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Journey to a Heart Safe Community

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**MOLLOY
UNIVERSITY**

Journey to a HEARTSafe Community

Mary McCormack DNP, FNP-C, Carole
Zarcone DNP, ANP-C, Kendra Hoepper DNP,
PNP-BC, Elizabeth Cotter PhD, RN &
Geraldine Moore EdD, RN

Objectives

- Describe the overall journey working towards a HEART Safe Community and emphasize the steps needed to ensure sustainability.
- Encourage others to implement similar multi-faceted interdisciplinary evidence-based programs on university campuses and in the community at large.
- Demonstrate how the Heart Safe Community initiative has reached beyond the campus and local community.

Problem

Approximately 436, 852 episodes of out-of-hospital cardiac arrest (OHCA) occur annually₁

According to 2021 U.S. data, the majority of adult OHCA's occur at home (73.4%). Public settings (16.3%) and nursing homes (10.3%) were the second and third most common locations of adult OHCA₁

Implementation of CPR and AED educational programs for laypersons have been identified by both the National Academy of Medicine and the American Heart Association[®] (AHA) as key strategies for improving OHCA outcomes_{1, 2}

Evidence: Preparation is Key

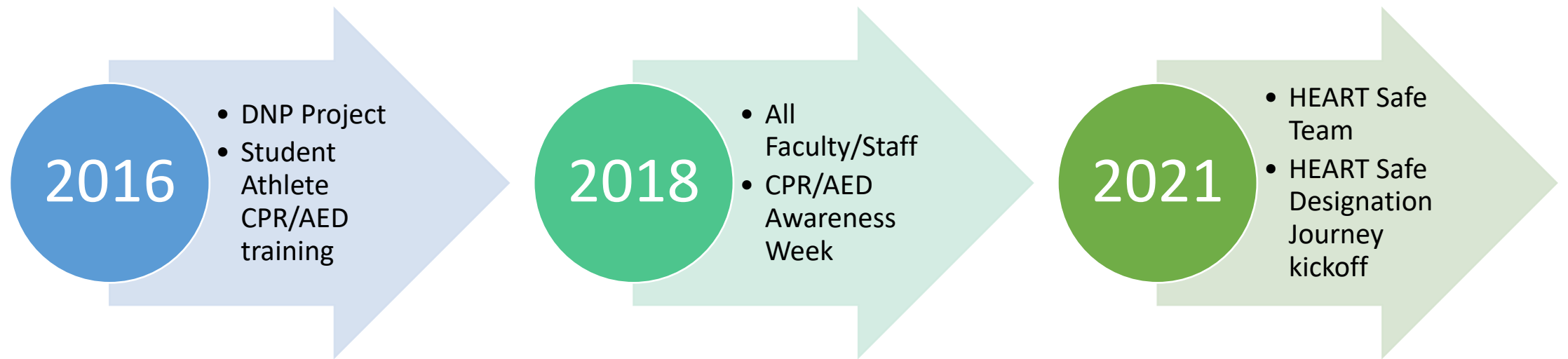
Damar Hamlin



Elijah Brown



Project Evolution

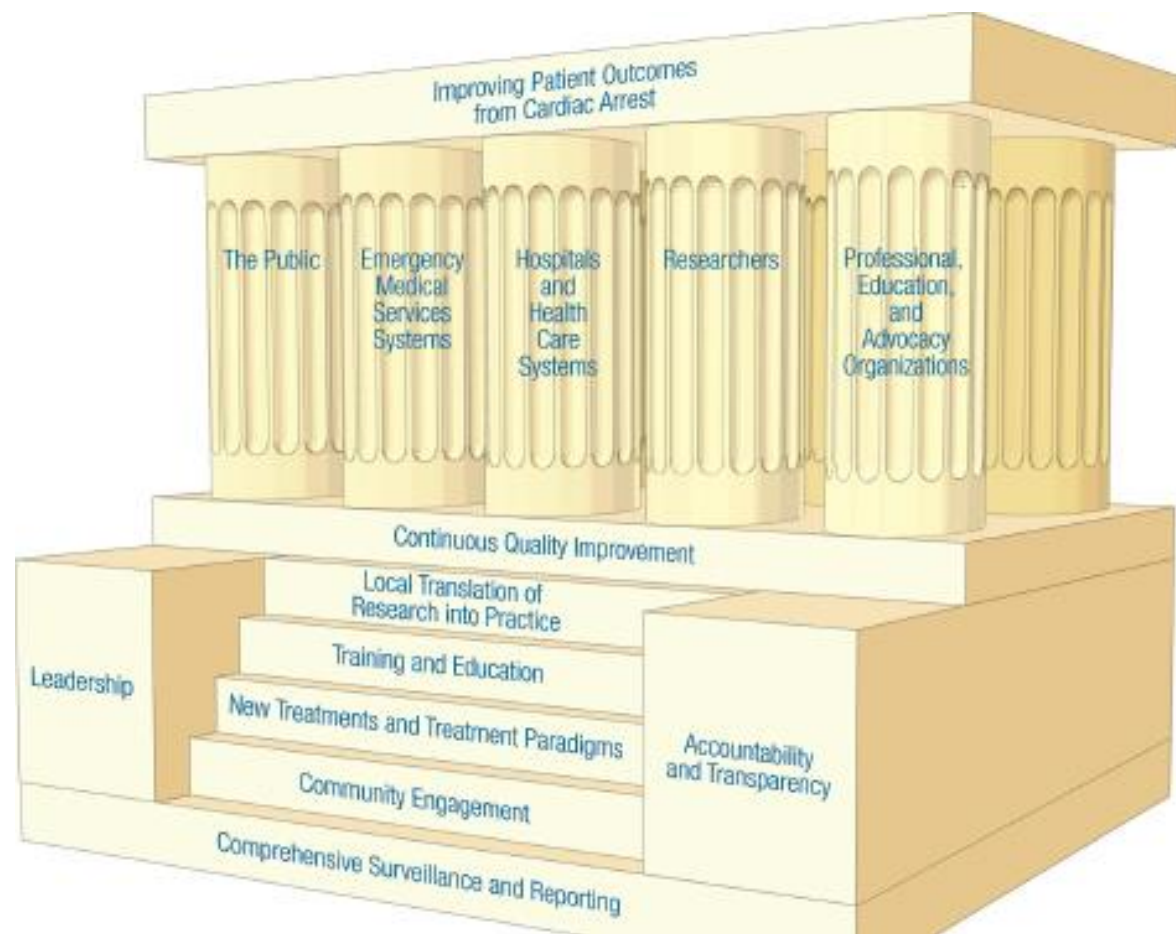


Citizen CPR Foundation: HEART Safe Community Program

- Set of criteria and guidelines designed to improve outcomes to sudden cardiac arrest emergencies through a specific set of training, preparation and response protocols₃
