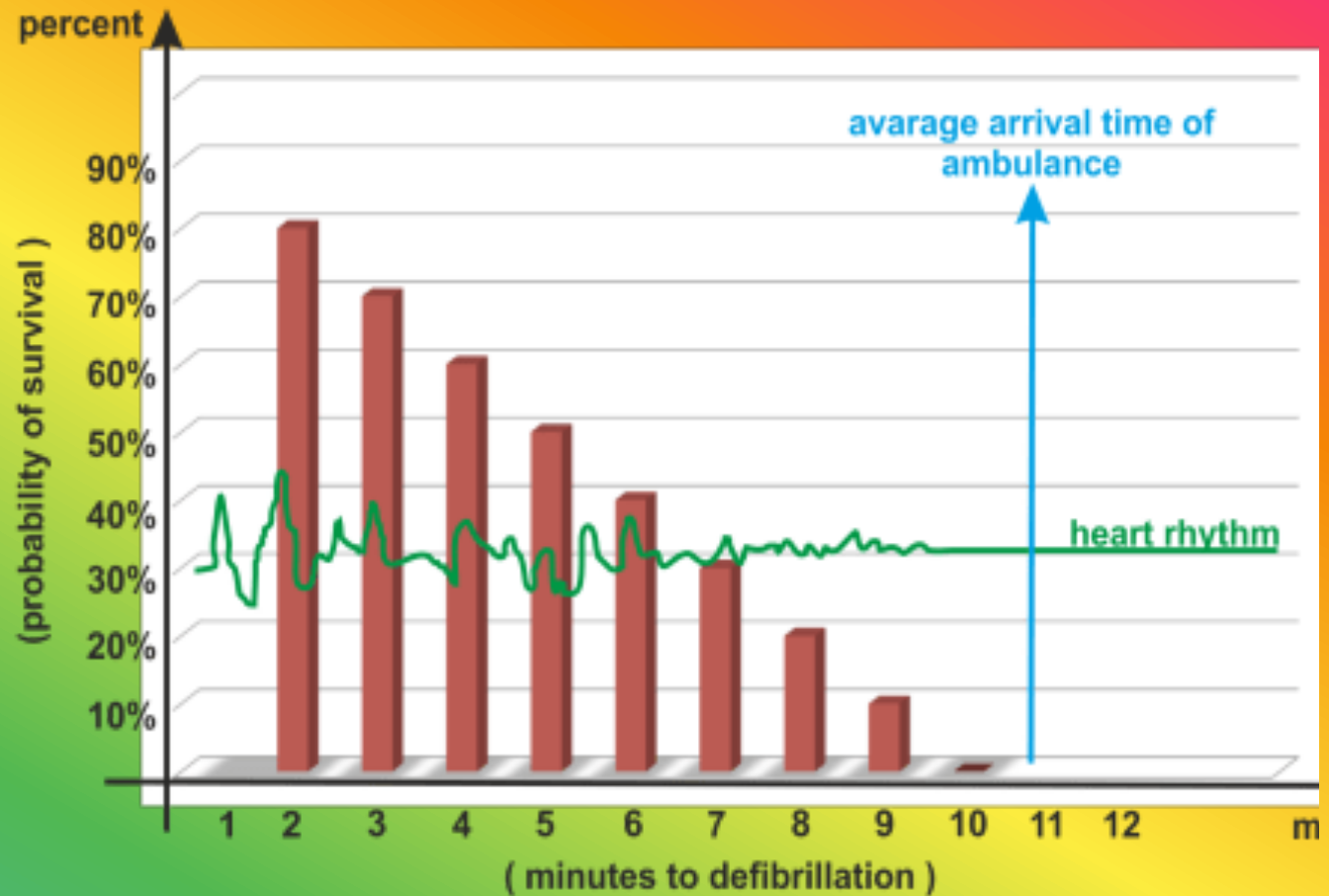
- + Sudden Cardiac Death (SCD) is the 3rd leading cause of death in the United States¹
- + More people die of SCD than stroke, lung cancer, and prostate cancer combined^{2,3}
- + Approximately 356,000 people suffer a cardiac arrest each year
- + 70% of Sudden Cardiac Arrest occurs at home
- + 50% of Sudden Cardiac arrest is Unwitnessed



