

SAFETY & LOSS PREVENTION

OUTLOOK

BEATING THE ODDS OF SUDDEN CARDIAC ARREST

WHY SURVIVAL RATES ARE SO LOW
AND WHAT YOU CAN DO TO IMPROVE THEM

ALSO INSIDE:

- The Bystander Effect: How to overcome it, and why it matters
- Top Trends in Health & Safety in the Workplace
- How an active social life can increase one's ability to work





1,000

the number of Americans who suffer sudden cardiac arrest each day

10,000

the number that occur in the workplace each year

1 in 10

the number who survive

IN THIS ISSUE

If a coworker's heart stopped, would you know how to respond? Have you been trained in basic first aid or CPR? Do you know if your workplace has an AED and where to find it? Workplace safety & loss prevention tends to focus on fixing hazards and preventing injuries, and too often overlooked are emergencies not directly linked to the workplace itself. Learning what to do for a person suffering a cardiac event can literally mean the difference between life and death.

CPR and AED Awareness Week
June 1-7

Kickstart My Heart — How Bystanders React (Or Don't) Determines the Outcome For Victims of Sudden Cardiac Arrest	1
SCA pg. 2 — Chain of Survival	2
How To Save A Life — First Aid, CPR, & AED Use in a Cardiac Emergency	3
Cardiac Arrest vs. Heart Attack	4
The Key To Surviving Sudden Cardiac Arrest Lies In Prevention	5
The Bystander Effect — What Keeps Us From Getting Involved During A Crisis	6
2023 Top Trends In Workplace Safety & Health	8
Want To Keep Working At An Older Age? A Social Life Off The Job May Help	9
Division of Risk Management's eLearning System	9
Safety & Loss Prevention OUTLOOK Online Library	10
References & Resources	11
Credits	13

KICKSTART



MY HEART

HOW BYSTANDERS REACT (OR DON'T) DETERMINES THE OUTCOME FOR VICTIMS OF SUDDEN CARDIAC ARREST

On Monday, January 2, 2023, Damar Hamlin of the Buffalo Bills collapsed on the field during an NFL game against the Cincinnati Bengals. Trainers and teammates rushed to his aid and found him without a pulse. Within seconds, Bills' assistant athletic trainer, Denny Kellington, administered CPR, keeping Hamlin's heart pumping for nine minutes, until emergency medical technicians arrived. EMTs then restarted Hamlin's heart with a device known as an automatic external defibrillator, or AED.

During cardiac arrest, the heart stops pumping blood through the body, which can result in organ failure.

The damage to organs is worse the longer they are deprived of oxygenated blood, and the brain is especially susceptible to this — brain cells begin to die within a few minutes of oxygen deprivation, and after five minutes, severe brain damage is likely.

At just 24 years old, healthy, and in peak physical condition, Hamlin may not seem to be at risk, but Sudden Cardiac Arrest (or SCA) can strike people of any age or medical status. SCA occurs when the heart suddenly stops beating due to an irregular heart rhythm, which can be brought on by a number of factors. In Hamlin's case, a blow to the chest during a critical time in the cycle of his heartbeat caused his heart to stop, a rare event known as commotio cordis.

Coach Kellington's rapid response not only saved Hamlin's life, but his neurological function as well — those nine minutes of CPR kept blood flowing to the brain. And just nine days after his collapse, Damar Hamlin was discharged from the hospital with an excellent prognosis.

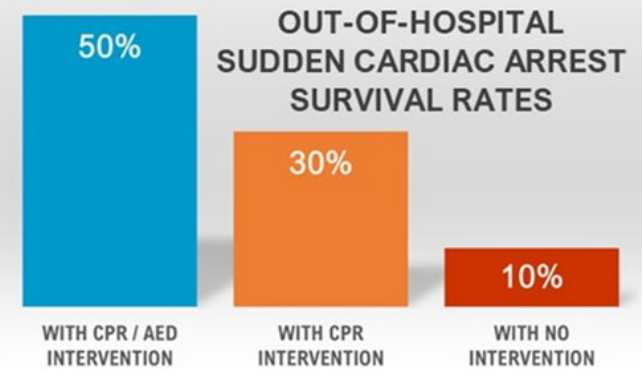
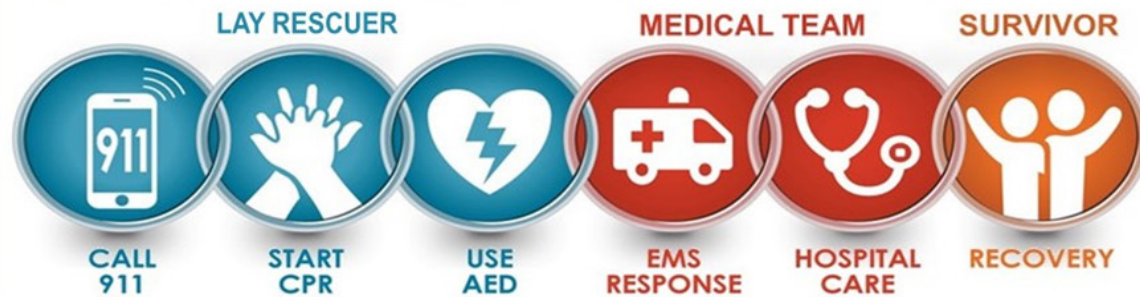


**DID YOU
KNOW?**

**SCA is the most
common single cause
of death worldwide**

About 365,000 people experience Sudden Cardiac Arrest in the U.S. each year — that's nearly equivalent to the number of deaths from firearms, car accidents, house fires, diabetes, HIV, Alzheimer's disease, suicide, and breast, cervical, colorectal, and prostate cancers combined.

