

Testimony in support of Int. 814-2022

New York City Council, Committee on Health

Public Hearing on March 30th, 2023

Improving Access to In-Community and At-Home Health Care

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Dear Committee on Health:

Thank you for considering Int 0814-2022, “A Local Law to amend the administrative code of the city of New York in relation to requiring an annual report indicating the quantities and locations of automated external defibrillators placed in public places.” I’m sorry I wasn’t able to present oral testimony at the meeting on March 30th, and hope this written testimony can help you amend and support this bill.

I. My father’s death, and wanting to be a good neighbor

I’m not a health care expert. I’m the daughter of S.K. Harihareswara, a man who died of a sudden heart attack thirteen years ago. And I’m a New Yorker who wants to be a good neighbor – that’s why I took a CPR class a few years ago. The instructor taught us how to use automated external defibrillators (AEDs) and told us to look for public access AEDs around NYC. I thought it would be a good idea to learn the locations of the AEDs closest to my home and office, just as I’d like to know ahead of time where the emergency exits are in my building.

But I couldn’t, because New York City doesn’t publish its list of public AEDs.

That’s why I started learning more about this topic, and asked Councilmember Krishnan’s office to look into it. I want to have a better shot at being a good neighbor and helping prevent heart attack deaths, and I want all New Yorkers to have that better shot, too.

II. The context: why New Yorkers need AED location data to be public

A. AEDs can save lives – even untrained bystanders can use them

On average, when a New Yorker calls 911 because of cardiac arrest, [emergency responders get to the scene in 10-11 minutes](#) -- but **for every minute they don't get circulation back, the chance of survival goes down about 7-10%** ([American Heart Association guidelines, 2010](#)). [The American Heart Association fact sheet on out-of-hospital cardiac arrest, "A Race Against The Clock"](#) (attached to this testimony) explains what AEDs are and how effective they are:

There are more than 357,000 EMS-assessed out-of-hospital cardiac arrests (OHCA) each year in the United States, and nearly 90 percent of OHCA's are fatal. Time is one of the most important factors in determining whether an individual experiencing cardiac arrest will survive. Victims of cardiac arrest who receive prompt medical attention including cardiopulmonary resuscitation (CPR) to increase the blood flow to the heart and brain and/or an electrical shock from a defibrillator to stop the abnormal heart rhythm are much more likely to survive than those who do not receive swift medical intervention....

When CPR cannot restart normal heart rhythm during cardiac arrest, rescuers can also turn to automated external defibrillators (AEDs). An AED is a simple-to-use portable device that is used to shock the heart of a person suffering a cardiac arrest to return the heart to a normal rhythm. AEDs are available in a variety of public settings – from schools to offices to airports. Used by both trained emergency responders and bystanders, the AED is attached to the victim and delivers an electric shock when it detects a dangerous heart rhythm. The devices provide audible step-by-step instructions to the user and independently determine if a shock is needed, making them very easy for almost anyone to use.

In cardiac arrest emergencies where bystanders used AEDs before emergency medical services arrived, patients were over two and a half times as likely to survive their cardiac arrest and had better functional outcomes than those who did not receive bystander defibrillation. Lay responders play a crucial role in achieving high survival rates....

AEDs are designed to be used safely and effectively without training. When a user applies an AED to a patient, the AED analyzes the patient's heart rhythm to check whether it'll respond well to shock, and won't deliver a shock if shocking won't help. This also prevents pranks or more serious misuse. Increasing New Yorkers' awareness of their nearest AEDs does not increase the risk of misuse.

During the hearing on March 30th, an assistant commissioner of New York City Department of Health and Mental Hygiene (DOHMH) mentioned concerns that people need training to use AEDs effectively. But **untrained bystanders can save lives**; researchers in 2010 found: “Success of 40% by lay persons emphasizes that speed is more important than training.” As results from ["Survival After Application of Automatic External Defibrillators Before Arrival of the Emergency Medical System"](#) state,

Survival was 9% when CPR was performed before EMS arrival, but an AED was not applied (Group 2). Of the cases in which an AED was applied before EMS arrival (Group 3), 24% (69 of 289) survived, and of those who received a shock from an AED applied before EMS arrival (Group 4), 38% (64 of 170) survived.....The survival of 38% with shock by a bystander using the AED should encourage broader awareness of the AED, which may prompt increased use by bystanders even for those lacking medical training.

More recently, [“A Call to Shock”](#) in 2019 (*The Lancet*) advises:

median survival is even higher (53.0%, range 26.0–72.0) when a non-dispatched lay first responder administers public-access defibrillation, regardless of the qualifications of the individual performing it, which indicates how important early defibrillation is in the chain of survival.

B. Our public access AEDs are underused

The [American Heart Association’s current resuscitation guidelines](#) say that “the use of public access defibrillators by lay rescuers remains low” and [add](#):

The key drivers of successful resuscitation from OHCA are lay rescuer cardiopulmonary resuscitation (CPR) and public use of an automated external defibrillator (AED). Despite recent gains, only 39.2% of adults receive layperson-initiated CPR, and the general public applied an AED in only 11.9% of cases.

New York City also follows this pattern, as far as we can tell, and may be doing far worse, with **only 2%** of out-of-hospital cardiac arrests getting AED application by a bystander. Also attached to this testimony is [DOHMH’s 2010 report on Public Access Defibrillator usage in New York City](#), which was the most recent data I could find on PAD usage in NYC. “Combining information from REMSCO and FDNY it may be concluded that PADs were deployed in 2% of all out-of-hospital cardiac arrests in NYC (i.e., 182 reported PAD uses out of 8,783 total cardiac arrests).” 150 of those uses were in nursing homes; only a handful of them were in NYC parks, government buildings, and similar places.

People can't use AEDs if they don't know they're there. [In one 2016 study](#), of individuals who were about 100 meters from an AED in a public place (train station, city mall and public park), only 16% knew where the closest AED was. And [the public OpenAEDMap](#) is only aware of 5 AEDs in all of New York City.

We've already invested in ensuring that this safety equipment is placed where people can use it, but if they don't know it's there, then that investment is a waste.

C. Open data lets us do better outreach, education, and placement

Several US localities have published their AED locations as open data. Examples include: [Washington, DC](#); [Boise, Idaho](#); and [Kansas City, Missouri](#).

Once the registry is public, DOHMH, Fire Department of NY, and other city agencies can fairly easily publish maps of AED locations, using existing City tools. Other municipalities and regions in the US do so and leverage those maps in their public health outreach efforts: see for example [Contra Costa County, California](#), [San Diego, California](#) and [Manatee County, Florida](#). This enables individual institutions to make and share targeted maps on their websites, such as [this AED location list and map at the University of California, San Diego](#).

Other agencies, activists, local nonprofits, and schools can reuse that data to annotate local maps and make translated handouts for specific neighborhoods -- Bengali in Jackson Heights, Chinese in Flushing, and so on. This would particularly help low-English-literacy residents. Local health advocates can reuse this data to enrich their existing classes, mailings, first aid kits, and other outreach.

We can find "AED deserts," densely populated neighborhoods with very few public AEDs compared to the likelihood of cardiac arrest, and improve them. Councilmembers' offices could donate AEDs to local nonprofits in those neighborhoods, or work with local businesses. We could prioritize telling those local merchants' associations that [there's a state tax credit for buying an AED \("The credit is equal to the purchase cost of the unit, or \\$500, whichever is less."\)](#) so the bodega on the corner can afford to keep an AED on hand.

Local organizers can follow the lead of [the MyHeartMap challenge in Philadelphia](#) and make a game to incentivize New Yorkers to take selfies with AEDs, learning their locations along the way.

Google, Apple, and other tech companies could integrate these locations into their map data, so if you ask "is there an AED nearby?" into your phone, it could tell you.

III. We have this data and can open it to the public

A. Who holds it and has access to it

[New York City Council bill number 0211-2004](#) was enacted as [Local Law No. 20 for the year 2005](#) (amending Chapter I of Title 17 of the New York City Administrative Code to add a new section § 17-188), mandating AEDs in some public places.

Per the [New York State Department of Health policy statement 09-03 \(2009\) on Public Access Defibrillation](#), each regional emergency medical services council holds a PAD registry. In New York City, that is [NYC REMSCO](#), a nonprofit organization. New PAD providers must file a "Notice of Intent to Provide Public Access Defibrillation" ([NY State Department of Health form #4135](#)) and a Collaborative Agreement ([sample](#)) with NYC REMSCO, and inform NYC REMSCO within 48 hours of a PAD AED usage. Also, "A written Site-Specific Response and Maintenance Plan, including written practice protocols, is required and must be made available to the DOHMH upon its request" (per [DOHMH's PAD fact sheet provided by NYC REMSCO](#)). NYC REMSCO also [requires](#) that the PAD provider file a new Collaborative Agreement every two years.

NYC REMSCO shares AED locations with 911 dispatchers. If someone calls and reports a cardiac arrest, the 911 operator can advise callers if there's a PAD at or near the address they're calling from. The dispatcher can say: "You keep doing CPR, but if someone else is there who can run a block to [x location], they can grab their AED."

Per [DOHMH's 2006 report on Local Law 20 and PAD usage](#), NYC REMSCO has "an online registration system intended to facilitate registration, reduce paperwork, and improve the

scope and accuracy of future reporting to City Council", and this was developed in coordination with DOHMH.

