When exercise turns deadly

Fitness clubs should not rely on CPR to revive patrons who suffer sudden cardiac arrest. Automated external defibrillators save lives, and they are easy to use—but many gyms don't have them.

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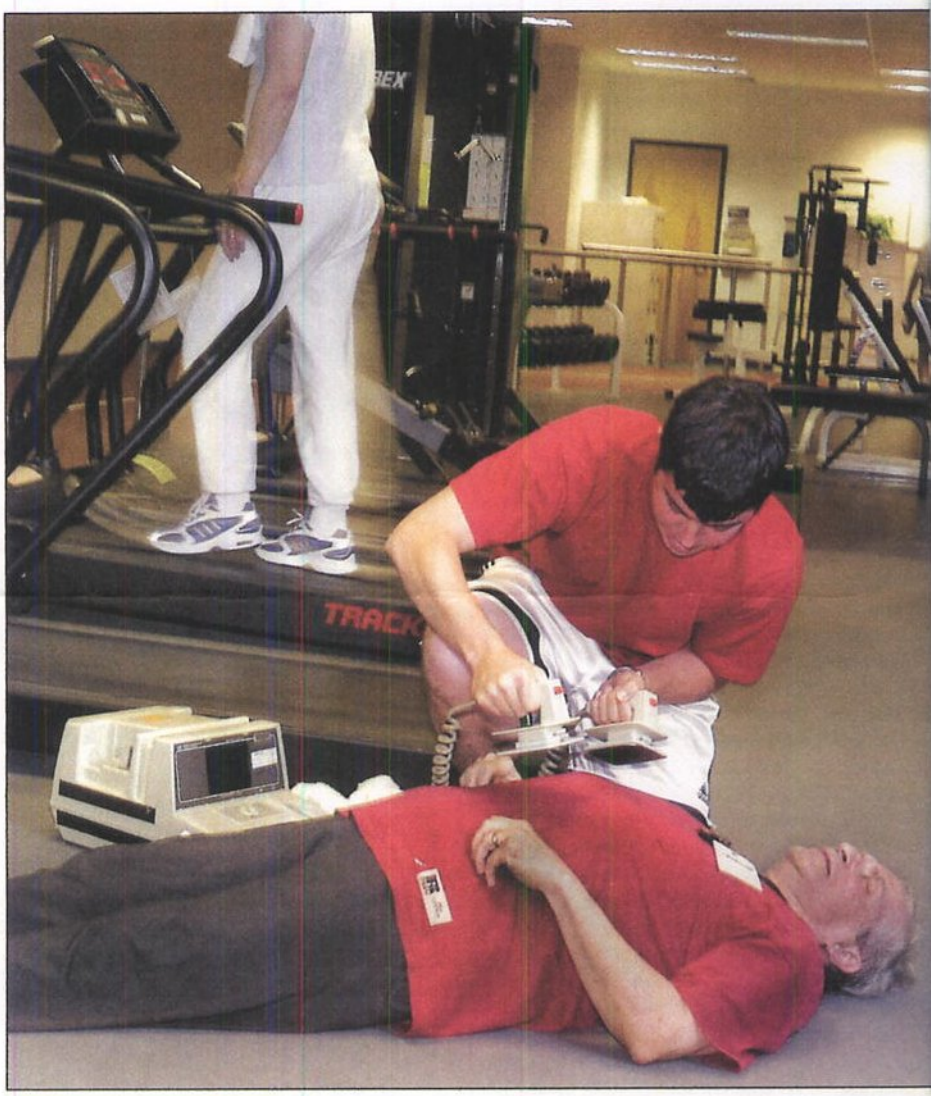

You are having lunch with colleagues when a probate lawyer from your firm mentions that John Doe, a 50-year-old client, died yesterday while exercising at a health club. Club employees began CPR within a minute or two of John's collapse and phoned 911 for paramedics, who arrived six to eight minutes later. The paramedics took him to the emergency room, where he was pronounced dead—a victim of sudden cardiac arrest (SCA).

"What a shame," says another lawyer at the table. "I guess John's time had just come."

"Maybe not," you say. "Did the health club have an AED?"

"An AED?" asks the probate lawyer. "What's that?"

You explain: An automated external defibrillator (AED) is a battery-operated device, about the size of *Black's Law Dictionary*, used to administer an electric shock to a heart in cardiac arrest. SCA is caused by an electrical malfunction of the heart that causes an abnormal heart rhythm—or arrhythmia—the most common of which is ventricular fibrillation (VF). A person suffering from VF will die unless the heart's normal rhythm and pumping action are restored. Cardiopulmonary resuscitation (CPR) may buy extra minutes by circulating some blood to the brain and other organs, but it can-

not reverse sudden cardiac arrest. An AED can.