CHAIN OF SURVIVAL



According to the American Heart Association, SCA affects nearly 1,000 people (outside of a hospital setting) in the U.S. every day, and most — nearly 90% — are fatal.

Why are survival rates so low? Because each person's chance of survival from SCA relies heavily on the "Chain of Survival," a term coined by the Sudden Cardiac Arrest Foundation. The chain depicts the events that must occur, in order and quick succession, to maximize the odds of survival — and, like any chain, it is only as strong as its weakest link. The first three links in the Chain of Survival can only be accomplished by bystanders. If there are no bystanders, or if no one steps up to help (see "[The Bystander Effect](#)"), the chain is broken, and survival is unlikely.

On average, survival rates go from 10% to 30% when CPR is performed after SCA, and go all the way to 50% for those who receive both CPR and defibrillation with an AED (see chart above). However, these actions must be taken **within the first three minutes** to be effective.

Rates of survival after SCA have increased in recent years due to more rapid response times, more frequent intervention by bystanders, greater knowledge of CPR techniques, and greater access to AEDs.

DON'T BE AFRAID TO HELP

Make no mistake — a person in cardiac arrest **will die** without immediate intervention. Even if you think you don't know what you're doing, even if you've never taken a CPR class or used an AED, even if you break the victim's ribs (which happens about 30% of the time), — you can't make the outcome worse by helping, and you can't prevent the worst outcome without at least trying to help. The only way to "do it wrong" is not to try.

Portable AEDs are designed to be safe and simple enough for the average layperson to use. Adhesive electrodes are attached to the patient's chest, allowing the computer to determine whether defibrillation is needed. The AED will not issue a shock unless the heart is beating irregularly, even if you press the shock button.

Additionally, Section 768.1325, F.S., protects any person who uses an AED during an emergency "to save the life of another person who is, or who appears to be, in cardiac arrest" from civil liability.

CALL • PUSH • SHOCK



SCA very quickly results in death if no action is taken. For every minute a person remains in cardiac arrest, survival odds decrease by 10%.

Performing CPR immediately following cardiac arrest can double or even triple chances of survival. Defibrillation with an AED increases the odds even more.

HOW TO SAVE A LIFE: First Aid, CPR, & AED Use in a Cardiac Emergency

JUNE 1-7 IS NATIONAL CPR & AED AWARENESS WEEK

Knowing what to do as a bystander to a cardiac emergency can mean the difference between life or death. Take note of the location of AEDs in your workplace and in public spaces. Learn CPR by taking a local class, or watch this [Hands-Only CPR Instructional Video](#) from the American Heart Association to learn the basics in just 90 seconds.

REMEMBER: Even if you are a little rusty or completely untrained, it's always better to attempt CPR than to do nothing.



What's the best way to estimate 100 compressions per minute? MUSIC! Here is a list of songs around 100 bpm to help you ...

STAYIN' ALIVE
Bee Gees

UPTOWN FUNK
Bruno Mars

ALL STAR
Smash Mouth

BABY SHARK
Pinkfong

DANCING QUEEN
ABBA

WORK IT
Missy Elliott

HIPS DON'T LIE
Shakira

I WILL SURVIVE
Gloria Gaynor

CRAZY IN LOVE
Beyonce & Jay Z

HOW TO ISSUE FIRST AID

STEP 1: Make sure the environment is safe.

Get yourself and the victim to a safe location if necessary (e.g., away from smoke, traffic, etc.).

STEP 2: If the person appears unconscious, try to get them to respond to you. Tap or shake their shoulders and loudly ask, "Are you OK?"

STEP 3: CALL 911, whether the person is conscious or not.

STEP 4: Retrieve the AED, if one is available. If you are alone, and the AED can be retrieved in less than three minutes, retrieve it while calling 911. If others can help, ask them to call 911 and retrieve the AED while you move on to STEP 5.

STEP 5: Put the person on their back on a firm surface. Try to move the head and neck as carefully as possible in case the person has a spinal injury.

STEP 6: Check for breathing. Gently tilt the victim's head back to open the airway and put your ear up to their mouth to listen and feel for breath. If no breath is detected after 10 seconds, move on to **STEP 7**.

STEP 7: Use the AED (if available), then **start CPR**.

HOW TO USE AN AUTOMATED ELECTRONIC DEFIBRILLATOR (AED)

STEP 1: Turn on the device and follow the audio instructions.

STEP 2: Expose the person's bare chest (including undergarments).

STEP 3: Apply the electrode pads to the person's bare skin. Make sure their skin is dry.

STEP 4: Allow the AED to analyze the person's heart rhythm. Make sure no one, including you, is touching the victim, as this can interrupt the AED's analysis.

STEP 5: Deliver a shock (if needed).

A fully-automated AED will tell you to stand clear, then count down and deliver the shock without requiring you to press a button. A semi-automated AED will charge itself and prompt you to press the shock button.