- This criteria supports the cardiac arrest “chain of survival” and encourages communities to put that chain of survival into action₃



Framework



Establishing a High-Performance Lead Agency & Community Team

- Heart Safe Community Committee
 - Faculty/Staff from School of Nursing & Health Sciences
- Public Safety Directors
- Molloy Student Nurses Association (MSNA)
 - Heart Safe Sub Committee
- Local Volunteer Fire Department
- Key Stakeholder Buy In
 - President/Provost of Molloy University
 - Office of Student Affairs
 - Local Village Politicians/Mayor's Cabinet
 - University Students



Using Data to Drive Regional Strategies & Localized Tactics

- No mandatory database for Out of Hospital Cardiac Arrest (OHCA)
- Difficult to obtain accurate numbers
- Collaborating with Northwell EMS director on OHCA incidence rates/outcomes in Rockville Centre
- Molloy University IRB Approval for participant demographic data, pre/post test scores





**Trained Citizen
Rescuers: Goal 15% of
the community
receives annual CPR
training**

Heart Safe Team Training Sessions

- 319 participants in AHA CPR Anywhere sessions (April 2022-February 2023)
- Pop Up CPR Sessions: Public Square, RVC Community events
 - 180 participants
- Molloy University students 2,684 with BLS training required for degree

CPR Anywhere Program Data Collection Process



Anonymous ID



Scan QR code with participant
demographics/pre-test
questions



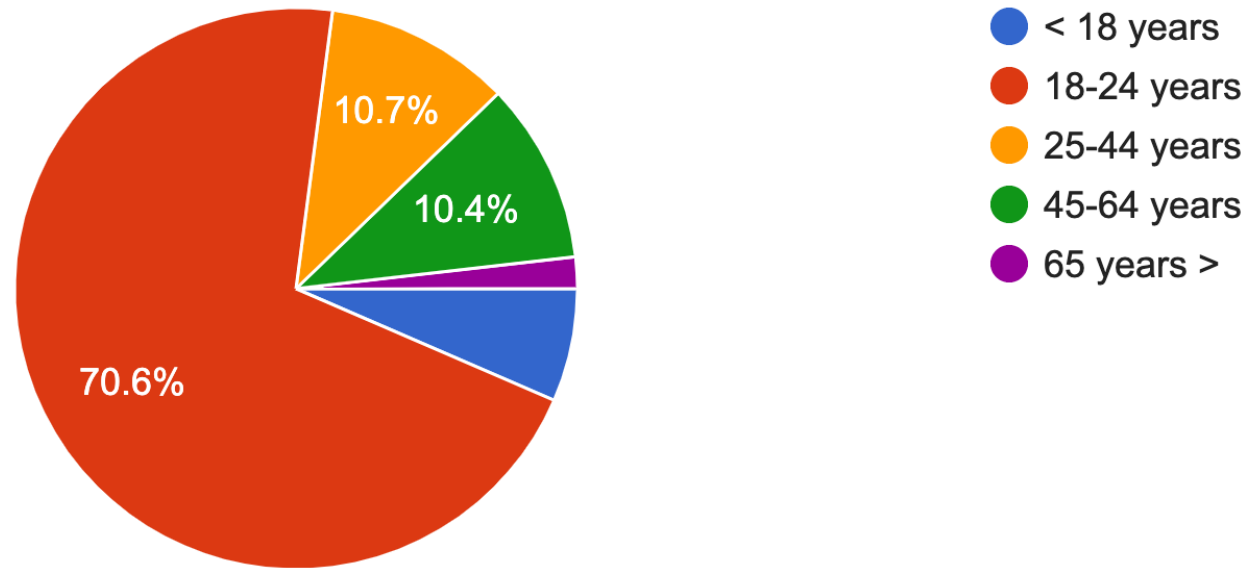
Implement AHA CPR
Anywhere program



Scan post test QR code

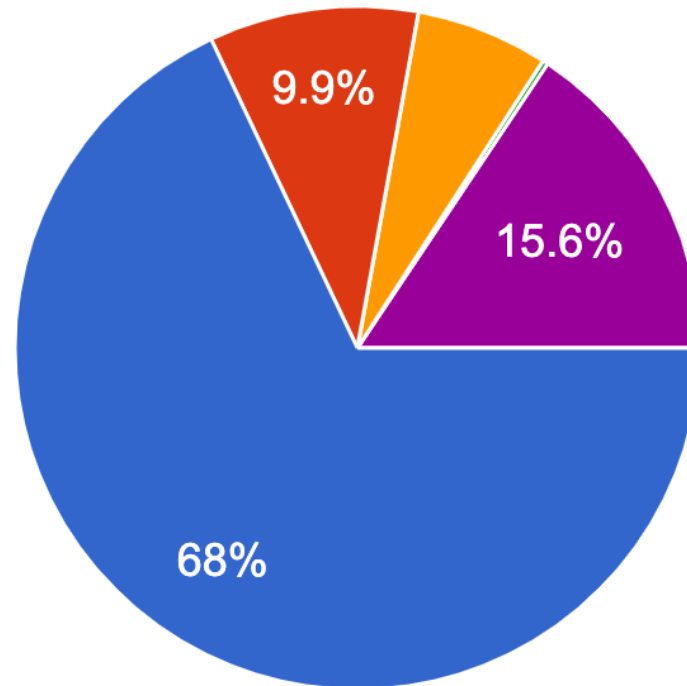
What is your age?