Studies have shown that defibrillation within the first few minutes of SCA gives the victim an 80 percent to 90 percent chance of survival.[1] Survival rates drop by 7 percent to 10 percent for each minute that goes by without defibrillation.[2]

AEDs are relatively inexpensive (between $2,500 and $3,000), and they are virtually foolproof. The machines are so simple to use that even untrained elementary-school children operated them in a study reported in *Circulation*, the journal of the American Heart Association (AHA).[3] An AED has a "start" button: Pushing it activates a voice recording that tells the user exactly what to do.

Health club operators know that SCA can happen in their facilities. Nearly 1 in 4 U.S. adults has some form of cardiovascular disease,[4] and SCA kills about 350,000 Americans a year.[5] People are 15 to 20 times more likely to die of SCA during vigorous exercise, or within 30 minutes following it, than when not engaged in vigorous exercise.[6]

Health and fitness clubs—which provide equipment and a controlled environment for exercise—know their patrons are at increased risk for SCA. Most keep records of such incidents and have come to expect them.[7] One health club executive has testified in deposition that his gyms expect 1 cardiac event for every 100,000 person-hours of exercise.[8] Even if this estimate is too high, busy facilities can have well over 100,000 person-hours of exercise a year.[9]

Back to your hypothetical lunch: You suggest that the probate lawyer advise John's widow that she might have a cause of action against the health club for wrongful death. The gym should have had an AED. If health club employees had used one on John within the first four minutes of his SCA, he probably would have survived.

Points of proof

To prove a cause of action against a health club for injury or death arising from its failure to have or use an AED, you must prove the following.

The victim suffered sudden cardiac arrest, and his or her heart rhythm required—and would have been corrected with—timely defibrillation. You can probably prove this by examining the cardiac rhythm strips generated by the paramedics who tended to the victim. Paramedics often have a defibrillator with an electrocardiogram (EKG) screen, which charts the heart rhythm. The paramedics simply print a copy of the EKG and make it a part of their records.

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Most SCA events result from VF or from pulseless ventricular tachycardia, both of which can be corrected with defibrillation. If the victim's heart rhythm cannot be shocked, it may be that a shockable rhythm deteriorated to a nonshockable one before help arrived.

You will need to interview eyewitnesses and obtain their testimony concerning how the victim appeared and behaved from the time he or she was first discovered until paramedics generated heart rhythm strips. A victim of SCA with a shockable heart rhythm would have been unconscious with no pulse and not breathing. Although it might be impossible to obtain 100 percent proof that the victim's heart rhythm was shockable when he or she first collapsed, medical experts I have worked with generally agree that a victim had a shockable rhythm if his or her physical symptoms were consistent with a shockable rhythm and if the first rhythm strips revealed a shockable rhythm.

The victim was in an area of the health club where employees could see him or her collapse. You must prove this to show that reasonably trained staff should have been able to react in time to save the victim with defibrillation.

Obviously, your case will be stronger if he or she collapsed in the middle of the exercise floor and not in a locked bathroom stall, yet gym users often lie on the floor to exercise and stretch. The victim could have been on the floor for seconds or minutes after collapsing before anyone noticed and tried to help. Witness testimony about the timing of events is vital; so is whether staff was trained to monitor the gym and identify trouble.

The health club had a duty to have an AED on the premises. This will be the primary battle in most cases. AED technology has advanced rapidly in the past decade, making it increasingly difficult for health and fitness clubs to deny this duty. In general, the more recent the victim's injury or death, the stronger your case will be.

The club did not have an operable AED, or it had one but did not use it. Litigated cases to date have involved gyms that had no AED. For example, *Chai v. Sports & Fitness Clubs of America* alleged that the lack of an AED at a club in Broward County, Florida, caused brain damage in a member who suffered SCA while exercising. The parties settled before the jury issued a verdict.[10] A few other similar cases are pending.[11]

AED batteries generally last several years, and the machines are designed to indicate when the battery is low. I am not aware of any cases that involved a malfunctioning AED. Manufacturers have such high confidence in their products that some offer indemnification agreements, assuming the purchaser's liability if the device malfunctions.