STEP 6: Stand clear of the victim until the AED instructs you that it is safe to continue CPR. The AED will reanalyze the heart rhythm every two minutes; **perform CPR** in between analysis periods and follow the AED instructions about when to deliver additional shocks.

HOW TO PERFORM CARDIOPULMONARY RESUSCITATION (CPR)

HANDS-ONLY:

STEP 1: Place your hands on the person's chest. Put the heel of one hand in the center of the chest, on the sternum. Put your other hand on top of the first hand, and center your weight directly over both hands. Position your shoulders directly above your hands.

STEP 2: Perform chest compressions. Keeping your arms straight, elbows locked, push **hard** (to a depth between 2-2.4 inches), using your entire body weight. Push **fast** (at a rate of 100-120 compressions per minute, or about twice per second). Keep your hands in contact with the person's chest at all times (not bouncing). Lift your body weight off the person and allow the chest to recoil between each compression.

If you are **NOT** trained in or comfortable issuing rescue breaths: **Continue compressions until the person is revived or medical help arrives. DO NOT CONTINUE TO STEP 3.**

If you have been trained and feel comfortable issuing rescue breaths: **Complete 30 chest compressions, then CONTINUE TO STEP 3.**

WITH RESCUE BREATHING:

STEP 3: Open the airway. Place your palm on the victim's forehead and gently tilt the head back. With the other hand, gently lift the chin forward.

STEP 4 using the Mouth-to-mouth breathing technique: Pinch the nostrils shut and cover their mouth with yours, creating a seal.

STEP 4 using a Bag-Valve-Mask (BVM): Hold the mask tightly over both the nose and mouth, creating a seal.

STEP 5: Issue a rescue breath, either by blowing into the person's mouth with your mouth for one second, or by squeezing the BVM. If the person's chest rises, give a second breath. If the chest does not rise, repeat Steps 3-4 before giving a second breath. **REPEAT FROM STEP 1.**

CARDIAC ARREST VS. HEART ATTACK

CARDIAC ARREST occurs when the heart malfunctions and stops beating unexpectedly.



Cardiac arrest is triggered by an **electrical malfunction** in the heart that causes an irregular heartbeat (arrhythmia). With its pumping action disrupted, the heart cannot pump blood to the brain, lungs, and other organs.

A person in **CARDIAC ARREST** is unresponsive, is not breathing, and has no pulse.



Cardiac arrest can sometimes be reversible if it is treated quickly. Call 911 and immediately start CPR on the victim. Use an AED as soon as possible if one is available. Cardiac arrest will cause death if the victim does not receive treatment within a few minutes.

A **HEART ATTACK** occurs when blood flow to the heart is reduced or cut off completely.



A blocked artery prevents **circulation** of oxygen-rich blood to a section of the heart. If the blocked artery is not reopened quickly, the part of the heart normally nourished by that artery begins to die.

A person having a **HEART ATTACK** is responsive, is breathing, and has a pulse.



The heart continues to beat but does not pump blood effectively. The longer a person goes without treatment, the greater the damage to the heart and other organs. Symptoms are not always obvious and may take hours, days, or even weeks to be recognized.

HEART ATTACK increases the risk of **SUDDEN CARDIAC ARREST**.

Not every episode of SCA is caused by a heart attack.

But heart attack is the most common cause of SCA. Other causes include cardiomyopathy, heart failure, and arrhythmias such as ventricular fibrillation.



Fast action can save lives.

To find out more about CPR training in your area, visit cpr.heart.org.

Not every heart attack leads to an episode of SCA.

Prompt treatment, followed by lifestyle changes and medications to prevent recurrence can decrease the risk of SCA after a heart attack.



THE KEY TO SURVIVING SUDDEN CARDIAC ARREST LIES IN PREVENTION

Given the odds of surviving sudden cardiac arrest are so low, the best plan of action is to avoid it in the first place. Because SCA can have many different causes, knowing your risk factors can help you take better control of your health.

SURVIVORS OF SCA & HEART ATTACK

Those who have previously survived SCA run the greatest risk of recurrence. And around 75% of SCA deaths can be linked to a previous heart attack.

WHAT YOU CAN DO: Doctors often recommend an implantable cardioverter defibrillator (ICD), which monitors the heartbeat and provides an electric shock to restore normal rhythm if necessary. Medications such as beta blockers or statins, as well as procedures such as angioplasty or catheter ablation can help reduce the risk.

OTHER HEALTH CONDITIONS

Coronary artery disease causes 80% of SCA deaths. Other chronic conditions, such as diabetes, obesity, high LDL cholesterol, high blood pressure, and heart disease, also increase the risk of SCA.

WHAT YOU CAN DO: Take charge of your pre-existing medical conditions by remembering your A-B-C-s:

A1C Test for Diabetes — Monitor blood sugar levels carefully

Blood Pressure — High blood pressure usually has no symptoms (see previous issue), so have it checked regularly

Cholesterol — Have blood levels checked at least every 4-6 years

Stop Smoking

Doctors may prescribe lifestyle changes and/or medications to help control these conditions.

Be aware of the risks associated with certain prescription medications — many have been associated with higher rates of obesity, diabetes, high blood pressure, heart attack, stroke, and atrial fibrillation — as well as the risks of not taking them or stopping suddenly.

GENETICS & BIRTH DEFECTS

SCA occurs most frequently in adults in their mid-30s to mid-40s, especially men of African American descent. Having a family history of heart disease or being born with a congenital heart defect also raises the risk of SCA.