1. Sudden Cardiac Arrest Foundation <http://www.sca-aware.org/about-sca>. 2. Centers for Disease Control and Prevention. Stroke Facts. <https://www.cdc.gov/stroke/facts.htm>. 3. American Cancer Society. Cancer Facts & Figures 2017. <https://www.cancer.org/content/dam/cancer-org/research/cancer-facts-and-statistics/annual-cancer-facts-and-figures/2017/cancer-facts-and-figures-2017.pdf>. 4. Cardiac Arrest Registry to Enhance Survival https://mycares.net/sitepages/uploads/2020/2019_flipbook/index.html?page=24

Chance of Survival of Sudden Cardiac Arrest

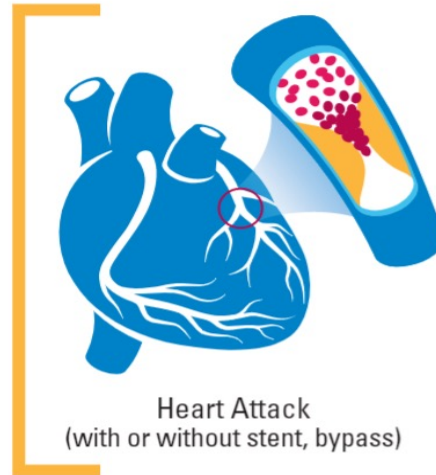
- + Only 1 out of 10 people survive Out of Hospital Sudden Cardiac Arrest in the United States
- + Survival drops 10% every minute that passes
- + Average ambulance response time for an EMS unit to arrive on the scene from the time of a 911 call: ²
 - 7 minutes in urban and suburban settings
 - 14 minutes in rural settings



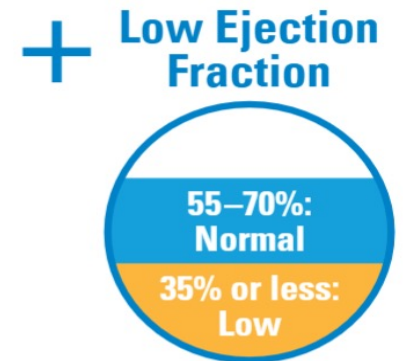
Who is at higher risk of Sudden Cardiac Death?

If you experience:

- + **A low ejection fraction (weak heart muscle)**
- + Prior heart attack
- + Heart failure
- + Family history of Sudden Cardiac Death
- + A viral infection in the heart



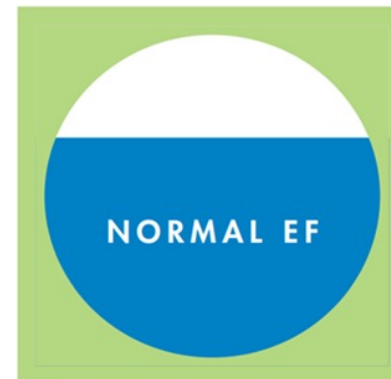
Other:
• Enlarged Heart
• Family History
• Lifestyle
• Virus or Infection



Your heart doesn't pump as well when you have a weak heart muscle

What is Ejection fraction?

- + Measurement of how well your heart is pumping
- + Percentage of blood that is pumped out of the main chamber during each heartbeat
- + If your Ejection Fraction is less than 35% you are at increased risk of Sudden Cardiac Death
- + Your Ejection Fraction can change overtime