It is likely that as more health clubs obtain AEDs, one will neglect to use it on a member who is in cardiac arrest. In such a case, discovery will boil down to whether staff received adequate training in emergency procedures; whether new employees had been trained; whether

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the victim was in a visible location; and whether the victim's symptoms indicated that health club employees should have reasonably determined that they should use the AED.

The absence or delay of defibrillation caused the victim's injuries or death. You can establish this element with testimony and evidence provided by the treating health care providers and medical experts. The longer an SCA victim goes without blood to the brain, the worse his or her brain damage. Lack of blood to the brain can also lead to death.

If the victim is given effective CPR—which health club staff should be trained to perform—some blood will circulate, extending the staff and paramedics' window of opportunity to save the victim from brain injury or death via defibrillation. However, most medical experts agree that even without CPR, a large percentage of victims who receive defibrillation within the first four minutes survive with little or no brain injury.[12]

The defense might try to shift or share liability by scrutinizing and challenging the paramedics' treatment. If the evidence supports an argument that the victim's physical symptoms were consistent with a shockable rhythm only after or shortly before paramedics arrived, the defense will claim that something the paramedics did or didn't do—not the health club staff's failure to use defibrillation—led to the victim's injury or death.

Paramedic response time varies, of course. For example, health clubs in rural areas far from a hospital or paramedic station, and those on the top floor of high-rise buildings—where elevator delays can be anticipated—have a stronger duty to foresee the need for an AED on their premises.

Paramedics will be among the most important witnesses in your case, assuming your medical experts conclude that they responded in a timely manner and acted appropriately. Talk to each paramedic early in your investigation. Assure them that they are not the target of your client's lawsuit, and tell them that you suspect the defense might point a finger at them. You may have to defend their actions in addition to prosecuting your client's claim. Obtain a recording of the 911 telephone call, which can add important information to your case.

Standards

As mentioned earlier, a health club will defend a claim that focuses on its failure to have an AED by asserting that it had no duty to have one. The defense in such cases has been that although using an AED might someday be the standard of care for the fitness club industry, that time has not yet arrived. Combat this argument by pointing out that there is compelling evidence that most reasonable health club operators should have equipped their clubs with AEDs by the late 1990s. If most health clubs do not have AEDs, then the industry as a whole is operating below the standard of care.

AED technology has advanced rapidly in the past decade, making it increasingly difficult for gyms to deny their duty to have one.

Since the early 1990s, several health organizations and fitness industry groups have issued standards and statements on the use of AEDs in health clubs.

American Heart Association (AHA). In 1992, the AHA published guidelines that stated, "All personnel whose jobs require that they perform basic CPR [should] be trained to operate and permitted to use defibrillators, particularly automated external defibrillators (AEDs)."[13]

American College of Sports Medicine (ACSM). Also in 1992, the highly respected ACSM published 353 standards, plus an additional 397 guidelines, for health facilities (it did not specifically mention AEDs).[14]

Many in the fitness industry objected to the large number of standards and guidelines, which they feared could be used as bases for liability claims. Responding to this criticism, the ACSM published a second edition in 1997, consolidating the standards into six that "must be demonstrated by all health/fitness facilities toward their users."[15] Standard 1 states, "A facility must be able to respond in a timely manner to any reasonably foreseeable emergency event that threatens the health and safety of facility users. Toward this end, a facility must have an appropriate emergency plan that can be executed by qualified personnel in a timely manner."

There is ample evidence that sudden cardiac arrest is a "reasonably foreseeable emergency event that threatens the health and safety of facility users." A health club whose emergency plan does not include AED use when a reasonable club administrator should have known of the availability, utility, and effectiveness of the device violates the standard. You can prove this in various ways; the strength of the case depends on the date the SCA occurred.

In March 2002, the AHA and the ACSM released recommendations regarding the purchase and use of AEDs in fitness facilities. These recommendations, published in *Circulation* and *Medicine & Science in Sports Exercise*, stated:

> Effective placement and use of AEDs at all health/fitness facilities . . . is encouraged, as permitted by law, to achieve the goal of minimizing the time between recognition of cardiac arrest and successful defibrillation. Until further definitive data are available, AED placement is strongly encouraged in those health/fitness facilities with a large number of members (i.e., membership greater than 2,500); . . . those that offer special programs to clinical populations (i.e., programs for the elderly or those with medical conditions); . . . and those health/fitness facilities in which the time from the recognition of cardiac arrest until the first shock is delivered by the EMS is anticipated to be greater than five minutes.[16]

Most health clubs require their staff to be trained in CPR as part of compliance with the ACSM standards and guidelines. These clubs also fall under the AHA's 1992 guideline on who should be trained to operate and permitted to use AEDs.