WHAT YOU CAN DO: Unfortunately, these risk factors cannot be avoided, but being aware of them can help you know to monitor symptoms closely.

LIFESTYLE

Poor diet, inactivity, and other bad habits can increase the risk of SCA, as well as increasing the risk of nearly all the other conditions that can lead to SCA.

WHAT YOU CAN DO: Eat a healthy diet, get regular exercise, limit alcohol use, and avoid smoking or abusing drugs.

STRESS & MENTAL DISORDERS

Research suggests that the long-term effects of emotional stress and mental illness can increase the risk for SCA. Mood disorders, anxiety, depression, PTSD, and chronic stress can increase heart rate and blood pressure, reduce blood flow to the heart, and raise cortisol levels, which over time can lead to calcium buildup in the arteries, metabolic disease, and heart disease.

WHAT YOU CAN DO: Though it may not always be possible to remove stress from your life, try to find time for activities that reduce its effects, such as yoga, walking, meditation, etc. Cut back on substances like caffeine and alcohol, as they can increase anxiety and blood pressure. Stay on top of treatment for mental health issues, whether through counseling, medications, or both.



THE BYSTANDER EFFECT

WHAT KEEPS US FROM GETTING
INVOLVED DURING A CRISIS

Every bystander who encounters a person in distress has a choice to make — jump into action and assist in some way, or stand by and do nothing — and this decision seems to depend a great deal on how many other people are around.

Studies have shown that observers are more likely to take action if there are few or no other witnesses in the vicinity. The more people that are present, the less willing bystanders are to help someone in distress. This phenomenon is known as the “Bystander Effect.”

But why does it happen? Psychologists have studied this effect in an effort to determine what restrains some people from helping in an emergency, while others feel compelled to act.

WHAT **STOPS US** FROM OFFERING HELP?

DIFFUSION OF RESPONSIBILITY

Researchers believe the presence of others spreads one's feelings of responsibility across the group, so each individual feels less pressure to respond, and studies have shown it takes as few as one additional witness to keep us from offering to help in an emergency.

One such study at Princeton University asked students to sit by themselves in a cubicle and talk to fellow students through an intercom. The researchers told Group #1 that they would be speaking with one other student; Group #2 was told there would be two other students on the line, and Group #3 believed they were speaking with five other students. In reality, every student was speaking only to one other person, who mentioned early on in the conversation that he sometimes suffered from seizures. This person then pretended to have a seizure, choking, gasping, and speaking incoherently over the intercom.

Each student in Group #1 believed there were no other witnesses to this medical emergency, and 85% of them left their cubicles to help. In Group #2, just the perception that another witness was present (even though they had not seen or heard proof of this) caused that number to drop to 62%. In Group #3, only 31% of participants tried to help.

BEING IN A HURRY

In another study done at Princeton University, seminary students were asked to walk across campus to give a presentation, through a passageway where they each encountered a person slumped over and groaning. Students with time to spare were more than six times as likely to stop and help as students who did not feel they had extra time. Only 10% of the students who were in a hurry stopped to help.

ASSUMING THE CRISIS IS BEING HANDLED

We may believe someone else has already called for help, or that the situation is under control or can't be that serious, because no one else is helping.

PLURALISTIC IGNORANCE

We tend to use people's expressions and actions to judge the seriousness of a situation, and if others appear calm, we assume everything must be fine. Passive bystanders unconsciously signal those around them that nothing is wrong, thus creating more passive bystanders.

CONFUSION / FEAR OF EMBARRASSMENT

The need for help can seem ambiguous, and misunderstanding a situation can be embarrassing — nobody wants to be seen as a person who overreacts or “cries wolf.”

FEELING UNQUALIFIED TO HELP

Surely with all these people around, someone better qualified will step up, right? Our own ignorance about how best to help often prevents us from even trying when others are around.

FEAR OF BEING HURT OR BLAMED

We sometimes fear that getting involved will somehow cause us to be hurt. Maybe the victim's condition is contagious; maybe we'll be blamed for causing the situation or for making it worse. We may even be afraid of the legal ramifications if our good-intentioned efforts fail. To counteract this concern, the state of Florida has Good Samaritan laws in place to offer legal protection to people “who administer emergency care or treatment to those in need, including those licensed to practice medicine.” (Section 741.30, F.S.)

WHAT **MOTIVATES US** TO HELP?

KNOWLEDGE IS POWER

Simply being aware of the Bystander Effect allows us to make a conscious effort to fight against it by challenging our own assumptions (e.g., someone else has already dealt with it, etc.) and choosing to act in spite of our hesitancy.