384 responses



Ethnicity

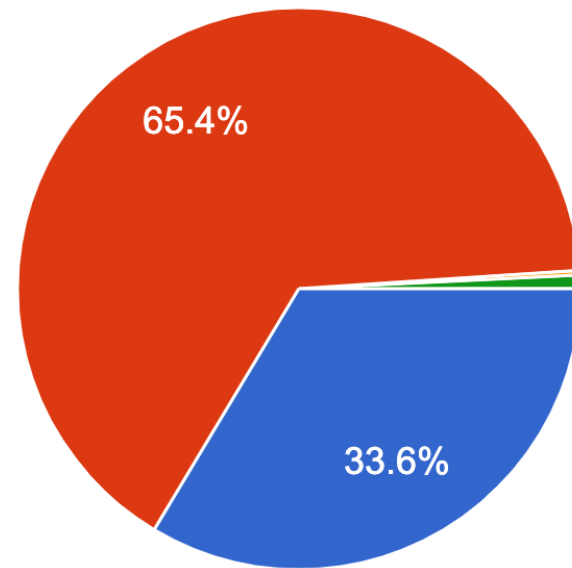
384 responses



- White
- Black/African American
- Asian
- Native Hawaiian/Pacific Islander
- Multiple

How do you identify ?

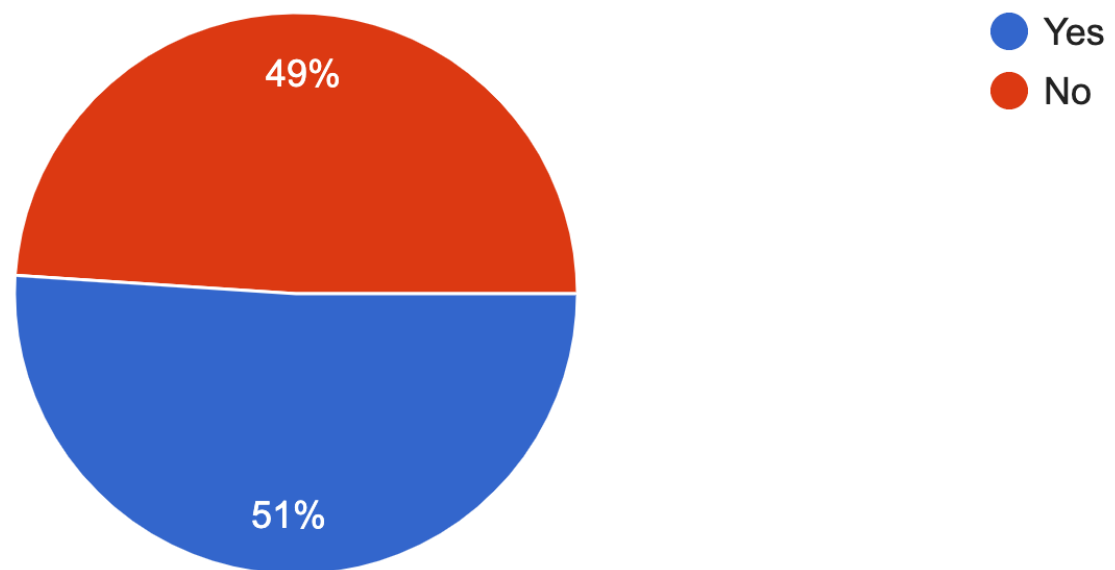
384 responses



- Man
- Woman
- Non-Binary
- Prefer not to answer

Have you ever attended a CPR/AED course before?

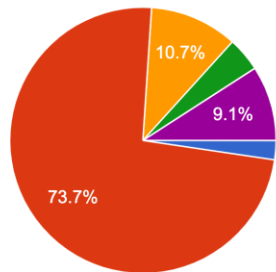
384 responses



During cardiac arrest, what happens to a person?

Pre-test

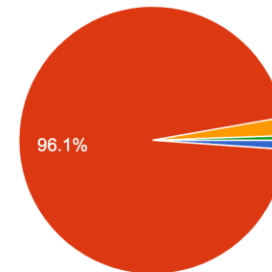
During cardiac arrest, what happens to a person?
384 responses



- The heart is still beating and pumping blood, and the person is still alive
- The heart stops beating, the person doesn't respond, and the person isn't breathing normally, and blood stops moving
- The heart is still beating, the person isn't breathing normally, and blood stops moving
- The heart is still beating and pumping blood, but the person isn't breathing normally
- The heart stops beating, the person doesn't respond, and the person isn't breathing normally

Post-test

During cardiac arrest, what happens to a person?
362 responses

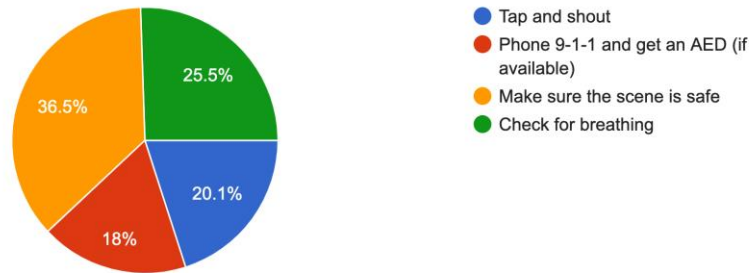


- The heart is still beating and pumping blood, and the person is still alive
- The heart stops beating, the person doesn't respond, and the person isn't breathing normally, and blood stops moving
- The heart is still beating, the person isn't breathing normally, and blood stops moving
- The heart is still beating and pumping blood, but the person isn't breathing normally

Which is the correct first step when you arrived at a scene where a person has collapsed ?