The Fire Department of NY (FDNY) developed and advertised [a mobile app, "Be 911"](#), to help bystanders perform CPR. While guiding the user through CPR, the app also used data from the NYC PAD registry to tell the user about the 3 AEDs nearest the user's location. While "Be 911" was last released in 2019, this does demonstrate that the PAD registry data is available in a digital form, and that FDNY has digital access to it.

B. The PAD registry includes addresses, usage, and category of location

During the March 30th hearing, Councilmember Krishnan asked several questions about the PAD registry: "Does DOHMH currently have a framework or list of the location of all AEDs in New York City? Is there an existing system that keeps track of the number of AEDs that have been issued and to whom? Is there an exact number or estimate on how many AEDs are currently available in public places in New York City?"

The PAD registry does answer these questions for public access AEDs. The PAD registry includes:

- the street addresses of buildings with AEDs
- the "agency" type ("agencies" including "Physician's Office", "Transportation Hub" "Stadium", "Business" and other categories)
- the number of trained providers and AED units at each location

The PAD site is also responsible for documenting each use of the AED and immediately reporting such usage to NYC REMSCO in accordance with NY State Public Health Law §3000-b, per NYS DOH BEMS policy statement 09-03.

Councilmember Krishnan also asked: "Is there a maintenance system in place to regularly check on the condition of AEDs? Do we know how many AEDs are in good working condition and ready for use in the event of an emergency?"

NY State Public Health Law §3000-b says that “The public access defibrillation provider shall cause the automated external defibrillator to be maintained and tested according to applicable standards of the manufacturer and any appropriate government agency.” However, to the Councilmember’s point, I believe there is no pre-emptive inspection program run by NYC, NYS, or NYC REMSCO.

C. NYC OpenData can host this data

[Kansas City, Missouri publishes its AED location data in an open data portal](#) similar to NYC OpenData (I believe they use the same data portal software platform). The dataset they publish has eight fields:

1. AED Owner (the organization in charge of the site)
2. AED Manufacturer
3. AED Model
4. AED Serial #
5. AED Street Address
6. ZIP code
7. AED Physical Location (a more specific location: for example, “On wall between shop and office”)
8. AED Geocoded Location (the street address, automatically translated into latitude and longitude for use in mapping software)

NYC OpenData can easily accommodate and display this number of fields, and can handle the number of PAD registrations, [as you can see from the restaurant inspections data \(27 fields\) as an example](#). We may not even need to publish the AED manufacturer, model, or serial numbers, nor provide a geocoded location since mapping software can generally perform this translation itself. And the size of the dataset won’t be a problem, either. As of the 2010 DOHMH report, NYC had less than 6 thousand PADs registered; the restaurant inspection dataset covers more than 200,000 inspections.

[NYC OpenData already holds a dataset of AED locations under the oversight of the Parks Department.](#)

Conclusion

Too many New Yorkers die when AEDs could have saved them. And this is more important than ever: COVID has weakened many New Yorkers' cardiovascular systems, and led to more heart attacks. Let's get this data where more people can get at it.

Please let me know if additional information would be helpful. Thank you.

Sincerely,
Sumana Harihareswara
Jackson Heights, NY
written April 2, 2023

Appendices:

American Heart Association fact sheet, "A Race Against The Clock"

NYC DOHMH 2010 PAD report



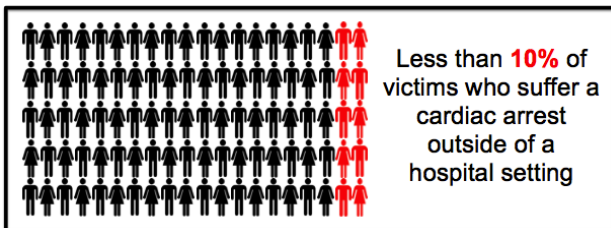
A Race Against the Clock

Out-of-Hospital Cardiac Arrest

OVERVIEW

Cardiac arrest occurs when the heart malfunctions and abruptly stops beating. While it is often confused with a heart attack, cardiac arrest is caused by an electrical malfunction in the heart that prevents the heart from beating normally. A heart attack is caused by a circulation problem in the arteries that prevents blood from reaching the heart. Not all heart attacks cause cardiac arrest, however heart attack is a significant risk factor associated with cardiac arrest.^{1,2}

There are more than 357,000 EMS-assessed out-of-hospital cardiac arrests (OHCA) each year in the United States, and nearly 90 percent of OHCA's are fatal.³ Time is one of the most important factors in determining whether an individual experiencing cardiac arrest will survive. Victims of cardiac arrest who receive prompt medical attention including cardiopulmonary resuscitation (CPR) to increase the blood flow to the heart and brain and/or an electrical shock from a defibrillator to stop the abnormal heart rhythm are much more likely to survive than those who do not receive swift medical intervention. Research suggests cardiac arrest victims who receive CPR immediately have double to triple the survival rates of those who do not.⁴ Accordingly, cardiac arrests that occur outside the hospital are significantly more deadly than in-hospital cardiac arrests (IHCA)—nearly 2.5 times as deadly in adults and almost 4 times as deadly in children³—as those experiencing OHCA are not surrounded by medical professionals that can provide them with aid.



Education about and awareness of cardiac arrest and the importance of providing immediate medical aid can help improve survival outcomes. Unfortunately, public surveys^{5,6} suggest a general lack of awareness about cardiac arrest and the need for prompt medical intervention. Even those among the public who are aware of cardiac arrest and the benefit of providing early intervention may not do so because of lack of confidence in administering aid, concerns about hurting the victim, a belief that someone

else may be able to provide aid more effectively, and personal liability.⁶ Providing education about cardiac arrest and training in intervention techniques that are accessible to lay people can improve the likelihood that cardiac arrest victims are identified and provided with the assistance they need to survive.

WHAT IS CARDIAC ARREST?

The human heart has a complex electrical system that regulates and synchronizes the beating of the heart. When this system malfunctions, the heart can be sent into a dangerously erratic rhythm that prevents blood from pumping normally and can lead to cardiac arrest. Unlike the heart attack victim who may exhibit early warning symptoms, such as chest pain or shortness of breath, cardiac arrest strikes without warning. One minute a person may feel fine, and the next be unconscious and close to death.

CAUSES AND RISK FACTORS

Cardiac arrest may occur in individuals with no known history of heart disease.⁷ However, heart conditions, including those that are undiagnosed, are often the causes of cardiac arrest.⁷ Risk factors of cardiac arrest include:⁸

- Abnormal heart rhythms (arrhythmias)—like ventricular tachycardia, ventricular fibrillation, or bradycardia
- Scarring of heart tissue—due to prior heart attack or other heart trauma
- Thickened heart muscle (cardiomyopathy)—due to high blood pressure or heart valve disease
- Heart medications—including those that are prescribed to prevent arrhythmias
- Electrical abnormalities in the heart—like Wolff-Parkinson White syndrome and Long QT syndrome
- Blood vessel abnormalities
- Use of certain recreational drugs like cocaine or amphetamines

WHO SUFFERS CARDIAC ARREST?

While adults are more likely to suffer cardiac arrest than children, cardiac arrest can affect anyone, regardless of age.³ Cardiac arrest mortality is high among very young children (<1 year old). Cardiac arrest decreases from ages 1 to 14 and increases each subsequent year from age 15 onward.³ The mortality rate from cardiac arrest has declined in the past 20 years.³

Rates of cardiac arrest also display historical patterns of health disparity. Research suggests racial and ethnic minorities like blacks and Hispanics suffer higher rates of OHCA than their white counterparts.³ Meanwhile, OHCA rates in lower socioeconomic census tracts are higher than rates in higher socioeconomic census tracts.³

SURVIVING CARDIAC ARREST

Treatment of cardiac arrest is a race against the clock. The combination of early, immediate CPR and defibrillation can significantly improve a victim's chance of survival.

The American Heart Association recommends implementing the **Chain of Survival**⁹ to rescue cardiac arrest victims:

- Immediate recognition of cardiac arrest and activation of the emergency response system
- Early CPR with an emphasis on chest compressions
- Rapid defibrillation if indicated
- Basic and advanced emergency medical services
- Advanced life support and post-cardiac arrest care

TRAINING CURRENT AND FUTURE LIVESAVERS

Administration of CPR is critical to the survival of victims of cardiac arrest. Unfortunately, not enough people are able to deliver effective CPR. Expanding the population of bystanders-turned-rescuers through training and education can help empower non-medical professionals to identify the signs of cardiac arrest and act to assist victims.

A growing body of research is exploring what aspects of training and education will affect the willingness of bystanders to intervene in cardiac arrest emergencies, provide quality medical intervention, and improve patient outcomes.⁴ Evidence suggests both instructor-led

and/or self-directed CPR training sessions with real-time or delayed feedback can be effective at preparing bystanders to respond to cardiac arrest.⁴ Periodic refresher training courses that focus on developing skills and confidence to intervene are also beneficial.⁴ Traditional CPR training teaches both compression and ventilation techniques, but newer evidence suggests compression only CPR training may also be appropriate and effective.⁴

In the fall of 2017, there were 59.5 million students enrolled in public, public charter, or private primary or secondary schools.¹⁰ With the proper training and education, these millions of students represent an enormous population of bystanders-turned-rescuers. Universal CPR training in high schools can teach a substantial portion of the population how to deliver this lifesaving technique and help increase the likelihood that individuals suffering a cardiac arrest will receive high quality CPR. As of 2018, thirty-eight states and Washington, DC require CPR training as part of their high school curriculum.¹¹ Still, there are 12 states that do not require such training. Training students in every state across the country in CPR will fill schools, as well as entire communities, with lifesavers.