SKILLS INSPIRE SELF-CONFIDENCE

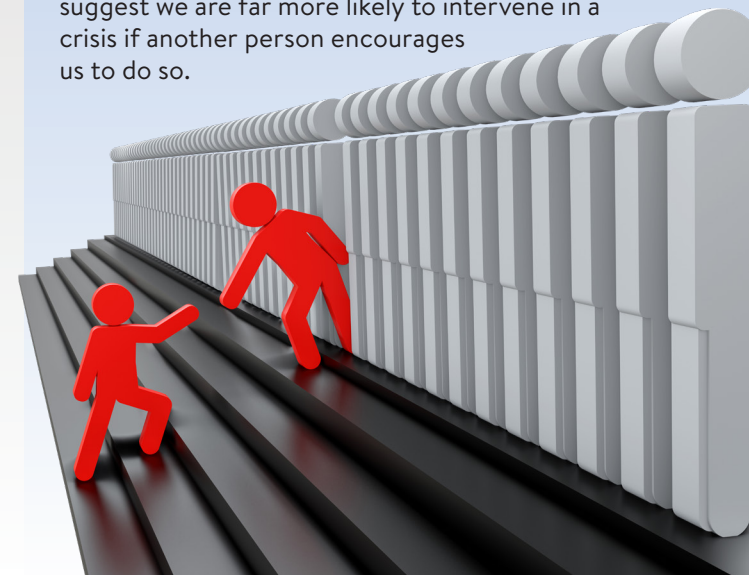
People who have been trained in first aid and CPR are more likely to offer assistance in a medical emergency, as they feel more qualified to help — another great reason to receive such training.

CONNECTION IS KEY

We are more likely to take action if we feel some sort of connection with the victim — if we know the victim personally, or if the victim makes eye contact or calls out to us directly.

COURAGE INSPIRES COURAGE

Just as passive bystanders can interfere with our ability to recognize a true crisis, active bystanders can influence and motivate others to help. Studies suggest we are far more likely to intervene in a crisis if another person encourages us to do so.



2023 TOP TRENDS IN WORKPLACE SAFETY & HEALTH

Here's a look at some of the most prevalent and pressing environmental health & safety issues organizations are facing now and in the near future. Some of these topics have been featured in previous issues of OUTLOOK, and they deserve a second look. Click the links under each header on this page to revisit past articles, and look for more in issues to come.

MUSCULOSKELETAL DISORDERS (MSDS)

Half of American adults experience pain from musculoskeletal disorders, according to the CDC and the National Health Interview Survey. Despite this percentage remaining relatively constant each year, the economic cost of MSD medical claims has doubled over the last decade, consuming nearly 30% of all workers' compensation costs. The average employee suffering from an MSD takes more than double the number of sick days than for any other illness or injury. Often called "ergonomic injuries," MSDs are caused by sudden or sustained forceful exertions, vibration, repetitive motion, and/or awkward posture. Muscle and joint fatigue can also lead to MSDs. Implementing engineering and work practice controls specific to job tasks in your workplace is essential in reducing the risk of ergonomic injuries. [Moving Without Injury](#) | [Cumulative Trauma Disorder: Preventing Injuries by Practicing Proper Ergonomics](#) | [Laptop Ergonomics](#)

HEAT-RELATED ILLNESSES

Since the 1990s, the three-year average of workplace deaths caused by heat exposure has doubled. In response to this, OSHA launched a National Emphasis Program in April 2022 to address the increasing number of workplace injuries related to heat. [Staying Cool When Temperatures Rise](#) | [Summer Swelter: Keeping Cool and Staying Safe in Florida's Extreme Heat - Special Feature Edition](#)

WORKPLACE VIOLENCE

Each year, nearly 1.5 million workplace attacks are reported (though many more go unreported) — and that number is increasing. According to the National Safety Council, assaults are the fifth leading cause of work-related deaths in the U.S. Workplace violence impacts organizations on every level — physically (20,050 injuries and 481 fatalities in 2020 alone), psychologically (one in seven U.S. workers feels unsafe at work, leading to anxiety, depression, and burnout), financially (medical costs, increased absenteeism, decreased productivity), and socially (damaged or uncomfortable relationships creates rifts among employees). New technologies, such as virtual reality training programs, weapons detection systems, access control equipment, and monitoring apps can help employers build an effective workplace violence prevention plan. [Workplace Violence - How to Spot Potentially Violent Behavior](#) | [Active Shooter Preparedness](#) | [Workplace Violence Warning Signs](#)

MENTAL HEALTH

According to the CDC, mental illnesses are among the most common health conditions in the U.S., with nearly one in five adults living with mental illness in a given year, and more than half the population diagnosed with mental disorders at some point in their lifetime. Staff shortages and heavier-than-normal workloads are adding additional stress, leading to worker burnout, reducing productivity. The World Health Organization estimates the financial cost on the U.S. economy of mental illnesses such as anxiety and depression at an estimated \$1 trillion.

Mental illnesses increase the risk of chronic physical illnesses, such as diabetes and heart disease, and those same chronic conditions increase the risk of mental illnesses, such as anxiety and depression. Because mental and physical health are so interconnected, employers need to consider both as a whole when making decisions about the health and safety of their employees. [De-Stress At Work](#) | [Mental Health: Keeping Safe & Staying Sane In A Time Of Unprecedented Crisis](#)



Want to keep working at an older age? A social life off the job may help



Dortmund, Germany — An active social life outside of work can have a positive effect on your ability to keep working as you age, results of a recent study by German and Spanish researchers suggest.

Using data from 247 middle-aged and 236 older workers who participated in the [Dortmund Vital Study](#), the researchers looked at physical fitness, cognitive function and social life, as well as each one's influence on work ability – measured via the [Work Ability Index](#), “which considers job demands and individual physical and mental resources.”

The researchers found that having a social life outside of work “had significant positive effects on work ability” for both groups of workers. Meanwhile, physical fitness had a “significant effect” on work ability among the middle-aged workers.