YMCA. In November 1997, the YMCA USA's Medical Advisory Committee published formal recommendations endorsing the AHA's guideline. The recom-

mendations specified that "YMCA staff should be trained in the procedure and use of the AED."[17]

International Health, Racquet & Sports Club Association (IHRSA). In October 2001, IHRSA—which represents nearly 6,000 health clubs and works toward the growth, protection, and promotion of the health club industry—announced an agreement with AED manufacturer Philips Medical Systems to promote AED placement, training, and use in more than 3,600 of its U.S. member clubs. The program offered discount pricing, site analysis, an AED response plan, medical direction, and on-site training programs with the American Red Cross.

Although IHRSA's official position is that the legal standard of care does not yet require health clubs to install AEDs, its executive director stated that the organization encourages health club operators to consider the advantages of installing them in their facilities.[18] AED manufacturers have advertised the devices to the health club industry at industry conventions since at least 1999. And a 2002 IHRSA convention included a program to educate and encourage member clubs to equip themselves with AEDs.

Many health club chains equipped their clubs with AEDs in the late 1990s, and this fact can bolster your case. They have said that initiating an AED program was neither difficult nor excessively costly and that training of staff was not troublesome.[19] They also reported that many lives have been saved with AEDs.[20]

Federal and state statutes

All 50 states have passed Good Samaritan laws, which extend to AED users. Similarly, the Federal Cardiac Arrest Survival Act of 2000 states that

> any person who uses or attempts to use an automated external defibrillator device on a victim of a perceived medical emergency is immune from civil liability for any harm resulting from the use or attempted use of such device; and in addition, any person who acquired the device is immune from such liability. . . .[21]

The act also required the U.S. Secretary of Health and Human Services (HHS) to establish guidelines for placing AEDs in federal buildings.

The same year, Congress made these findings when it passed the Rural Access to Emergency Devices Act:

> Because most cardiac arrest victims are initially in ventricular fibrillation, and the only treatment for ventricular fibrillation is defibrillation, prompt access to defibrillation to return the heart to normal rhythm is essential.
>
> Lifesaving technology, the automated external defibrillator, has been developed to allow trained lay-rescuers to respond to cardiac arrest by using this simple device to shock the heart into normal rhythm. . . .
>
> Legislation should be enacted to encourage greater public access to automated external defibrillators in communities across the United States.[22]

The machines are so simple to use that even untrained elementary-school children were able to operate them.

These factual findings constitute public statutory law, and the Rules of Evidence require a court to take judicial notice of them. This requirement can be an important evidentiary tool, given Congress's expressed intent to encourage greater public access to AEDs.

In 2002, Congress enacted 42 U.S.C. §244, entitled Public Access Defibrillation Programs, which allows HHS to award grants to various government entities.[23] With it, Congress adopted a public policy to encourage private companies, including small businesses, to buy AEDs and train employees to use them. A later section of the statute authorizes using the grants to produce written material encouraging private companies to purchase AEDs.

Most states also have passed statutes to encourage the use of AEDs and protect the users from civil liability. For instance, Florida has a Good Samaritan act pertaining to emergency care generally,[24] as well as two statutes that specifically address AEDs.[25]

The various state and federal laws provide further evidence to support the argument that health clubs have a duty to possess AEDs. These laws make it difficult for health clubs to argue that AEDs are not yet recognized as necessary safety devices or that there are legal obstacles to having and using them.

Experts

Use expert witnesses to prove that a duty to possess AEDs existed when the victim was injured or died.

Exercise physiologist. An exercise physiologist who holds a Ph.D. will help establish that the industry is aware of the increased risk of SCA after vigorous exercise. He or she should be familiar with the ACSM standards and the statements issued by the ACSM and the AHA. The expert might also be helpful with facts specific to your case, such as discovery of the victim, training of health club staff, the club's compliance with its own policies and procedures, and industry standard-of-care evidence.

Cardiologist familiar with the AHA's encouragement of public access to AEDs. This expert will establish causation by determining the probable timing of the medical events, based on medical records and eyewitness accounts. The timing will affect medical opinions regarding when the victim experienced a shockable rhythm, as well as when, within reasonable medical probability, AED intervention would have saved him or her from brain damage or death.