GREATER ACCESS TO AEDS

When CPR cannot restart normal heart rhythm during cardiac arrest, rescuers can also turn to automated external defibrillators (AEDs). An AED is a simple-to-use portable device that is used to shock the heart of a person suffering a cardiac arrest to return the heart to a normal rhythm. AEDs are available in a variety of public settings – from schools to offices to airports. Used by both trained emergency responders and bystanders, the AED is attached to the victim and delivers an electric shock when it detects a dangerous heart rhythm. The devices provide audible step-by-step instructions to the user and independently determine if a shock is needed, making them very easy for almost anyone to use.

In cardiac arrest emergencies where bystanders used AEDs before emergency medical services arrived, patients were over two and a half times as likely to survive their cardiac arrest and had better functional outcomes than those who did not receive bystander defibrillation.¹² Lay responders play a crucial role in achieving high survival rates, and more AEDs and CPR training for these individuals are needed to provide this life-saving treatment. Despite widespread public support for increasing federal funding for cardiac arrest research, education and treatment, such funding has been cut.

THE ASSOCIATION ADVOCATES

The American Heart Association advocates for a comprehensive approach to addressing out-of-hospital cardiac arrest, including:

- Greater research into its underlying causes.
- Improved data collection on out-of-hospital cardiac arrest; how it affects different populations; and the effectiveness of treatment methods.

FACT SHEET: Out-of-Hospital Cardiac Arrest

- Promoting the use of recognized emergency medical dispatch protocols and appropriate quality improvement programs among 911 dispatch agencies to assure that bystanders promptly receive effective CPR coaching and support for efforts to train dispatch personnel to provide pre-arrival medical instructions.
- Supporting legislation and policies that encourage bystander CPR, including requiring all students to be trained in CPR and AED prior to graduating from high school.
- Championing public policy initiatives that promote the development of Medical Emergency Response Plans (MERPS), which includes placing AEDs in public places where cardiac arrest is likely to occur.
- Advocating for funding the *Rural and Community Access to Emergency Device Program* at the FY 2005 level of \$9 million annually, so that more lives can be saved each year.
- Extending Good Samaritan law coverage to all AED users and program facilitators.
- Increasing public awareness of out-of-hospital cardiac arrest and its causes through activities such as CPR and AED Awareness Week each June.¹

References:

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**2010 Report to City Council on
Local Law 20 of 2005:
Public Access Defibrillator Use In
New York City**



**NEW YORK CITY DEPARTMENT OF HEALTH AND
MENTAL HYGIENE**

Thomas Farley, MD, MPH
Commissioner

July 7, 2010

**Prepared by the
Division of Health Promotion and Disease Prevention
Bureau of Chronic Disease Prevention and Control
Cardiovascular Disease Prevention and Control Program**

Executive Summary

In March 2005, the New York City Council enacted Local Law 20 (LL20) requiring the placement of Automated External Defibrillators (AEDs) in specific public places. This is the 5th and final report of the quantities and locations of AEDs in New York City (NYC) as required by LL20. Other registered AEDs in NYC are also described. Finally, the impact of LL20 on saving lives is considered.

New York State (NYS) law requires that all AEDs that are placed in a publicly accessible area in NYC, otherwise known as 'public access defibrillators' (PADs), be registered with the Regional Emergency Medical Services Council of New York City, Inc. (REMSCO). REMSCO reports that as of May 31, 2010, 5,492 PADs are registered. Last year at this time, there were 5,296 registered PADs.

All non-governmental entities and city agencies mandated under the law, including the Department for the Aging, Department of Citywide Administrative Services, Department of Parks and Recreation, Department of Transportation, and NYC Health and Hospitals Corporation report to Department of Health and Mental Hygiene (DOHMH) that they have met the requirements of the regulations.

There were 182 documented PAD uses reported to REMSCO for the period of June 1, 2009 through May 31, 2010. During this time period, the Fire Department of New York (FDNY) reported a total of 8,783 out-of-hospital cardiac arrests. While acknowledging gaps in the existing data, the reported data shows that only 5 out of the 8,783 out-of-hospital cardiac arrests were responded to by use of a PAD required pursuant to the requirements of LL20. It was reported to DOHMH that the outcome of 1 of these uses was patient survival to hospital discharge with meaningful neurological function. However, patient outcome associated with the remaining 4 uses is unknown due to limitations of available data.

The City is preempted by NYS Public Health Law Sections 2812 and 2801 from enacting and enforcing any regulations for hospitals, which by definition includes private nursing homes. NYS does not currently require PADs in nursing homes although many have registered devices. While survival from out-of-hospital cardiac arrest associated with PAD use in nursing homes is not available locally, data included in this report show that nursing homes represent the single most reported location of PAD use in NYC.

It is well documented that PADs located in high traffic areas (e.g., airports, other transportation hubs) and in places where people at a high risk for sudden cardiac arrest live or congregate (e.g., nursing homes, senior centers) have a higher likelihood of saving lives and supports targeted PAD placement in these locations. One recent study estimates that PADs placed in locations with at least a 12% annual likelihood of use can be a good investment.

AEDs are currently in use by FDNY, the New York City Police Department (NYPD), Port Authority Police Department (PAPD) and in other private settings. FDNY maintains AEDs on most fire trucks, NYPD utilizes AEDs within many of its units, and PAPD maintains AEDs at the airports, with some patrol units and at some PATH train hubs. Considered in combination with LL20 mandated placement, DOHMH recommends no further expansion of existing PAD placements under local authority. The DOHMH does recommend mandated PAD placement in private nursing homes; however such a requirement could only be enacted at the state level.

**Report on Local Law 20 of 2005:
Public Access Defibrillator Use in New York City Since Implementation**

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Attachments:

- Local Law 20, 2005
- NYC DOHMH Rule Implementing Section 17-188 of the Administrative Code Requiring Placement of Automated External Defibrillators in Certain Public Places
- New York State Public Health Law §3000-b

1.0 Introduction

In March 2005, the New York City Council enacted Local Law 20 (LL20) requiring the placement of Automated External Defibrillators (AEDs) in specific public places. LL20 also mandated that the New York City Department of Health and Mental Hygiene (DOHMH) provide a report on the quantities and locations of AEDs following the first year of enactment and annually thereafter until 2010. Now at the completion of year five of LL20's enactment, and in accordance with this mandate, we submit this fifth and final report for the reporting period of June 1, 2009 through May 31, 2010.

LL20 and the DOHMH rules state that any AED acquired, possessed and operated, be done so in accordance with New York State Public Health Law §3000-b (NYS PHL §3000-b). NYS PHL §3000-b requires registration of the devices with the Regional Emergency Medical Services Council of New York City, Inc. (REMSCO) before they can be in public settings.

LL20 requires AEDs in specific public places that may be used by non-medical personnel and NYS PHL §3000-b describes the requirements governing this type of AED placement. Sites covered by LL20 that offer a higher level of emergency care are exempt from the AED requirement (e.g. stadia that provide a higher level of emergency medical care during events). Neither LL20 nor NYS PHL §3000-b cover the use of AEDs as part of medical response by emergency medical systems (EMS) personnel, including emergency medical technicians and paramedics, nor does it govern the use of AEDs in medical facilities that have more advanced levels of medical care.

LL20 requires first, that all entities covered under LL20 must possess and place AEDs with the required signage for their specific type of establishment as set forth in Section 24-04 of NYC Administrative Code 17-188. Secondly, all AEDs must be registered in accordance with New York State law per section 24-05 of the NYC Administrative Code 17-188. Possession of an AED and registration with REMSCO is self-reported by all entities covered by LL20 in this report. To register, the entity needs to submit a site-specific response plan including deployment location(s), location of signage, training of staff, medical oversight, emergency response and maintenance procedures and all procedures for documentation of usage. The site specific response plan is submitted to REMSCO with the initial and all subsequent registrations. All AEDs must be registered every two years. Additionally, any use of AEDs in the covered entities is also self-reported to REMSCO. Mandated sites which are not pre-empted by state law and therefore covered by LL20 include the following facilities: DCAS buildings, Parks, golf courses, DOT ferry terminals, HHC nursing facilities, stadia, arenas and DFTA senior centers.

Throughout this report, AEDs that are placed in publicly accessible areas and may be used by a lay rescuer are referred to as 'public access defibrillators' (PADs).

Although not mandated by the LL20 reporting requirement, limited available data from REMSCO and the Fire Department of New York (FDNY) on AED uses and outcomes is also reported here in an attempt to assess the impact of this law. For those readers

becoming newly acquainted with LL20, the original legislation and the related the DOHMH regulation is attached.

See attachments:

- Local Law 20, 2005
- NYC DOHMH Rule Implementing Section 17-188 of the Administrative Code Requiring Placement of Automated External Defibrillators in Certain Public Places
- New York State Public Health Law §3000-b

2.0 Data Sources

PAD location, quantity, use, and cardiac arrest data in this report come from the following sources:

The Regional Emergency Medical Services Council of New York City, Inc. (REMSCO) - REMSCO is designated by NYS PHL §3000-b to accept and maintain registration documentation for PADs within NYC and to maintain records on all PAD use. The time period for data included in this report is 6/1/2009-5/31/2010.

LL20 covered entities – Data was supplied to DOHMH by all affected city agencies. In addition, DOHMH contacted all 24 covered government and non-government entities by phone for their self-report on meeting the requirements of LL20.