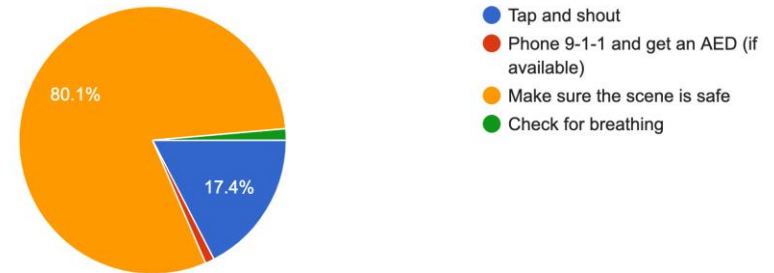
Pre-test

Which is the correct first step when you arrive at a scene where a person has collapsed?
384 responses



Post-test

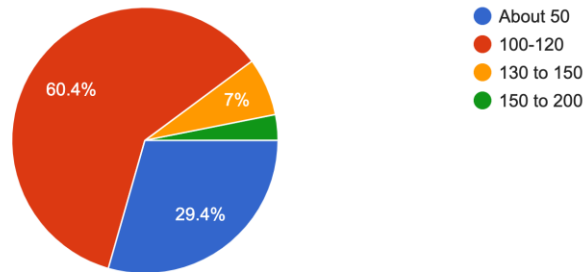
Which is the correct first step when you arrive at a scene where a person has collapsed?
362 responses



When you do Hands-Only CPR, how many chest compressions should you perform each minute ?

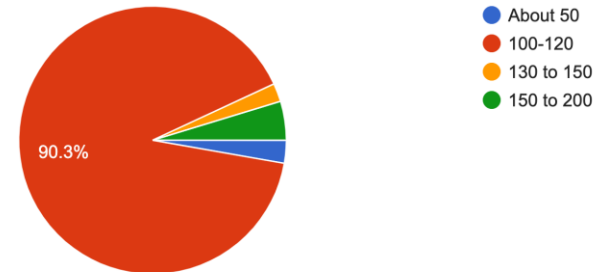
Pre-test

When you do Hands-Only CPR, how many chest compressions should you perform each minute?
384 responses



Post-test

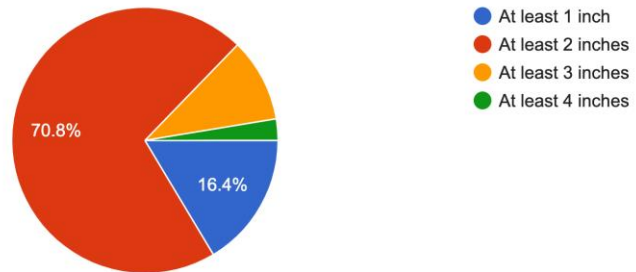
When you do Hands-Only CPR, how many chest compressions should you perform each minute?
362 responses



How deep should you push on the chest of a teen or adult when doing Hands-Only CPR ?

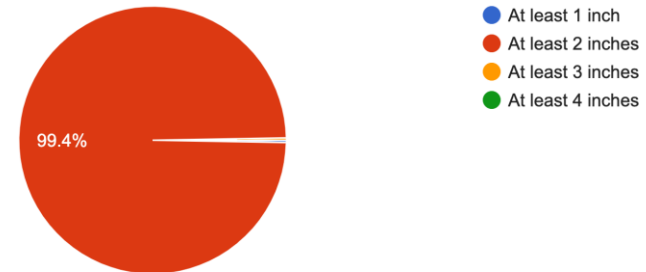
Pre-test

How deep should you push on the chest of a teen or an adult when doing Hands-Only CPR?
384 responses



Post-test

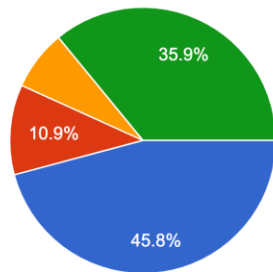
How deep should you push on the chest of a teen or an adult when doing Hands-Only CPR?
362 responses



Once you shout for help, what are the next steps for performing Hands-Only CPR?

Pre-test

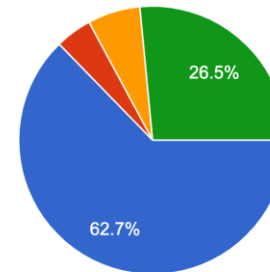
Once you shout for help, what are the next steps for providing Hands-Only-CPR?
384 responses



- Phone 9-1-1 and get an AED (if available), check for breathing, and begin compressions
- Begin compressions, check for breathing, and phone 9-1-1 and get an AED (if available)
- Phone 9-1-1 and get an AED (if available), begin compressions, and c...
- Check for breathing, begin compressions, and phone 9-1-1 and g...

Post-test

Once you shout for help, what are the next steps for providing Hands-Only-CPR?
362 responses

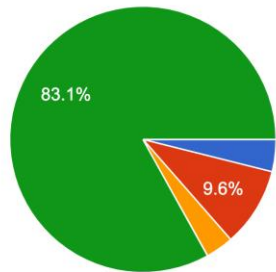


- Phone 9-1-1 and get an AED (if available), check for breathing, and begin compressions
- Begin compressions, check for breathing, and phone 9-1-1 and get an AED (if available)
- Phone 9-1-1 and get an AED (if available), begin compressions, and c...
- Check for breathing, begin compressions, and phone 9-1-1 and g...