Health club operator whose facilities had AEDs before the victim's sudden cardiac arrest. This person's testimony should establish that a reasonable health club operator had a legal duty to have an AED at the time of the victim's injury or death. With practical, commonsense testimony as to how, why, and when the expert's facilities decided to purchase and deploy AEDs, the expert should be able to refute the defense that having AEDs is not yet a health club standard of care. The operator should also testify to the ease of obtaining AEDs and training

staff to use them. This will dispel defense suggestions that AEDs were unavailable, too expensive, or too difficult to use at the time.

As when the auto industry was reluctant to install seat belts in automobiles and the tobacco industry was resistant to warning smokers, apparently it will take more lawsuits before the health club industry admits its responsibility to patrons and adopts AEDs. Trial lawyers must step forward and litigate these cases. Successful litigation will not only compensate gym patrons injured due to health club negligence (or the families of those who die), but also serve a greater public good, saving countless lives. ■

Notes

1. William Ginsberg, *Prepare to Be Shocked: The Evolving Standard of Care in Treating Sudden Cardiac Arrest*, 16 AM. J. EMERGENCY MED. 315 (1998).

2. Rosarie Lynch et al., *Cardiopulmonary Resuscitation*, 271 PHARM. J. 581, 581 (2003), *available at* www.pharmj.com/pdf/cpd/pj_20031025_heart9.pdf (last visited Apr. 27, 2004).

3. John W. Gundry et al., *Comparison of Naive Sixth-Grade Children with Trained Professionals in the Use of an Automated External Defibrillator*, 100 CIRCULATION 1703 (1999).

4. Lisa Schnirring, *Fitness Clubs Urged to Do Cardiac Screening*, PHYSICIAN & SPORTSMEDICINE, Aug. 1998, at 3.

5. Richard F. Gillum, *Sudden Coronary Death in the United States*, 79 CIRCULATION 756 (1989).

6. James Rippe & Howard Pomerantz, *Saving Lives in the Fitness World*, IHRSA 21ST ANNUAL INTERNATIONAL CONVENTION (Mar. 8, 2002).

7. Pamela J. Stoike, *Automated External Defibrillators*, ACSM'S HEALTH & FITNESS J., July/Aug. 2001, at 22.

8. Anthony A. Abbott, *Are You Prepared? Handling Emergency Situations*, PERSONAL FITNESS PROF., Nov. 2000, at 38.

9. *Id.*

10. Chai v. Sports & Fitness Clubs of Am., No. 98-16053 CA (05) (Fla., Broward County Cir. Ct. Aug. 2000).

11. *See, e.g.*, Fruh v. Wellbridge Club Mgmt., Inc., No. 02-CV-10689 (D. Mass filed Apr. 11, 2002); DeLibero v. Q Clubs, Inc., No. 02-018309 CACE 21 (Fla., Broward County Cir. Ct. filed Sept. 20, 2002).

12. CPR: RESUSCITATION OF THE ARRESTED HEART 53-55 (Max Harry Weil et al. eds., 1999).

13. Emergency Cardiac Care Comm. & Subcomms., Am. Heart Ass'n, *Guidelines for Cardiopulmonary Resuscitation and Emergency Cardiac Care Part III: Adult Advanced Cardiac Life Support*, 268 JAMA 2199 (1992).

14. AM. COLL. SPORTS MED., ACSM'S HEALTH/FITNESS FACILITY STANDARDS AND GUIDELINES (Neil Sol & Carl Foster eds., 1992).

15. AM. COLL. SPORTS MED., ACSM'S HEALTH/FITNESS FACILITY STANDARDS AND GUIDELINES ix (James A. Peterson & Stephen J. Tharrett eds., 2d ed. 1997).

16. Gary J. Balady et al., *Automated External Defibrillators in Health Fitness Facilities*, 105 CIRCULATION 1147, 1148-49 (2002).

17. YMCA OF THE USA MED. ADVISORY COMM., THE USE OF AUTOMATED EXTERNAL DEFIBRILLATORS IN YMCAS (1997).

18. INT'L HEALTH, RACQUET & SPORTSCLUB ASS'N, BRIEFING PAPER: DEFIBRILLATORS (AEDS) IN HEALTH CLUBS (2002).

19. Deposition of Art Curtis, Past Chief Operating Officer, Wellbridge Cos., in *Fruh*, No. 02-CV-10689 (Dec. 16, 2002).

20. *Id.*

21. 42 U.S.C. §238Q (2000).

22. 42 U.S.C. §411 (2000).

23. 42 U.S.C.A. §244 (2004).

24. FLA. STAT. ch. 768.13 (2004).

25. FLA STAT. ch. 401.2915 (2004); FLA. STAT. ch. 768.1325 (2004).