The Fire Department of New York (FDNY) Division of Emergency Medical Services (EMS), Office of Medical Affairs - This office maintains records on all patients entered into the municipal 911-EMS system. Limited data on all out-of-hospital cardiac arrests in NYC was made available for this report for the time period of 6/1/2009-5/31/2010.

3.0 PAD Locations

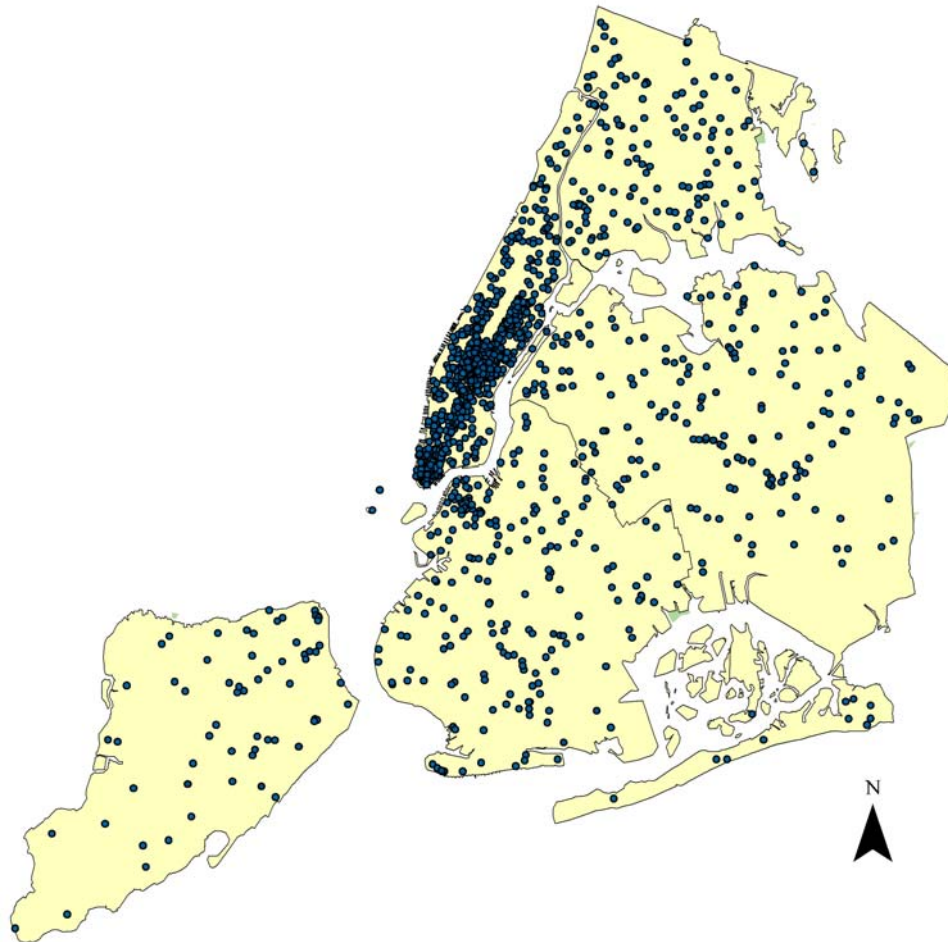
3.1 PAD Quantities and Locations

According to REMSCO data, 5,492 PADs are registered throughout the five boroughs. During this reporting period, a total of 196 new PADs were registered with REMSCO. None of those newly registered are required under LL20, but some may have been placed by NYC Agencies. It is estimated that 554 PADs are covered by LL20.

3.3 Map of all PAD Locations Registered in NYC (includes those not required by LL20)

The following map displays all registered PAD locations in NYC as reported by REMSCO. Boundaries represent the borough districts and each blue dot represents a PAD site. Multiple PADs may and in some cases do exist at one location or address. Registered PAD sites in NYC are most concentrated in Manhattan.

Public Access Defibrillation Sites in New York City 2010



Data Source: NYC REMSCO May 31, 2010
Map prepared by DOHMH CVD Prevention and Control Program

Note: This represents only PAD sites and does not include AEDs used by medical personnel in an official emergency response capacity. While all AEDs maintained by the Department of Education are registered with REMSCO, this map does not include these locations.

3.4 Non-Government Locations Covered by LL20

Stadia and Arenas

Fifteen NYC stadia and arenas report to DOHMH that they have placed PADs on the premises and report that they meet all the requirements of LL20. Six NYC stadia and arenas report to DOHMH that they offer a higher level of medical care when events are held thus requiring no PAD and report that they meet all the requirements of LL20.

Private Golf Courses

The 3 private golf courses in NYC report to DOHMH that they have placed PADs on the premises and report that they meet all the requirements of LL20. All other golf-courses in NYC are operated by the Department of Parks and Recreation (Parks) as discussed in section 3.5 below.

3.5 City Agency PAD Placement Covered by LL20

Department for the Aging

As outlined in LL20, the Department for the Aging (DFTA) is required to maintain PADs at senior centers serving 3 or more meals per week. DFTA reports to DOHMH that they have 314 locations that meet these criteria and have placed a total of 314 PADs in those locations and report that they meet all the requirements of LL20. DFTA reported 316 locations in the prior reporting period.

Department of Transportation

As outlined in LL20, all ferry terminals owned and operated by the City and served by ferry boats with a passenger capacity of 1,000 or more are required to have PADs. DOT reports to DOHMH that they have placed 38 PADs and reports that they meet all the requirement of LL20. There have been no changes to the numbers and locations of PADs placed by the Department of Transportation (DOT).

Department of Parks and Recreation, including Public Golf Courses

As outlined in LL20, the Department of Parks and Recreation (Parks) is required to identify six parks in each borough where devices will be placed and that at least one of these parks in each borough be over 170 acres in size. Parks reports to DOHMH that they have placed PADs in a minimum of 10 parks in each borough and reports that they meet all the requirements of LL20. Additionally, public golf courses are required to have PADs. Parks reports to DOHMH that they have placed PADS in all golf courses within the Parks system and reports that they meet the requirements of LL20. Parks also reports that it is in the process of placing and registering an additional 20 AEDs at public beaches. These placements are in response to the amendment of Section 225 of the NYS Public Health Law, Subpart 6-2, which requires at least one AED at each ocean surf beach.

Borough	Number of Parks with PADs	Total Number of PADs in Parks
Bronx	12	12
Brooklyn	12	12
Manhattan	18	22
Queens	10	10
Staten Island	13	14
Citywide	65	70

Data Source: NYC Parks Department, 2010

Department of Citywide Administrative Services

As outlined in LL20, the Department of Citywide Administrative Services (DCAS), Division of Facilities Management and Construction is required to have PADs in all places in its buildings where the public is regularly invited or permitted on most business days and which do not require an appointment or special authorization or permission to gain admission. DCAS reports to DOHMH that they have placed a total of 112 PADs, throughout their facilities and reports meeting all the requirements of LL20. This is up from 110 during the previous reporting period. DCAS reports both number of buildings covered and number of PADs since many of the covered buildings have more than one PAD to meet the requirements of the NYC Administrative Code 17-188.

Borough	Number of DCAS Buildings with PADs	Total Number of PADs in DCAS Buildings
Bronx	6	13
Brooklyn	11	20
Manhattan	22	52
Queens	7	16
Staten Island	7	11
Citywide	53	112

Data Source: NYC Department of Citywide Administrative Services, 2010

NYC Health and Hospitals Corporation-run Nursing Homes

LL20 covers only NYC Health and Hospitals Corporation (HHC) -run nursing facilities of which there are 3. One of these facilities reports to DOHMH that they have 24-hour advanced life support on the premises and is therefore exempt from the LL20 requirement. The remaining two facilities both report to DOHMH that they have placed PADs on premises and report meeting all the requirements of LL20.