What does an AED do?

Pre-test

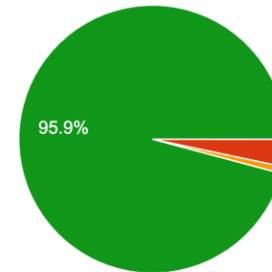
What does an AED do?
384 responses



- Automatically phones 911 and calls for help
- Reads the heart rhythm and checks for breathing
- Automatically phones 9-1-1 and tells you if a shock is needed
- Reads the heart rhythm and tells you if a shock is needed

Post-test

What does an AED do?
362 responses



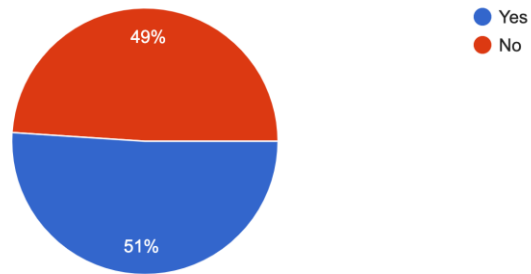
- Automatically phones 911 and calls for help
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- Automatically phones 9-1-1 and tells you if a shock is needed
- Reads the heart rhythm and tells you if a shock is needed

Do you know where the AED is located in public places that you go to ?

Pre-test

Do you know where the AED is located in public places that you go to (for example, work, school, events, stores) ?

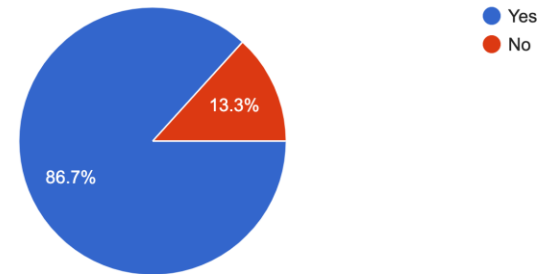
384 responses



Post-test

Do you know where the AED is located in public places that you go to (for example, work, school, events, stores) ?

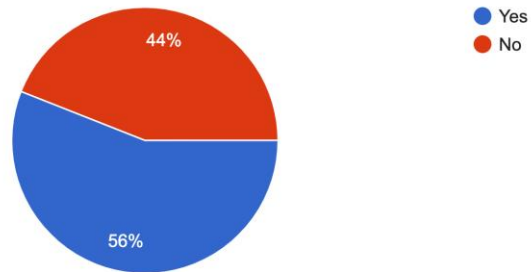
362 responses



Would you feel comfortable performing Hands-Only CPR if someone had a cardiac arrest?

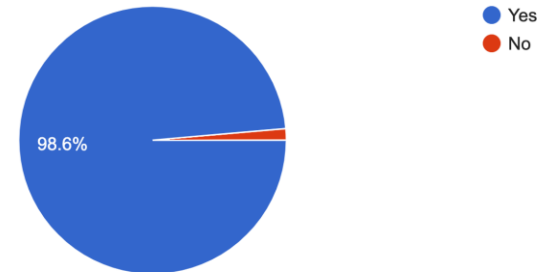
Pre-test

Would you feel comfortable performing Hands-Only CPR if someone had a cardiac arrest?
384 responses



Post-test

Would you feel comfortable performing Hands-Only CPR if someone had a cardiac arrest?
362 responses



Statistical Analysis Pre/Post Test Scores (SPSS)

- ($n=319$)
- Pre/posttest consists of seven CPR/AED knowledge questions and one comfort question
- Statistical analysis revealed there was a significant difference, $t(318) = -24.23$, $p < .001$ between pre-test ($M = 4.79$; $SD = 1.78$) and post-test scores ($M = 7.10$; $SD = .909$), indicating an improvement in CPR/AED knowledge and comfort after participating in the sessions.
- 98.6% of participants report they would feel more comfortable providing hands only CPR if they witnessed an OHCA after taking the course

American Heart Association: CPR Anytime Kit



- Participants offered take home kits
- DVD's & streaming videos in the kit
- Participant scan QR code to update team on additional training



CPR Anytime Data Collection Process

- QR code inserted in kit
- Ask participants to share training with friends/family
- QR code inserted in kit
- Participant scan QR code to update team on additional training
- 44 participants took kits home and trained an additional 132 family members/friends

Data Collection/Analysis Process

- Continuous update of participant responses
- Immediately populates into excel spreadsheet
- Code data
- Insert into SPSS



Recognizing & Celebrating the Actions of Rescuers

- Formal recognition ceremony was held Monday February 27th
 - February is Heart Health month
 - Guest speaker Karen Accompora
 - Provided awards to 20 citizens of our community that have performed CPR/AED use over the past year



Louis J Accompora
MEMORIAL FOUNDATION



Heart Saver Hero Award Ceremony 2/27/23

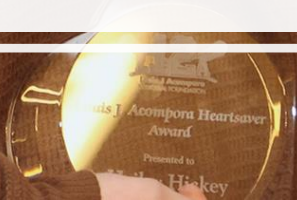


St. Anthony's High School Rescue





Molloy Nursing Student Hailey Hickey



As for the future, your
task is not to foresee it,
but to enable it.
-Antoine de Saint-Exupéry

LOUIS J. ACCIARRA MEMORIAL FOUNDATION
W.LA12.0



Chaminade H.S. Rescue

LOUIS J. ACOMPORA MEMORIAL FOUNDATION
WWW.LA12.ORG



Division Avenue H.S. School Rescue



Atlanta Baseball Tournament Rescue

ION

A photograph of two women standing side-by-side in an indoor setting. The woman on the left has long dark hair and is wearing a sleeveless top with a blue and white abstract pattern and a dark skirt. The woman on the right has short dark hair and is wearing a dark jacket and a light-colored scarf with red heart patterns. They are both smiling. In the background, there are several gifts wrapped in red paper on a shelf. A white banner is overlaid at the bottom of the image.