“Work ability is influenced by various factors in the course of working life,” a press release from the Leibniz Research Centre for Working Environment and Human Factors says. “In particular, social activities outside work and physical activity in leisure time increase well-being and health and can act as a compensation for work-related negative aspects such as psychosocial stress or even poor working conditions.”

The study was [published online](#) in the journal *International Archives of Occupational and Environmental Health*.



E-Learning

from the
DIVISION OF RISK MANAGEMENT

The safety training required per section 284.50, F.S. for all newly-appointed safety and alternate safety coordinators, previously available solely in webinar format, is now being provided through online training modules available at your convenience.



PEOPLE FIRST TIMESHEET USERS:

- Click here to login to **People First**
- Click on **Talent Management**
- Click on **Learning**
- Click on **Find Learning**
- Type “DFS_RM” into the search bar for a list of current courses
- Click “**Start Course**” on the module of your choice

DRM WEBSITE REGISTRATION

ALL OTHERS:

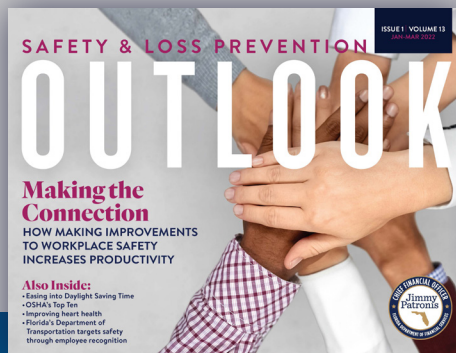
- Click here to access the external registration portal on the Division of Risk Management’s website
- Submit your information

Registration into the People First Learning Management System will allow access to all of our current and future trainings.

Miss a
previous
issue?
Visit the

OUTLOOK Library

Click a cover to
view a recent issue:



or for the complete collection visit:

<https://www.myfloridacfo.com/division/risk/risk-financing-loss-prevention/safety-loss-prevention-outlook>