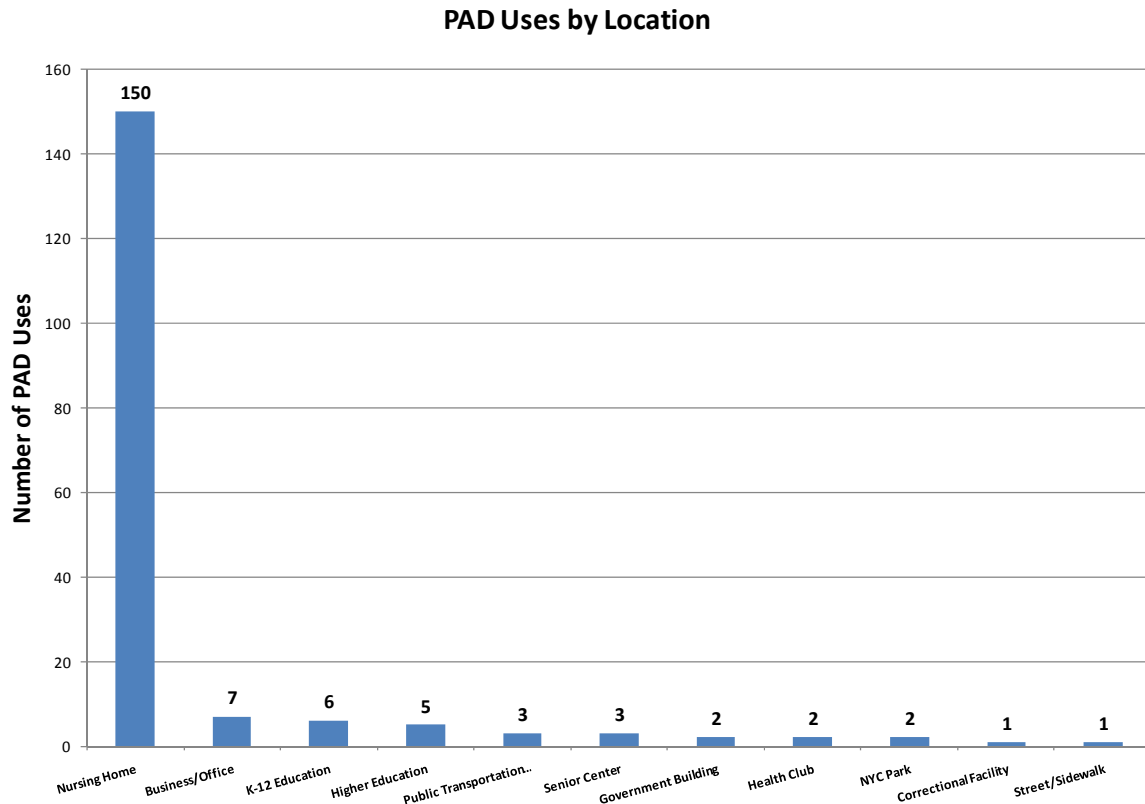
4.0 LL20 Complaints from the Public

Under normal procedure, 311 calls regarding AEDs or complaints about facilities not having AEDs are routed to the Cardiovascular Disease Prevention and Control program of the DOHMH. Complaints regarding a health club or other facility not covered by LL20 but covered by New York State law are referred to the to the New York State Attorney General's Office. In addition, DOHMH contacts the facility, notifies them of the complaint and sends information explaining NYS PHL §3000-b and their obligations under it. During the June 1, 2009 through May 31, 2010 reporting period, DOHMH received no complaints from the public regarding AEDs.

5.0 PAD Uses

5.1 REMSCO Reported PAD Use by Location in New York City

REMSCO receives reports of PAD use in NYC and DOHMH requests use data from REMSCO.

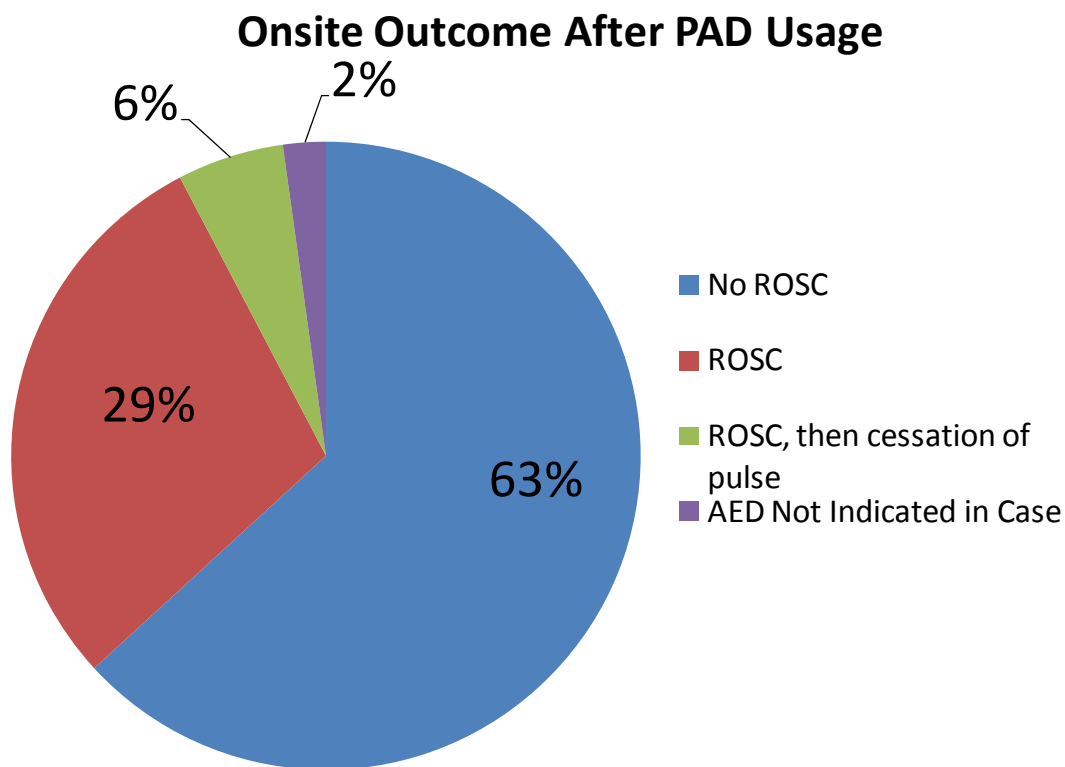


*Data Source: Regional EMS Council of New York City, data from June 1, 2009 – May 31, 2010
(Includes LL20 mandated and non-mandated entities)*

A total of 182 PAD uses were reported to REMSCO from 6/1/2009 – 5/31/2010. PAD use in nursing homes made up the majority (150/182) of uses reported to REMSCO during this reporting period, similar to prior reporting years. However, only 3 of the estimated 178 nursing homes in NYC are covered by LL20 since the law only applies to HHC-run nursing facilities. All the reported uses in nursing homes during this period were in private nursing homes.

5.2 REMSCO Data on Return of Spontaneous Circulation

REMSCO PAD use data report on return of spontaneous circulation (ROSC), defined as a return of a pulse when it had been reported as absent prior to PAD use. ROSC related outcomes reported here are categorized as follows: ‘ROSC’, ‘No ROSC’ and “ROSC & Subsequent Cessation of Pulse.” Additionally, supplemental documentation indicated that there were several cases, initially categorized as ROSC, where an AED was applied to a patient who had not lost circulation. These cases were re-categorized and are represented as “AED not indicated” in the accompanying graph



Data Source: Regional EMS Council of New York City, June 1, 2009 – May 31, 2010

According to REMSCO data, of the 182 uses of registered PAD use, 115 (63%) uses were associated with no ROSC, 53 (29%) were associated with ROSC, 10 (6%) were associated with ROSC, then cessation of pulse, and 4 (2%) were cases where AED was not indicated. REMSCO does not collect information on long-term outcome (e.g. survival to hospital or survival to hospital discharge) therefore actual survival rates associated with use cannot be reported.

5.3 Impact of LL20

During the period from 6/1/2009 to 5/31/2010, use was reported in 5 LL20 mandated PAD placement locations. Of these 5 reported uses, three were in senior centers and 2 were in NYC Parks. DFTA reported to the DOHMH that 1 of the 3 uses that occurred in a senior center resulted in ROSC and regaining of consciousness immediately after use and a subsequent survival to hospital discharge with minimal to no lasting neurological deficits. The outcomes from the 4 additional uses are unknown due to data limitations.

FDNY provided to the DOHMH EMS data on out-of-hospital cardiac arrests in NYC. The following chart displays the number of out-of-hospital cardiac arrests occurring during the 12 month period from 6/1/2009-5/31/2010.

Out-of-Hospital Cardiac Arrests Responses by FDNY	
Category	Citywide Totals
Transported	4,359
Transported with ROSC*	1,446
Not Transported (Deceased on Scene)	2,978
Total Cardiac Arrests	8,783
* ROSC defined as 'Return of Spontaneous Circulation'	

911-EMS Data, June 1, 2009 – May 31, 2010

Data Source: Fire Department of New York, Office of Medical Affairs, 2010

Combining information from REMSCO and FDNY it may be concluded that PADs were deployed in 2% of all out-of-hospital cardiac arrests in NYC (i.e., 182 reported PAD uses out of 8,783 total cardiac arrests). Since 5 of the 182 reported uses were from LL20 covered entities, it may further be concluded that 5 out of 8,783 or 0.06% of out-of-hospital cardiac arrests were responded to with a PAD required and placed in accordance with LL20.

6.0 Data Limitations

Data utilized for this report has limitations. First, because possession of a PAD is self-reported by the covered entity, we are unable to determine if all PADs in NYC are registered with REMSCO as required. Therefore the total number of devices reported to us by REMSCO may underreport the true total in place in NYC at large. Second, because the use of PAD is also self-reported by the covered entity to REMSCO, we are unable to determine if all PAD use is appropriately reported and may therefore also be underreported.

REMSCO data includes report of ‘return of spontaneous circulation’ (ROSC) following PAD use, but provides no further information on individual outcome, such as survival to discharge from the hospital. To provide context for the overall potential impact of PAD use in NYC, this report also includes available data from FDNY. FDNY maintains records from the patient care reports generated by their electronic documentation system. These data report on out-of-hospital cardiac arrests responded to by EMS personnel and includes detail on EMS transport to hospitals and ROSC during pre-hospital resuscitation attempts. While this provides an estimate of the total number of out-of-hospital cardiac arrests in NYC, only outcome in the field is reported; survival to hospital or survival to hospital discharge data is not reported.

7.0 Conclusions

LL20 mandated the placement of PADs by both public and private entities. As described, city agencies specified in LL20, which include DCAS, DFTA, Parks and DOT report to DOHMH that they have met the requirements of the law. Additionally, HHC-run nursing facilities, as well as all private and public golf courses and all stadia and arenas in NYC also report meeting all the requirements of LL20.