Half Hollow Hills East H.S. Rescue

Educated & Responsive Citizens

- Increase public awareness of OHCA & encourage bystander CPR
- Formally aligned with national advocacy group Call, Push, Shock
- Molloy University is the first university to align with the organization
- Co-branding of educational handouts/posters
- Ongoing collaboration with the American Heart Association Regional Community Impact Director
- Plan for multiple CPR/AED training events during CPR/AED awareness week June 2023

CALL·PUSH·SHOCK



You Can Save a Life from Sudden Cardiac Arrest

SUDDEN CARDIAC ARREST (SCA) IS A PUBLIC HEALTH CRISIS AFFECTING OVER 356,000¹ PEOPLE EACH YEAR IN THE U.S., INCLUDING 7,000 YOUTH UNDER AGE 18.

Sudden Cardiac Arrest is a life-threatening emergency that occurs when the heart suddenly stops beating. When SCA happens, the person collapses and does not respond or breathe normally. They may gasp or shake as if having a seizure.

Survival depends on the quick actions of people nearby calling 911, starting CPR and using an AED, if available, as soon as possible.

Every second counts!

SCA leads to death in minutes, if the person does not get help right away.



You can triple a person's chance of survival from SCA by starting CPR immediately.

Push hard and fast in the center of the chest 100 to 120 compressions per minute.

7 in 10 SCAs happen at home.

You could save the life of someone you love by starting CPR.



Remember:

CPR and AEDs cannot hurt the person, these can only help.



AED



AEDs are meant for anyone to use. Follow the step-by-step audio/visual instructions.



CallPushShock.org

To join: contact@callpushshock.org

¹Out-of-hospital cardiac arrests. Heart Disease & Stroke Statistics - 2019 Update. A Report from the American Heart Association. © 2019 Parent Heart Watch and Sudden Cardiac Arrest Foundation. All Rights Reserved.

DOWNLOAD MATERIALS

This project is co-sponsored by Parent Heart Watch and the Sudden Cardiac Arrest Foundation



We are the national voice solely dedicated to the prevention of SCA in youth. Take the Prevention Promise and use our free toolkit to prepare your family, school, team and any place youth congregate to save a young life. Learn more...



We aim to reduce death and disability from sudden cardiac arrest by increasing awareness about SCA and influencing attitudinal and behavioral changes that lead to increased bystander CPR and use of AEDs. Learn more...

Partners



Community Outreach

CPR Anywhere Sessions

- Village Employees
- Recreation Center
- Senior Center
- MLK Day of Service
- Girl Scout Troops

CPR/AED Pop Up Sessions

- Street Fairs
- Local 5K
- Youth Sports Fields
- New Student Orientation

Senior Center





Annual Local Street Fair

RECOGNIZE & RESPOND TO SUDDEN CARDIAC ARREST

Person is collapsed and unresponsive to your voice They may be gasping for air or unable to breathe They may shake or have seizure-like movements

Their heart has stopped!
.....What do you quickly do?.....

CALL·PUSH·SHOCK™



Call 911
to get help on the way; dispatcher can guide you

Start CPR
immediately by pushing hard & fast on the center of the chest

Use an AED
follow prompts to restart the heart

.....**YOU Can Save A Life!**.....

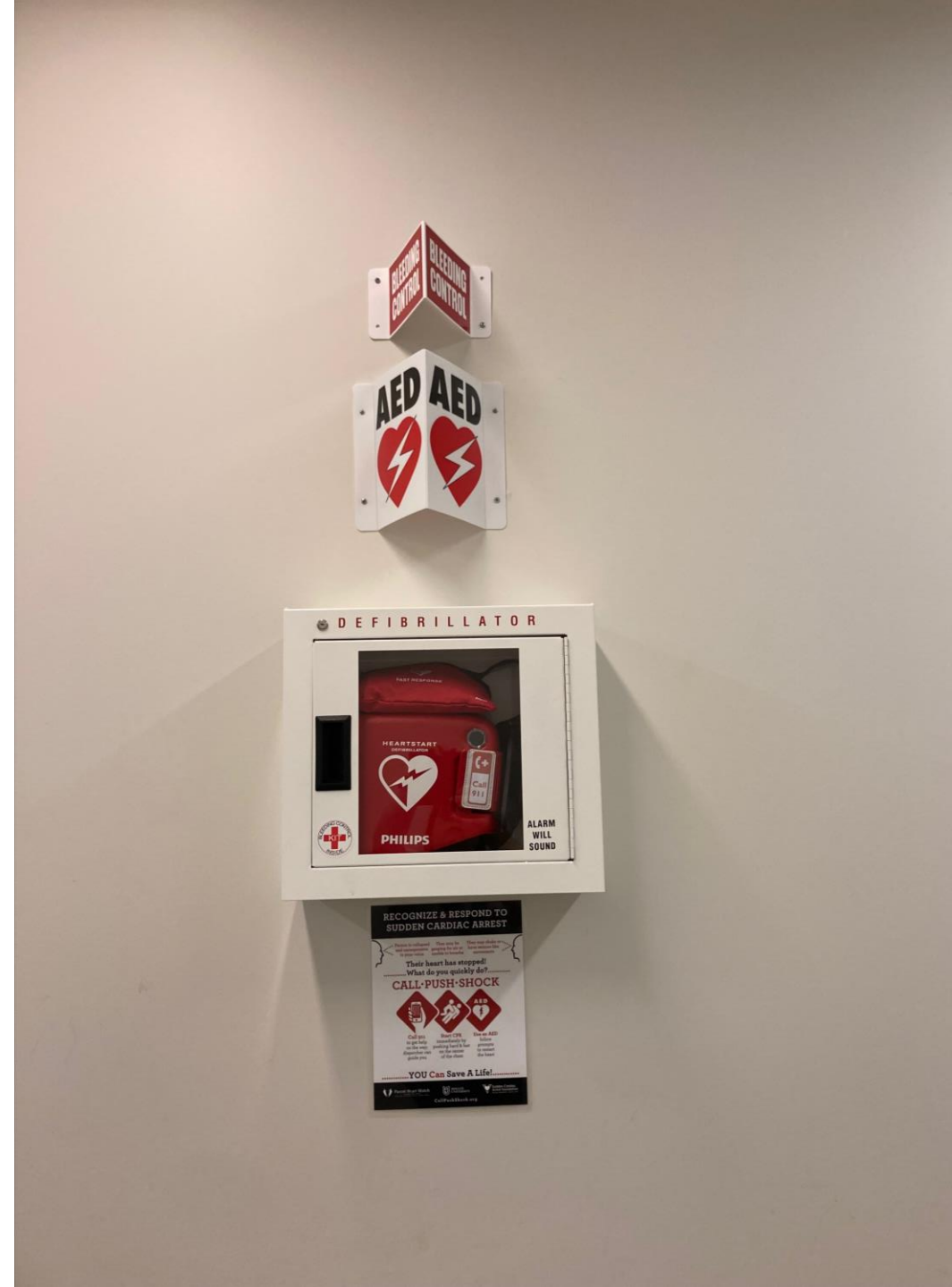
Planned & Practiced Response to Cardiac Arrest