REFERENCES & RESOURCES

- Adrianna Rodriguez, USA Today. (2023, January 03). Damar Hamlin was treated with AED and CPR after cardiac arrest: Emergency response, explained. USA Today Health. Retrieved on February 22, 2023 from <http://bit.ly/3m16eDH>
- Alaina Getzenberg. (2023, January 02). Damar Hamlin in critical condition after suffering cardiac arrest; Bills-Bengals postponed." ESPN. Retrieved February 22, 2023 from <https://bit.ly/3km931y>
- Alaina Getzenberg. (2023, January 09). Bills' Damar Hamlin back in Buffalo to continue recovery. ESPN. Retrieved February 22, 2023 from <https://bit.ly/3EufFlj>
- American Heart Association. (2000, August 22). Part 4: The Automated External Defibrillator – Key Link in the Chain of Survival. Part 12: From Science to Survival – Strengthening the Chain of Survival in Every Community. Circulation, Vol. 102. Retrieved February 22, 2023 from <https://bit.ly/3YUW1Hp>
- American Heart Association. (2016, November). Implementing an AED Program. Retrieved February 22, 2023 from <https://bit.ly/3llySP>
- American Heart Association. (2018, February 26). Cardiac arrest survival greatly increases when bystanders use an automated external defibrillator. Circulation. Retrieved February 22, 2023 from <http://bit.ly/3lmCNDy>
- American Heart Association. (2021, January 29). Causes of Cardiac Arrest. Retrieved February 22, 2023 from <http://bit.ly/3xLCjly>
- American Heart Association. (2022, November 14). Heart Conduction Disorders. Retrieved February 22, 2023 from <http://bit.ly/3keVAZv>
- American Heart Association. (2022, November 15). Ventricular Fibrillation. Retrieved February 22, 2023 from <https://bit.ly/3xLI83p>
- American Heart Association. (2022, December 02). Heart Attack and Sudden Cardiac Arrest Differences. Retrieved February 22, 2023 from <http://bit.ly/3SIDsJQ>
- American Heart Association. (2022, December 05). Heart Attack Symptoms in Women. Retrieved February 22, 2023 from <http://bit.ly/41gWpl4>
- American Heart Association. (2023). CPR & AED Awareness Week. Retrieved on February 22, 2023 from <http://bit.ly/3Z3ikdH>
- American Heart Association. (2023). What is CPR? Retrieved February 22, 2023 from <http://bit.ly/3YCJaJz>
- Centers for Disease Control and Prevention. (2022, June 20). Diabetes and Your Heart. Retrieved February 22, 2023 from <http://bit.ly/3xLp04w>
- Cleveland Clinic. (2020, December 11). Sudden Cardiac Arrest: 5 Things Raise Your Risk. Health Essentials. Retrieved February 22, 2023 from <http://bit.ly/3KddMNB>
- Cleveland Clinic. (2022, June 06). Sudden Cardiac Death (Sudden Cardiac Arrest). Cleveland Clinic Health Library. Retrieved February 22, 2023 from <http://bit.ly/3kev8iB>
- Deb Balzer, Mayo Clinic. (2023, January 03). What is cardiac arrest? A Mayo Clinic heart expert explains. Mayo Clinic News Network. Retrieved February 22, 2023 from <http://bit.ly/3SuOyMH>
- Dr. Gerald Koenig, Henry Ford Health. (2018, September 11). Sudden Cardiac Arrest: How To Recognize It And Respond. Henry Ford LiveWell Blog. Retrieved February 22, 2023 from <https://bit.ly/3XOI76U>
- Dr. Mecky McNeil, HealthFirst. (2014, September 08). The Chain Of Survival. HealthFirst Blog. Retrieved February 22, 2023 from <https://bit.ly/3lbGjQL>
- Geisinger. (2022, July 15). Sudden cardiac arrest can have warning signs. Balance. Retrieved February 22, 2023 from <http://bit.ly/3lpDawR>
- Gina Mayfield. (2020, June 01). Saving Lives: Why CPR AED Training Matter. Occupational Health & Safety. Retrieved February 22, 2023 from <http://bit.ly/3xHVg8w>
- Jacob Lev, Elizabeth Wolfe, CNN. (2023, February 12). Buffalo Bills trainer Denny Kellington saved Damar Hamlin's life on the field, head coach says. KQTV 2, ABC News St. Joseph. Retrieved February 22, 2023 from <http://bit.ly/3YLrjJP>
- Joel Streed, Mayo Clinic. (2022, January 09). Sharing Mayo Clinic: Sudden cardiac arrest sidelines coach during game. Mayo Clinic News Network. Retrieved February 22, 2023 from <http://bit.ly/3lYdekB>
- Joyce Chen, TODAY. (2017, May 27). Performing CPR to the Bee Gees, Beyonce and Missy Elliot could save lives. TODAY Health & Wellness. Retrieved on February 22, 2023 from <http://bit.ly/3xNNrhM>
- Konner McIntire, Courtney Rau, ABC News. (2023, January 05). Fact Check Team: The device that helped restore Damar Hamlin's heartbeat. The National Desk. Retrieved February 22, 2023 from <http://bit.ly/3XYplFX>
- Laura Williamson, American Heart Association. (2023, January 17). 5 things to know about AEDs after a defibrillator helped save Damar Hamlin. AMA News. Retrieved February 22, 2023 from <http://bit.ly/3lJBpfx>
- Mary Newman, Sudden Cardiac Arrest Foundation. (2020, January 29). Latest statistics: 1,000 people suffer sudden cardiac arrest each day in U.S.; only 10% survive. Retrieved February 22, 2023 from <http://bit.ly/3lN5SJC>
- Mayo Clinic. (2022, February 12). Cardiopulmonary resuscitation (CPR): First Aid. Retrieved February 22, 2023 from <http://bit.ly/3YUJ7Js>
- Nanci Hellmich, USA Today. (2013, November 19). Many men with sudden cardiac arrest had early warnings. USA Today Health. Retrieved on February 22, 2023 from <http://bit.ly/3KxIGQS>
- Natalie Hee. (2023, January 03). Doctors say using an AED machine in first 3 minutes of someone collapsing, could increase survival by 70%. FOX 26 Houston. Retrieved February 22, 2023 from <http://bit.ly/3xKw6Gh>
- National Center for Chronic Disease Prevention and Health Promotion, Division for Heart Disease and Stroke Prevention. (2019, December 09). Know Your Risk for Heart Disease. Retrieved February 22, 2023 from <http://bit.ly/3kl8dC9>
- National Center for Chronic Disease Prevention and Health Promotion, Division for Heart Disease and Stroke Prevention. (2020, May 06). Heart Disease and Mental Health Disorders. Retrieved February 22, 2023 from <http://bit.ly/3m1UoZF>

REFERENCES & RESOURCES *Cont'd.*

National Center for Chronic Disease Prevention and Health Promotion, Division for Heart Disease and Stroke Prevention. (2022, July 12). Heart Attack Symptoms, Risk, and Recovery. Retrieved February 22, 2023 from <http://bit.ly/3xMimuC>

National Health Care Provider Solutions. (2023 February). Use of Automated External Defibrillator (AED). Save a Life. Retrieved February 22, 2023 from <http://bit.ly/3ILDnfn>

National Safety Council. (2023, January 24). Do you know how to use an AED? Safety + Health. Retrieved February 22, 2023 from <http://bit.ly/3KugZs2>

Parmita Uniyal. (2022, October 17). Sudden cardiac arrest: Warning signs you shouldn't ignore, know the emergency treatment, tips from cardiologist. Hindustan Times. Retrieved February 22, 2023 from <http://bit.ly/3YT8USI>

Penn Medicine. (2016, April 06). Heart Attack vs. Cardiac Arrest – Do You Know the Difference? Penn Heart and Vascular Blog. Retrieved February 22, 2023 from <https://bit.ly/3EuJJ02>

Rescue One Training for Life, Inc. (2023, January 06). Damar Hamlin Cardiac Arrest Raises Awareness of the Importance of CPR and AED Training. Rescue One Blog. Retrieved February 22, 2023 from <https://bit.ly/3xMrQGc>

Rod Brouhard, EMT-P. (2022, October 18). How to Do CPR: Step-by-Step With Tips for Success. Verywell Health. Retrieved February 22, 2023 from <http://bit.ly/3YXCUfU>

Rod Brouhard, EMT-P. (2023, January 03). How Long Does Brain Activity Last After Cardiac Arrest? Verywell Health. Retrieved February 22, 2023 from <http://bit.ly/3kgUqg3>