There were 8,783 out-of-hospital cardiac arrests in NYC over the time period covered by this report. There were 182 reported PAD uses in NYC of which 5 were in facilities which are currently covered by the LL20 mandate. It was reported to the DOHMH that the outcome of 1 of these uses resulted in survival to hospital discharge with no known neurological deficits. The outcomes associated with the remaining 4 uses are unknown.

It is paramount that our public health interventions include evidence-based initiatives designed to significantly reduce cardiovascular disease related death and illness at the population level and that evaluation of these programs are ongoing to assure the best use of limited public resources. It is well documented that PADs placed in high traffic areas (e.g. airports, other transportation hubs) and in places where people who are at a high risk for sudden cardiac arrest live or congregate (e.g. nursing homes, senior centers) have a higher likelihood of saving lives.¹⁻⁷ Recent literature continues to support the targeted placement of PADs in locations likely to experience a high number of cardiac arrests.⁸ One study concluded that placement of PADs where the likelihood of use is at least 12% per year (i.e. 1 use every 9 years) is a good investment.⁹ According to available data for this one-year reporting period, there were 182 uses out of 5,492 available PADs in NYC, making the overall likelihood of use of PADs about 3% (about 1 use every 33 years). Furthermore, there were only 5 uses in LL20 mandated placements out of the 5,492 available PADs in NYC (0.09% mean likelihood of use).

The vast majority of reported PAD uses registered with REMSCO were in private nursing homes where the likelihood of use is probably in excess of 12% per year. As such, PAD placement in these facilities appear to be an appropriate measure. LL20 attempted to require placement of PADs in private nursing homes and may have succeeded in increasing these placements, but was preempted from regulation by New York State Public Health Law. Since nursing homes consistently demonstrate the highest usage rate of all PAD locations, we continue to recommend PAD placements in such facilities where they do not already offer a higher level of care. Such legislation covering nursing homes would require state level legislative actions. Expansion of the LL20 mandate to include additional NYC facilities does not appear warranted at this time based on current PAD use data, which suggests that likelihood of use in non-nursing home facilities is well below 12% per year.

Furthermore, AEDs are already in use by FDNY, New York Police Department (NYPD), Port Authority Police Department (PAPD) and in other private settings. FDNY maintains AEDs on most fire apparatus, NYPD utilizes AEDs within many of its units, and PAPD maintains AEDs at the airports, with some patrol units and at some PATH train hubs.

Still, most cardiac arrests are due to underlying causes that evolve over years and can be prevented and treated prior to the onset of cardiac arrest. While under select circumstances PAD use will save lives, use of resources to address smoking, obesity, physical inactivity, high blood pressure and elevated cholesterol effectively as a city will have the greatest impact on reducing cardiac deaths.

8.0 References

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4. Valenzuela TD, Roe DJ, Nichol G, Clark LL, Spaite DW, Hardman RG. Outcomes of rapid defibrillation by security officers after cardiac arrest in casinos. *N Engl J Med*. 2000;343(17):1206-1209.
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7. Muraoka H, Ohishi Y, Hazui H, et al. Location of Out-of-Hospital Cardiac Arrests in Takatsuki City: Where Should Automated External Defibrillator be Placed? *Circulation Journal*. 2006;70(7):827-831.
8. Folke F, Lippert FK, Nielsen SL, et al. Location of cardiac arrest in a city center: strategic placement of automated external defibrillators in public locations. *Circulation*. 2009;120(6):510.
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**LOCAL LAWS
OF
THE CITY OF NEW YORK
FOR THE YEAR 2005**

No. 20

Introduced by Council Members Oddo, The Speaker (Council Member Miller), and Council Members Lopez, Reed, Lanza, Gallagher, Baez, Barron, Comrie, DeBlasio, Gioia, Koppell, McMahon, Martinez, Moskowitz, Nelson, Quinn, Reyna, Rivera, Sanders, Vallone, Jr., Gerson, Brewer, the Public Advocate (Ms. Gotbaum), Provenzano, Clarke, Dilan, Fidler, Gentile, Jennings, Stewart, Weprin, Palma, Gennaro, Katz, Sears, Avella and Perkins.

A LOCAL LAW

To amend the administrative code of the city of New York, in relation to requiring the placement of automated external defibrillators at certain public places.

Be it enacted by the Council as follows:

Section 1. Chapter one of title 17 of the administrative code of the city of New York is hereby amended by adding a new section 17-188 to read as follows:

§17-188 Automated external defibrillators. a. Definitions. For the purposes of this section, the following terms shall have the following meanings:

1. *“Automated external defibrillator” means a medical device, approved by the United States food and drug administration, that: (i) is capable of recognizing the presence or absence in a patient of ventricular fibrillation and rapid ventricular tachycardia; (ii) is capable of determining, without intervention by an individual, whether defibrillation should be performed on a patient; (iii) upon determining that defibrillation should be performed, automatically charges and requests delivery of an electrical impulse to a patient’s heart; and (iv) upon action by an individual, delivers an appropriate electrical impulse to a patient’s heart to perform defibrillation.*

2. *“Owner or operator” means the owner, manager, operator, or other person or persons having control of a public place.*

3. *“Public place” means the publicly accessible areas of the following places to which the public is invited or permitted: (i) public buildings maintained by the division of facilities management and construction of the department of citywide administrative services or any successor; (ii) parks under the jurisdiction of the department of parks and recreation identified pursuant to subdivision e of this section; (iii) ferry terminals owned and operated by the city of New York served by ferry boats with a passenger capacity of one thousand or more persons; (iv) nursing homes, as defined in section 2801 of the New York state public health law; (v) senior centers, which include facilities*

operated by the city of New York or operated by an entity that has contracted with the city to provide services to senior citizens on a regular basis, such as meals and other on-site activities; (vi) golf courses, stadia and arenas; and (vii) health clubs that are commercial establishments offering instruction, training or assistance and/or facilities for the preservation, maintenance, encouragement or development of physical fitness or well-being that have a membership of at least two hundred and fifty people, and which shall include, but not be limited to, health spas, health studios, gymnasiums, weight control studios, martial arts and self-defense schools or any other commercial establishment offering a similar course of physical training.

b. *Automated external defibrillators required.* Except as provided in subdivision j of this section, the owner or operator of a public place shall make available in such public place automated external defibrillators in quantities and locations deemed adequate in accordance with rules promulgated pursuant to subdivisions e and f of this section and in accordance with section 3000-b of the New York state public health law. Such automated external defibrillators shall be readily accessible for use during medical emergencies. Any information regarding use of automated external defibrillators deemed necessary by the department in accordance with rules promulgated pursuant to subdivision f of this section shall accompany and be kept with each automated external defibrillator. Any automated external defibrillator required pursuant to this subdivision shall be acquired, possessed and operated in accordance with the requirements of section 3000-b of the New York state public health law.

c. *Notice required.* The owner or operator of a public place shall provide written notice to the public, by means of signs, printed material or other form of written communication, indicating the availability of automated external defibrillators for emergency use in such public place and providing information on how to obtain automated external defibrillator training. The type, size, style, location and language of such notice shall be determined in accordance with rules promulgated by the department pursuant to subdivision f of this section. Should such rules require or allow the posting of signs made available by the department to owners or operators of a public place to serve as appropriate notice pursuant to this subdivision, the department may charge a fee to cover printing, postage and handling expenses.

d. *Reports.* The department shall conduct a comprehensive study and submit a report to the mayor and the council twelve months after the effective date of the local law that added this section. Such report shall include, but not be limited to, the quantities and locations of automated external defibrillators placed in public places pursuant to subdivision b of this section and the identification of any additional locations throughout the city of New York that warrant the placement of automated external defibrillators. Twenty-four months after the effective date of the local law that added this section, and annually thereafter for the next succeeding three years, the department shall submit to the mayor and the council a report indicating the quantities and locations of automated external defibrillators placed in public places pursuant to subdivision b of this section.

e. *Parks.* The commissioner of the department of parks and recreation shall, no later than seven calendar days after the effective date of the local law that added this section, promulgate rules identifying at least six parks in each borough under the jurisdiction of the department of parks and recreation to be considered a public place for the purposes of this section, and determining the quantity and location of automated external defibrillators to be placed in such parks; provided, however, that at least one of the parks identified in each borough must be over one hundred and seventy acres.

f. Rules. The department shall promulgate such rules as may be necessary for the purpose of implementing the provisions of this section, including, but not limited to, rules regarding the quantity and location of automated external defibrillators to be placed in a particular public place or general category of public place; the form of notice in which the availability of automated external defibrillators in a public place shall be made known to the public and any accompanying fee; and any information on the use of automated external defibrillators that must accompany and be kept with each automatic external defibrillator; provided, however, that the department of parks and recreation shall determine the quantity and location of automated external defibrillators placed in parks, pursuant to subdivision e of this section. Such rules shall also include, but not be limited to, required training in the use of automated external defibrillators.

g. Liability limited. Any person who, in accordance with the provisions of this section, voluntarily and without expectation of monetary compensation renders first aid or emergency treatment using an automated external defibrillator that has been made available pursuant to this section, to a person who is unconscious, ill or injured, and any person, owner or operator, entity, partnership, corporation, firm or society that purchases or makes available an automated external defibrillator as required by this section, shall be entitled to the limitation of liability provided in section 3000-a of the New York state public health law.

h. No duty to act. Nothing contained in this section shall impose any duty or obligation on any owner or operator of a public place, his or her employee or other agent, or any other person to provide assistance with an automated external defibrillator to a victim of a medical emergency.

i. Standard of care. Nothing contained in this section shall be deemed to affect the obligations or liability of emergency health providers pursuant to section 3000-b of the New York state public health law.

j. Exception. During such times as an owner or operator of a public place provides, at such public place, advanced life support by a physician, registered professional nurse or advanced emergency medical technician acting within his or her lawful scope of practice, or the use of automated external defibrillators by a physician, registered professional nurse, or advanced emergency medical technician acting within his or her lawful scope of practice, such provision shall be deemed to satisfy the requirements of subdivision b of this section, subject to rules of the department promulgated pursuant to subdivision f of this section. For purposes of this subdivision, advanced emergency medical technician shall mean an advanced emergency medical technician as defined in section three thousand one of the New York state public health law.

k. Public awareness. Within ninety days of the effective date of the local law that added this section, the department shall conduct public awareness and education campaigns in English and Spanish regarding cardiopulmonary resuscitation training.