55–70%

Your heart's pumping ability is
NORMAL



35% & Lower

Your heart's pumping ability is
LOW

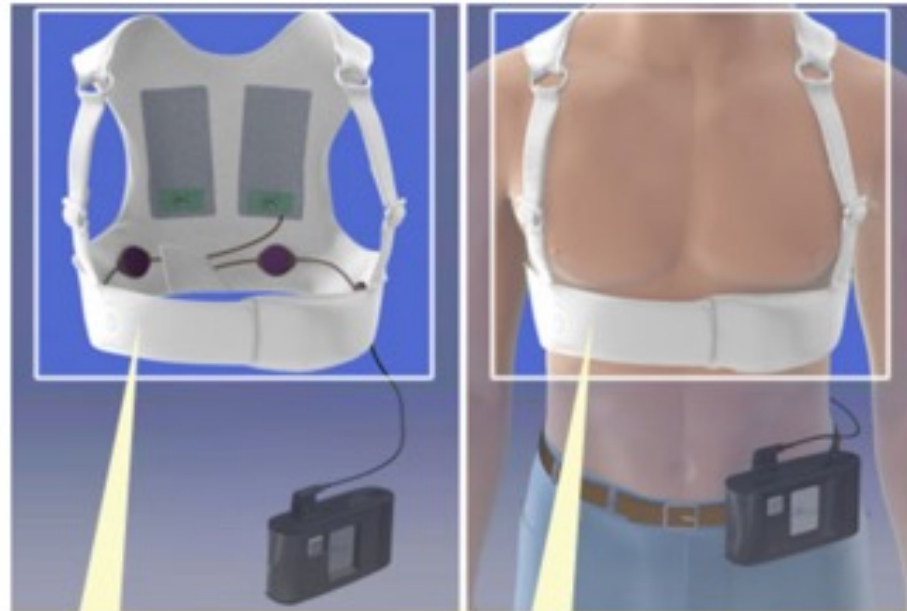


A Proven Therapy for Patients at Risk of Sudden Cardiac Death

LifeVest can protect you from sudden cardiac death by delivering a treatment to restore your heart's normal rhythm.

What is ZOLL LifeVest?

Wearable Cardioverter Defibrillator (WCD)



- + Worn by patients at risk of Sudden Cardiac Death (SCD)
- + Detects dangerously fast heart rhythms and treats rhythm by delivering a shock
- + Most patients will wear temporarily until their doctor determines they are no longer at risk of SCD or decides on a longer-term option.

LifeVest Components

Consists of a garment, and electrode belt, and a monitor

1. Garment

- Worn under your normal clothing, directly against skin
- Includes the electrode belt

2. Electrode Belt

- Designed to detect dangerous heart rhythms and deliver a treatment shock

3. Monitor

- Worn around waist or with shoulder strap
- Continuously records heart rate



LifeVest Consists of Two Main Components



Garment Has 3 Therapy Pads with Blue™ Gel and 4 ECG Electrodes

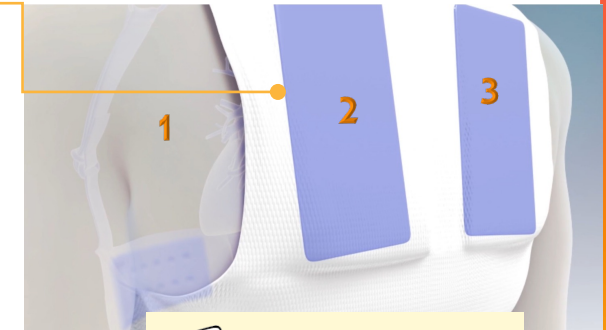
+ 3 Therapy Pads with Blue™ Gel

Blue™ gel on the patient is an indication that the patient may have been treated

Blue™ gel improves shock conduction and minimizes burning

Blue™ gel should remain on patient as long as patient is on LifeVest

Blue™ gel can be removed with water if external monitoring and defibrillation is planned to be used

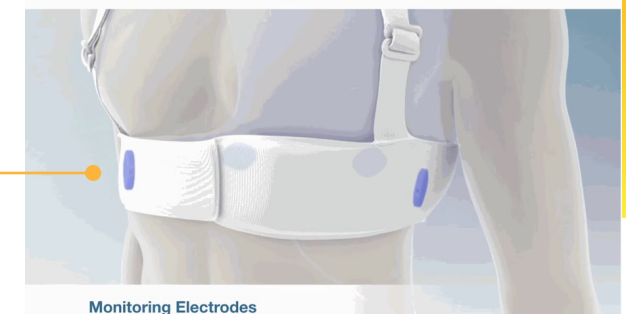


Blue™ Gel - Only LifeVest has Blue™ gel.