- Creation of Cardiac Emergency Response Protocol (CERP) ongoing
- Collaboration with Molloy Public Safety & Office of Student Affairs ongoing



Strategically Placed & 24/7 Accessible AED's

- 2016 beginning of project 9 AED's were on campus
- 2023 increase to 24 AED's on campus
- Co-branded Call, Push, Shock posters placed beside each AED on campus



Don't Hesitate to Call 911

CallPushShock.org

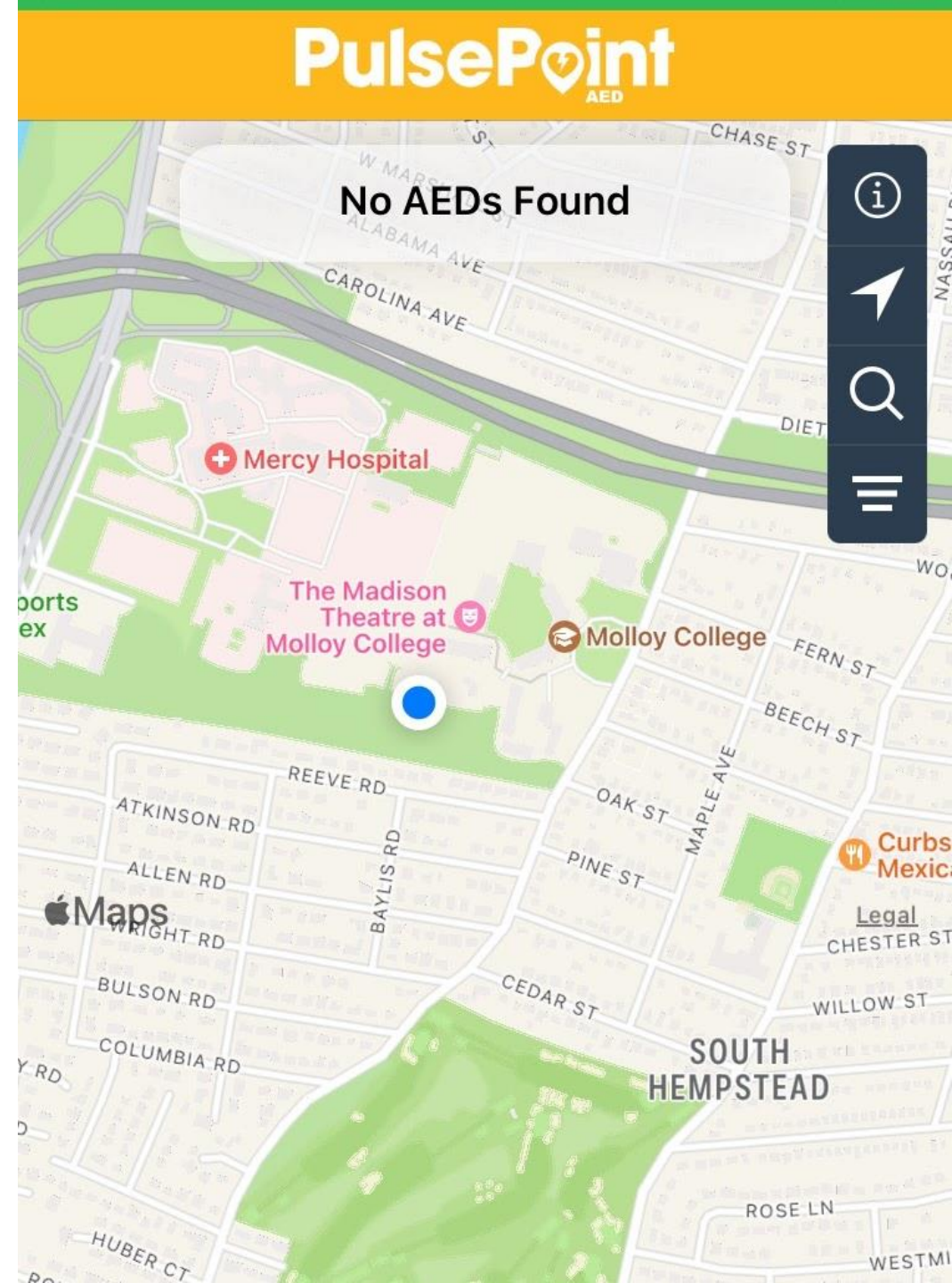


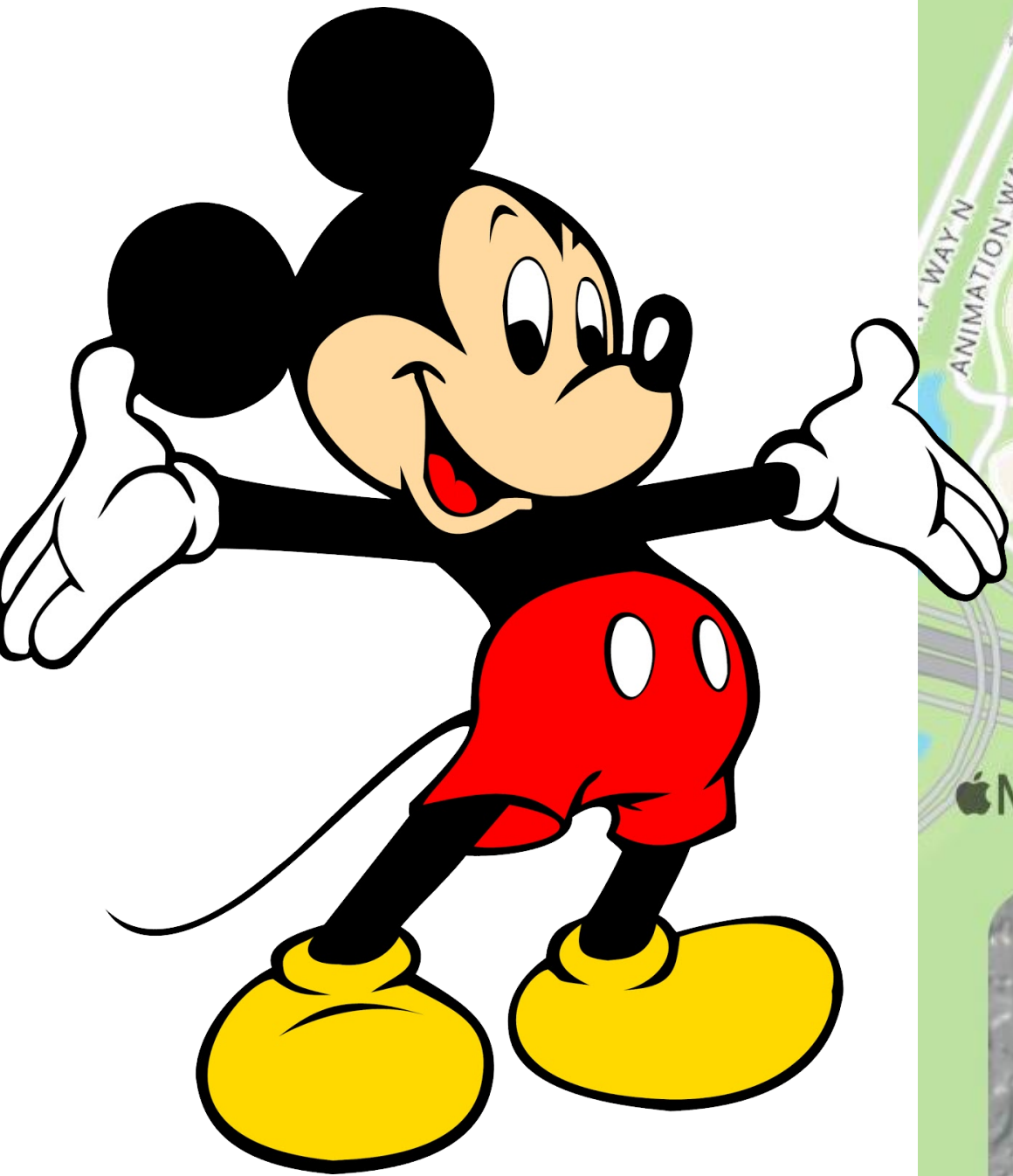
Telephone Guided CPR & Utilization of AEDs

- Collaborating with Northwell EMS regarding policy/protocol for dispatcher assisted CPR

Establish a 911 integrated AED Registry

- Plan to upload all AEDs on campus to Pulse Point AED app
- App users will be notified of closest AED in the event of an emergency
- Photos of AEDs with explanation of exact location, contents of box, times of availability (ex: stop the bleed kit etc.)





UNDING

GRANT

Project Funding

External Funding

- Received EBP Grant from Building Health Academic Communities \$2,500 (The Ohio State University)
- American Heart Association donated approximately \$6,000 in training equipment

Internal Funding

- Molloy University Faculty Scholarship Grant \$5,000

Sustainability

- Badge
- Incorporated into University Freshman Studies Curriculum
- MSNA Subcommittee
- Take home kits





Heart Safe Badge

Badge Applicants

- 92 Molloy Undergraduate Students
- 5 High School Students

Challenges

- Securing Stakeholder Buy-in
- Creating a team
- Having enough CPR facilitators
- AED Maintenance \$
 - Expired AED pads
 - Outdated Units





Questions ?

References

1. Tsao, C. W., Aday, A. W., Almarzooq, Z. I., Anderson, C. A., Arora, P., Avery, C. L., ... & American Heart Association Council on Epidemiology and Prevention Statistics Committee and Stroke Statistics Subcommittee. (2023). Heart disease and stroke statistics—2023 update: a report from the American Heart Association. *Circulation*, 147(8), e93-e621.
2. National Academies of Sciences, Engineering, and Medicine. 2017. *Exploring Strategies to Improve Cardiac Arrest Survival: Proceedings of a Workshop*. Washington, DC: The National Academies Press.
<https://doi.org/10.17226/23695>.
3. Citizen CPR Foundation. (2023). *HEART Safe Community*. <https://citizencpr.org/heartsafe/>