§2. Severability. If any subdivision, sentence, clause, phrase or other portion of the local law that added this section is, for any reason, declared unconstitutional or invalid, in whole or in part, by any court of competent jurisdiction, such portion shall be deemed severable and such unconstitutionality or invalidity shall not affect the validity of the remaining portions of the local law that added this section, which remaining portions shall remain in full force and effect.

§3. Effective date. This local law shall take effect one hundred twenty days after its enactment into law. Actions necessary to prepare for the implementation of this local law may be taken prior to its effective date.

THE CITY OF NEW YORK, OFFICE OF THE CITY CLERK, s.s.:

I hereby certify that the foregoing is a true copy of a local law of the City of New York, passed by the Council on February 16, 2005, and approved by the Mayor on March 7, 2005.

VICTOR L. ROBLES, City Clerk of the Council

CERTIFICATION PURSUANT TO MUNICIPAL HOME RULE LAW §27

Pursuant to the provisions of Municipal Home Rule Law §27, I hereby certify that the enclosed Local Law (Local Law 20 of 2005, Council Int. No. 211-A) contains the correct text and:

Received the following vote at the meeting of the New York City Council on February 16, 2005: 47 for, 0 against, 0 not voting.

Was signed by the Mayor on March 7, 2005.

Was returned to the City Clerk on March 9, 2005.

JEFFREY D. FRIEDLANDER, Acting Corporation Counsel

DEPARTMENT OF HEALTH AND MENTAL HYGIENE
COMMISSIONER OF HEALTH

NOTICE OF ADOPTION OF RULE IMPLEMENTING
SECTION 17-188 OF THE ADMINISTRATIVE CODE REQUIRING THE PLACEMENT OF
AUTOMATED EXTERNAL DEFIBRILLATORS AT CERTAIN PUBLIC PLACES

IN COMPLIANCE WITH SECTION 1043(b) and 389(b) OF THE NEW YORK CITY CHARTER (the "Charter") and pursuant to Title 17, Chapter 1, Section 17-188(f) of the New York City Administrative Code, notice is hereby given of the adoption of the following rule implementing Section 17-188 of the New York City Administrative Code requiring the placement of automated external defibrillators at certain public places. The Notice of Public Hearing was printed in the City Record on July 20, 2005. A public hearing was held on August 22, 2005. The Department received four written comments and two testimonials at its public hearing.

STATUTORY AUTHORITY

This rule is promulgated pursuant to New York City Charter Sections 389(b) and 1043(a) and Section 17-188(f) of the New York City Administrative Code. Section 1043(a) of the Charter provides that each "agency is empowered to adopt rules necessary to carry out the powers and duties delegated to it by or pursuant to federal, state or local law". Section 389(b) similarly provides that the "heads of mayoral agencies shall have the powers to adopt rules to carry out the powers and duties delegated to the agency head or the agency by or pursuant to federal, state or local law. Section 17-188(f) of Chapter 1 of Title 17 of the Administrative Code authorizes the Commissioner of the Department of Health and Mental Hygiene to "promulgate such rules as may be necessary for the purpose of implementing the provisions of this section, including, but not limited to, rules regarding the quantity and location of automated external defibrillators to be placed in a particular public place or general category of public place; the form of notice in which the availability of automated external defibrillators in a public place shall be made known to the public and any accompanying fee; and any information on the use of automated external defibrillators that must accompany and be kept with each automated external defibrillator...."

STATEMENT OF BASIS AND PURPOSE

This rule is required to be promulgated pursuant to Section 17-188 of the Administrative Code, specifically subsections (b), (c), (f) and (j) thereof, and is necessary for that law's proper implementation and enforcement. The general purpose of Section 17-188 of the Administrative Code is to make "automated external defibrillators" available in the "publicly accessible areas" of certain "public places" in order to encourage persons to "voluntarily and without expectation of monetary compensation" provide first aid or emergency treatment using an automated external defibrillator that has been made available pursuant to this section, to a person who is unconscious, ill or injured....". Section 24-01 of a new Chapter 24 of Title 24 of the Rules of the City of New York provides the meaning of specific words and terms used in this rule and in

Section 17-188 of the Code and further provides that the meaning of other words and terms used in the rule are as specified in Section 17-188 of the Code. In response to a comment received, the definition of “publicly accessible areas” in Section 24-01(b)(3) has been modified. The revised version makes clearer that this definition was not intended to exclude employees but rather to clarify which areas within these public places are open to the public. The definition of “membership” in former Section 24-01(b)(4) has been deleted from the final version because Section 631 of the New York State General Business Law (“GBL”) reflects the State Legislature’s intent to preempt the area of automated external defibrillators in health clubs, as now set forth in Section 627-a of the “GBL”. Section 627-a, which went into effect on July 20, 2005, establishes statewide requirements relating to the provision of automated external defibrillators in health clubs. Therefore, consistent with Section 631 of the “GBL”, those provisions of Local Law 20 of 2005 as they relate to health clubs and related facilities defined in Section 17-188(a)(3)(vii) of the Code are of no force and effect. The definition of “membership” as it relates solely to health clubs and related facilities has been deleted.

Section 24-02 provides that those required to make automated external defibrillators available pursuant to Section 17-188 must in implementing this rule also comply with the requirements of Section 3000-b of the New York State Public Health Law in connection with the acquisition, possession and operation of automated external defibrillators. Section 24-03 provides necessary guidance as to the appropriate location and quantities of automated external defibrillators that must be maintained pursuant to the new law. According to Section 24-03(a), the owner or operator of a public place, as defined in Section 17-188(a)(3) of the Code and limited by Section 17-188(e) of the Code, must “place at least one automated external defibrillator(s) in a prominent location in that public place.” Subsection (b) of this section provides that the automated external defibrillator(s) is to be “located or placed so that this equipment can be obtained in a timely manner”. Section 24-04 entitled Required Notice: Signage Information, provides the information that is required to appear on the wall sign informing the public as to the availability of an automated external defibrillator at that location and specifies where that wall sign should be placed. It also identifies information that must be included on a second sign and provides that this second sign may be placed either on a wall or on the face of the storage container in which the automated external defibrillator is contained. In response to a comment, changes to Section 24-04 reducing the minimum height of the lettering on the required signage and allowing the use of the abbreviation “AED” have been made. The Department determined that the use of the abbreviation and the size reduction in lettering would not affect legibility and that these changes were necessary to ensure that the language could be accommodated on the signage. Upon further consideration, the Department has deleted paragraph (ii) of subsection (e) of Section 24-04 as unnecessary. The reference to a paragraph (i) has, accordingly, also been deleted. The content of former paragraph (i) remains as subsection (e) of Section 24-04. Section 24-05 specifies what must be contained in a required written Site-Specific Response Plan and provides that the Plan must be made available to the Department upon its request.

In response to a comment, the definition of “On A Regular Basis” in Section 24-01(b)(7) was modified to increase the number of senior centers that would be required to make an automated external defibrillator available by reducing the number of hours of services per week, including lunch, that a senior center has to provide before it is required to have an automated

external defibrillator. A definition of “Advanced Life Support” [Section 24-01(b)(8)] and a section entitled “Nursing Homes” [Section 24-06] have been added as the Department determined that there existed a need to provide guidance to nursing homes as to which facilities would have to make automated external defibrillators available and the number of trained responders that must be specifically required in those facilities.

THE RULE IS AS FOLLOWS:

COMMISSIONER OF HEALTH AND MENTAL HYGIENE RULE IMPLEMENTING SECTION 17-188 OF THE ADMINISTRATIVE CODE REQUIRING PLACEMENT OF AUTOMATED EXTERNAL DEFIBRILLATORS AT CERTAIN PUBLIC PLACES

Chapter 24

AUTOMATED EXTERNAL DEFIBRILLATORS IN CERTAIN PUBLIC PLACES

Section 24-01(a). Definitions.

Words and terms used in this rule, other than those specified in subsection (b) of this section, shall have the same meaning as specified in §17-188 of the New York City Administrative Code.

(b) When used in this rule, the following words or terms shall have the following meaning:

(1) Department. “Department” means the New York City Department of Health and Mental Hygiene.

(2) Code. Code means the Administrative Code of the City of New York.

(3) Publicly Accessible Areas. Publicly accessible areas of buildings operated by the Division of Facilities Management and Construction of the Department of Citywide Administrative Services means the areas within a “public place”, as that term is defined in §17-188(a)(3) of the Code, to which members of the public are regularly invited or permitted on most business days and which do not require an appointment or special authorization or permission in order to gain admission.