Sandroni, C., Cronberg, T. & Sekhon, M. (2021, October 27). Brain injury after cardiac arrest: pathophysiology, treatment, and prognosis. Intensive Care Med vol. 47, 1393-1414. Retrieved February 22, 2023 from <https://rdcu.be/c6a2O>

Scott Neuman, NPR. (2023, January 06). Cardiac arrest is often fatal, but doctors say certain steps can boost survival odds. Retrieved February 22, 2023 from <http://bit.ly/3Smrlxm>

Shelley Wood. Cardiovascular Research Foundation. (2017, May 09). Bystander CPR Linked to Less Brain Damage, More Independent Living for Cardiac Arrest Survivors. TCTMD. Retrieved on February 22, 2023 from <http://bit.ly/3ZcTSq7>

SpinalCord.com. (2020, June 09). How Long Can the Brain Go Without Oxygen? What Happens? Retrieved February 22, 2023 from <http://bit.ly/3Snf4ri>

University of Rochester Medical Center. (2023). Stress Can Increase Your Risk for Heart Disease. URM Health Encyclopedia. Retrieved on February 22, 2023 from <http://bit.ly/3KulhQa>

Victor Mather. (2023, February 06). What to Know About Damar Hamlin's Injury. The New York Times. Retrieved February 22, 2023 from <https://bit.ly/3XVYwro>

American Heart Association. (2018, February 26). Bystander use of defibrillators can dramatically boost survival of cardiac arrest patients. AHA News. Retrieved February 22, 2023 from <http://bit.ly/3ERXs1p>

Catherine A. Sanderson, Ph.D. (2021, August 21). A Bystander Training Intervention Could Save a Life. Psychology Today. Retrieved February 22, 2023 from <http://bit.ly/3YSgVXn>

Christi Chidester, Berkeley University of California. (2007, September 01). What Makes a Rescuer. Greater Good Magazine. Retrieved on February 22, 2023 from <https://bit.ly/3k4t3pc>

Jane McGregor. (2014, August 31). Why Won't We Help Each Other Out? Wellbeing. Retrieved February 22, 2023 from <http://bit.ly/3kid1Z5>

Jason Marsh, Dacher Keltner, Berkeley University of California. (2006, September 01). We Are All Bystanders. Greater Good Magazine. Retrieved on February 22, 2023 from <https://bit.ly/3xwBI72>

Kendra Cherry. (2020, May 10). The Diffusion of Responsibility Concept in Psychology. Verywell Mind. Retrieved on February 22, 2023 from <http://bit.ly/3XQwopH>

Kendra Cherry. (2022, November 16). How Psychology Explains the Bystander Effect. Verywell Mind. Retrieved on February 22, 2023 from <http://bit.ly/3km9yZq>

Princeton University. (2022). Bystander Intervention. UMass Now. Retrieved February 22, 2023 from <http://bit.ly/41ctApX>

Susan York Morris. (2016, November 23). Bystander Effect: What It Is and How to Prevent It. Healthline. Retrieved February 22, 2023 from <http://bit.ly/3EvPEXI>

(2020, February 13). The Relationship between MSDs and the Workplace. Occupational Health & Safety. Retrieved February 22, 2023 from <http://bit.ly/3YU0U0ej>

Alex Saurman. (2022, May 18). The Impact of Musculoskeletal Disorders on the Workforce. Occupational Health & Safety. Retrieved February 22, 2023 from <http://bit.ly/3KutTX2>

Dave Blanchard, Adrienne Selko, Nicole Stempak, David Sparkman, Jonathan Katz. (2022, December 20). Top 10 EHS Trends of 2022. Retrieved February 22, 2023 from <http://bit.ly/3XVyZPk>

National Institute for Occupational Safety and Health. (2018, February 28). Ergonomics and Musculoskeletal Disorders. Retrieved February 22, 2023 from <http://bit.ly/3klidLG>

PHOTO CREDITS



"Bystander—June Lee" by Frederik Meijer Gardens & Sculpture Park. (2011, August 05). Licensed under CC BY-NC-ND 2.0. License available at <https://creativecommons.org/licenses/by-nc-nd/2.0/>



Karen Beate Nøsterud - norden.org Licensed under Creative Commons Attribution 2.5 Denmark.

SAFETY & LOSS PREVENTION OUTLOOK TEAM:

Lori Taylor

Managing Editor/Writer

Wendy McSwain

Staff Editor

Eston Crew

Creative Director

We look forward to your feedback on how we can better serve you. To submit story ideas, articles, and other suggestions — or to be added to our distribution list — please contact us by clicking on the link below:

The Safety and Loss Prevention Outlook newsletter is for informational purposes only. The Department of Financial Services does not endorse or support any websites, products, brands, or services referenced herein.

[State Loss Prevention Program](#)

www.myfloridacfo.com/division/risk/

Molly Merry, CPA

Division Director

Robin Delaney

Assistant Division Director

Jeffrey W. Cagle

Chief of Risk Financing
& Loss Prevention

Wendy McSwain, MSA

Loss Prevention Section
Administrator

Office of the Director
(850) 413-4700

State of Florida Loss Prevention Section
(850) 413-3121

Bureau of State Liability & Property Claims
(850) 413-3122

Bureau of State Employee Workers'
Compensation Claims
(850) 413-3123

Safety Coordinator Appointment Form
(850) 413-3121