+ 4 ECG Electrodes

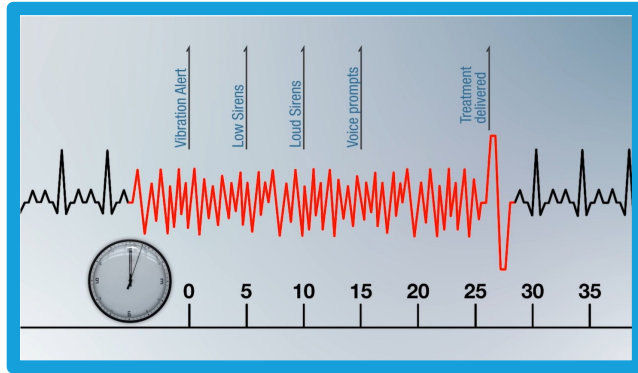
2 pairs of electrodes to provide

- + Side to side channel of ECG signal
- + Front to back channel of ECG signal



Monitoring Electrodes

Monitor Has Patient Response Buttons and Initiates a Sequence of Alerts and Voice Prompts to Warn of Potential Shock Treatment



- **Alert Sequence - Pay Attention**

- Monitor's algorithm analyzes for shockable abnormal rhythms
- 5 second increments of alerts and voice prompts



- **Response Buttons – Patient Only**

- Response buttons prevent a shock from being delivered
- If patient is conscious - only they should press and hold the response buttons

DEBBIE WILLIAMS

(wife of patient
Mike Williams, age 61)

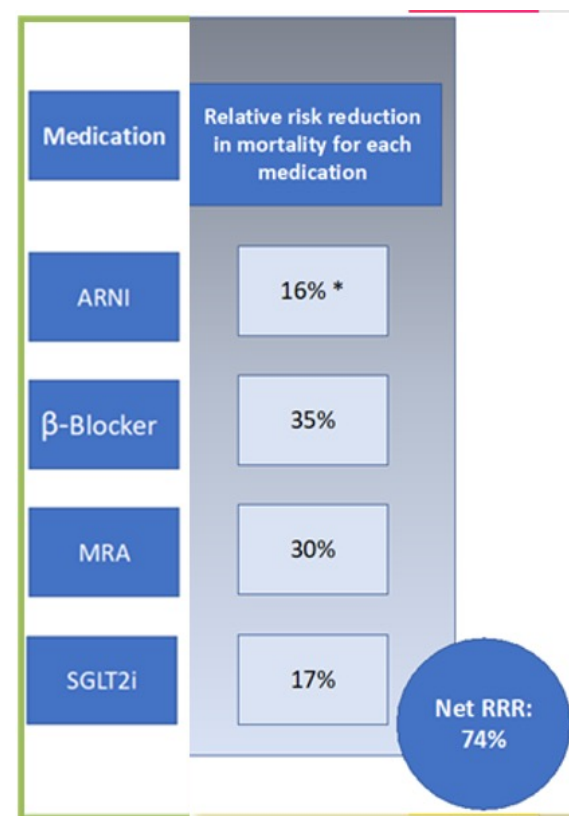
Husband saved
by LifeVest
after 8 days



“Without the LifeVest, I wouldn't have been able to let him out of my sight. But the LifeVest takes the burden off of you. It gave me a lot of security knowing I could be out of the room and the LifeVest would take care of him.”

Heart Failure with reduced Ejection Fraction Treatment

- + Treated with several medications all working together along with diet and exercise to improve outcomes
 - Increases Ejection Fraction
 - Reduces chance of death and hospital readmission
 - Improves quality of life
- + Medication doses are adjusted to meet doses that control heart rate and fluid status
- + Must continue taking most medications after heart failure is stable
- + Asante's goal is to start the four medications proven to reduce death at discharge from hospital
 - First follow-up appointment within 3 to 5 days of discharge.



LifeVest Can Provide Constant Protection

And provides other key data to your physician to help them analyze your progress in recovery.

Our data management system tracks and stores key data like:

- + Heart rate (by day and time of day)
- + Activity (steps per day)
- + Body Position (sleeping and awake)

Contact **ZOLL**
24 hours a day, 7 days a week



For LifeVest customer support
or technical support, please call
800.543.3267



To view the LifeVest patient education
video, visit **www.lifevestpatient.com**
or call **800.543.3267**



For more LifeVest information,
please visit **www.zoll.com**
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Thank you

Questions?