(4) Prominent Location. Prominent location shall mean any central location in a public place where the automated external defibrillators can be located and are readily available at all times for use by persons trained in their operation.

(5) Public access defibrillation provider. Public access defibrillation provider means a person, firm, organization or other entity having control of a public place and possessing or operating an automated external defibrillator pursuant to a collaborative agreement, as that term is defined in §3000-b of the New York State Public Health Law.

(6) Trained Responder(s). Employees/volunteers recruited by or, if necessary, designated by the owner/management of those public places specified in §17-188(a)(3) of the Code, to operate automated external defibrillators. Such employees shall have received appropriate training in the use and operation of automated external defibrillators, as evidenced by the

successful completion of a combination cardio-pulmonary resuscitation/automated external defibrillator (CPR/AED) training class.

(7) On A Regular Basis. As used in § 17-188(a)(3)(iv) of the Code, refers to those senior centers offering services, including lunch, to senior citizens at least three days per week.

(8) Advanced Life Support. As used in § 17-188(j) of the Code and § 24-06, advanced life support must include, although is not limited to, the availability of manual defibrillation.

Section 24-02. Compliance with State Law

Any automated external defibrillator required pursuant to §17-188 of the Code shall be acquired, possessed and operated in accordance with the requirements of §3000-b of the New York State Public Health Law.

Section 24-03. Quantity and Location of Automated External Defibrillators

(a) The owner or operator of a public place, as defined in §17-188(a)(3) of the Code and limited by §17-188(e), shall place at least one automated external defibrillator(s) in a prominent location in that public place. In those public places maintained by the Division of Facilities Management and Construction of the Department of Citywide Administrative Services, this placement shall be within a “publicly accessible area”, as defined in §24-01(b)(3).

(b) Automated external defibrillator(s) shall be located or placed so that this equipment can be obtained in a timely manner. For those buildings operated by the Division of Facilities Management and Construction of the Department of Citywide Administrative Services having publicly accessible areas located more than five (5) floors apart, no such publicly accessible area shall be more than five floors from where an automated external defibrillator is located.

(c) Storage conditions for the automated external defibrillators shall be in compliance with the manufacturer’s specifications.

Section 24-04. Required Notice: Signage Information

(a) The owner or operator of a public place shall provide written notice to all persons using a public place, as that term is defined in §17-188(a)(3) of the Code, in the form of a clear and conspicuous wall sign placed at a height between five and seven feet above the floor and which is also in close proximity to the automated external defibrillator unit storage location.

(b) The sign shall contain the following language in lettering and representation (symbol) in the size indicated:

- “DEFIBRILLATOR” or “AED” (minimum height - two (2) inches)
- Automated External Defibrillator (minimum height – five eighths (5/8) inch)
- Heart and lightening bolt logo (minimum height - two (2) inches)

(c) A second wall sign either similarly placed as the one required in subsection (a) of this section or located on the storage cabinet containing the automated external defibrillator must contain the following information in the size indicated:

- In event of emergency call 911 (minimum height –three eighths (3/8) inch)
- **and**
- Contact this facility’s trained responder(s) at: (Give contact information for trained responder(s) (minimum height – three eighths (3/8) inch)

(d) In addition to the signs required in subsections (a) and (b) of this section, a wall sign containing the information specified in subsection (c) of this section shall be placed in a prominent location on all publicly accessible floors of a public place. Such sign shall also state that more information on CPR/AED training may be obtained by calling 311.

(e) Exception. The wall signs required by subsections (c) and (d) of this section shall not be required in nursing homes.

(f) Signs in conformity with the requirements specified in §24-03 (b) and (c) shall be made available by the Department, at no cost to the owner or operator of a public place required to have an automated external defibrillator. An owner or operator shall use either the sign provided by the Department or its own sign provided that the sign used meets the requirements specified in this section.

(g) All automated external defibrillators shall be stored with clear concise written or pictorial instructions for their use.

Section 24-05 Site-Specific Response Plan

(a) The owner or operator of a public place, as defined in §17-188 of the Code, must have a site response and maintenance plan as part of the written practice protocols included in the collaborative agreement required by §3000-b of New York State Public Health Law. This plan must be made available to the Department upon its request.

(b) The Site-Specific Plan must specify the following:

1. A list of the trained responders, the specific training they received, how they can be contacted, the locations of the trained responders at the site .
2. The provider of the AED/CPR training received by each trained responder, the date that training was received as well as the due dates for training recertification of each trained responder.
3. The specific location(s) of the automated external defibrillator(s) at the public place. The automated external defibrillator(s) shall be in a location(s) accessible to the trained responder(s).

4. The party responsible for verifying that the automated external defibrillator(s) is in operable condition and for ensuring that the equipment is maintained in conformity with the manufacturer's recommendations.
5. The placement and exact location of the signs required by §24-04(a), (b) and (c) along with the information on how to contact the site's trained responder(s).
6. Instructions on how to identify an on-site medical emergency and a listing of procedures to be followed to notify trained responders of the existence of that emergency.
7. Procedures to be followed to notify the emergency medical services system as to the existence of an on-site medical emergency.
8. How the trained responder(s) at a site will be dispatched to the location of the medical emergency.
9. The procedures to be followed by the trained responder(s) at the location upon their response to the location of a medical emergency.
10. Procedures to be followed by trained responders upon their transfer of care of an emergency to the emergency medical services system.
11. Instructions on how to document each use of an automated external defibrillator and immediately report such usage in accordance with Public Health Law §3000-b.

(c) The number of trained responders in each public place shall be commensurate with the size and configuration of the facility to permit rapid response during regular business hours. The number of trained responders in nursing homes required to make on-site automated external defibrillators available pursuant to §17-188(b) of the Code shall be as specified in §24-06.

Section 24-06 Nursing Homes

- (a) Nursing homes not making available advanced life support, as that term is defined in §24-01(b)(8), by a physician, registered nurse or emergency medical technician present on-site twenty-four hours a day, seven days a week or not making available automated external defibrillators to be used by a trained physician, registered nurse or emergency medical technician present on-site twenty-four hours a day, seven days a week, shall provide on-site automated external defibrillators, as required by §17-188(b) of the Code in the number specified in §24-03(a). Such nursing homes must acquire, possess and operate their automated external defibrillators in accordance with the requirements of § 3000-b of the Public Health Law, as specified in § 24-02.
- (b) A minimum of two trained responders, as defined in §24-01(b)(6), shall be present at all times in those nursing homes required to make automated external defibrillators available.

New York State Public Health Law Section § 3000-b.
Automated external defibrillators: Public access providers.

1. Definitions.

As used in this section, unless the context clearly requires otherwise, the following terms shall have the following meanings:

- (a) "Automated external defibrillator" means a medical device, approved by the United States food and drug administration, that: (i) is capable of recognizing the presence or absence, in a patient, of ventricular fibrillation and rapid ventricular tachycardia; (ii) is capable of determining, without intervention by an operator, whether defibrillation should be performed on the patient; (iii) upon determining that defibrillation should be performed, automatically charges and requests delivery of an electrical impulse to the patient's heart; and (iv) then, upon action by an operator, delivers an appropriate electrical impulse to the patient's heart to perform defibrillation.
- (b) "Emergency health care provider" means (i) a physician with knowledge and experience in the delivery of emergency cardiac care; or (ii) a hospital licensed under article twenty-eight of this chapter that provides emergency cardiac care.
- (c) "Public access defibrillation provider" means a person, firm, organization or other entity possessing or operating an automated external defibrillator pursuant to a collaborative agreement under this section.
- (d) "Nationally-recognized organization" means a national organization approved by the department for the purpose of training people in use of an automated external defibrillator.

2. Collaborative agreement.

A person, firm, organization or other entity may purchase, acquire, possess and operate an automated external defibrillator pursuant to a collaborative agreement with an emergency health care provider. The collaborative agreement shall include a written agreement and written practice protocols, and policies and procedures that shall assure compliance with this section. The public access defibrillation provider shall file a copy of the collaborative agreement with the department and with the appropriate regional council prior to operating the automated external defibrillator.

3. Possession and operation of automated external defibrillator.

Possession and operation of an automated external defibrillator by a public access defibrillation provider shall comply with the following:

- a) No person may operate an automated external defibrillator unless the person has successfully completed a training course in the operation of an automated external defibrillator approved by a nationally-recognized organization or the state emergency medical services council. However, this section shall not prohibit operation of an automated external defibrillator, (i) by a health care practitioner licensed or certified under title VIII of the education law or a person certified under this article acting within his or her lawful scope of practice or (ii) by a person acting pursuant to a lawful prescription.
- (b) The public access defibrillation provider shall cause the automated external defibrillator to be maintained and tested according to applicable standards of the manufacturer and any appropriate government agency.
- (c) The public access defibrillation provider shall notify the regional council of the existence, location and type of any automated external defibrillator it possesses.
- (d) Every use of an automated external defibrillator on a patient shall be immediately reported to the appropriate local emergency medical services system, emergency communications center or emergency vehicle dispatch center as appropriate and promptly reported to the emergency health care provider.
- (e) The emergency health care provider shall participate in the regional quality improvement program pursuant to subdivision one of section three thousand four-a of this article.

4. Application of other laws.

- (a) Operation of an automated external defibrillator pursuant to this section shall be considered first aid or emergency treatment for the purpose of any statute relating to liability.
- (b) Operation of an automated external defibrillator pursuant to this section shall not constitute the unlawful practice of a profession under title VIII of the education law.