

CITY OF APPLETON POLICY	TITLE: Automatic External Defibrillator (AED) All City Facilities (except Police & Fire)	
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I. PURPOSE

The purpose of this policy is to provide guidelines for the use of the Automatic External Defibrillators (AED) which are located in City buildings.

II. POLICY

The City of Appleton has placed AEDs in key locations of City buildings where people work or visit. A list of the City's AED locations is attached. The goal is to have AEDs readily available for use by City staff and bystanders should someone experience a Sudden Cardiac Arrest (SCA).

The AEDs are intended for use by City staff, bystanders members of the public, other first responders ~~with active CPR AED certification~~, physicians or authorized emergency medical response personnel.

III. DEFINITIONS

Automatic External Defibrillator (AED) – electronic device used to apply electrical shocks to the heart via paddles or pads placed on the patient's chest.

Electrocardiogram (ECG) – shows a graphic recording of the electrical activity of the heart.

Emergency Medical System (EMS) – the pre-hospital medical system that includes the request for and dispatch of emergency medical response personnel, the field medical treatment of ill/injured patients, and the transport of the ill/injured patients to a hospital for definitive care.

Emergency Medical Responders (EMR) – person trained in emergency medical care (i.e. Police & Fire personnel).

Emergency Medical Technician (EMT) – person specially trained in pre-hospital care of a sick or injured patient.

Medical Director – medical person who oversees the City's AED program. The Medical Director for the City of Appleton is the Medical Director for Gold Cross Ambulance Service.

Sudden Cardiac Arrest (SCA) – sudden cessation of cardiac output and blood circulation.

Ventricular Fibrillation (VF) – a serious disturbance in a cardiac rhythm.

IV. DISCUSSION

Sudden Cardiac Arrest can happen anywhere to people of all ages and at anytime. SCA is usually caused by an electrical malfunction that makes the heart quiver ineffectively in an abnormal rhythm called Ventricular Fibrillation (VF). It sometimes is triggered by a heart attack, but can also happen even without any blockage of blood flow to the heart.

A lifesaving pulse of electricity must be delivered quickly to restore the heart's normal rhythm and pump blood throughout the body. Defibrillation is the only effective treatment for SCA caused by VF.

Research has shown that shortening the time between the onset of VF and defibrillation increases the survival rate of victims.

Cardiac Chain of Survival: A person in cardiac arrest will have the greatest chance of survival if the following steps occur:

- Early recognition and early access – The sooner someone calls 9-1-1, the sooner advanced medical care arrives.
- Early CPR – This helps circulate blood that provides oxygen to vital organs until an AED becomes available.
- Early defibrillation – Each minute that defibrillation is delayed reduces the chance of survival by about 10 percent.
- Early advanced medical care – Trained medical personnel such as EMS personnel and EMTs provide further care and transportation to hospital facilities.

State Statute 895.48 provides immunity “from civil liability for the acts or omissions of a person in rendering in good faith emergency care by use of an automated external defibrillator to an individual who appears to be in cardiac arrest”.

V. PROCEDURES

This procedure provides guidelines for the use of the AEDs located in City buildings on adults or adolescents 12 years or older. If a child is under age 12, provide rescue breathing and/or CPR until emergency personnel arrive.

If you find yourself in an emergency situation, put on your ~~personal protective equipment gloves should be put on~~ and the following emergency steps should be taken:

- Check the scene for safety. ~~If unsafe, d~~Don't move a person unless there is immediate danger.
- Check for consciousness by tapping their chest and/or gently shaking their shoulders and asking if they are ok. If the person does not respond...
- Put the person on his or her back on a firm surface
- Call – If you are the only person at the scene, shout for help. If no one arrives, call 9-1-1. You should always call first if there is an unconscious adult or adolescent 12 years or older. If it is an adolescent under 12 and they are not breathing and/or have no pulse provide rescue breathing and/or CPR for 2 minutes, then go call 9-1-1.
- Check – For signs of life (movement or breathing) in an adult
 1. Airway – open the airway using the head-tilt/chin lift technique. If a neck injury is suspected, pull only the jaw (using the jaw-thrust technique) to open airway.

2. Breathing – Look-for signs of breathing for no more than 10 seconds, watching to see if the chest rises and falls. If there are no signs of breathing you must assume the problem is a cardiac emergency and begin CPR immediately.

- Care – Hands only CPR should be done if no pocket mask is available. Start CPR by giving 30 compressions (in about 15 seconds) by compressing the sternum at least 2 inches deep, then two rescue breaths. CPR SHOULD BE CONTINUED UNTIL AN AED BECOMES AVAILABLE OR MORE ADVANCED MEDICAL PERSONNEL ARRIVES AT THE SCENE.

A. Defibrillation – Prepare to operate the AED when it becomes available

DO NOT use the AED when a patient has any of the following:

- Consciousness
- Normal breathing
- A pulse or other signs of life.

B. Using the AED

1. For safety remember the following:

- DO NOT use near or in puddles of water
- DO NOT use near flammable agents, such as gasoline (remove clothing that may be contaminated with flammable agents).
- ALWAYS stay clear of the person when delivering the AED shock
- DO NOT touch the electrode surfaces, the person or any conductive material near the person during the ECG analysis or shock

2. Turn on the AED.

3. Follow the prompts as directed by the AED Unit.

4. Dry skin if necessary, and shave chest hair **ONLY** if it is so excessive it prevents a good seal between electrodes and the skin. Apply electrodes according to diagram on electrode package to victim's bare chest. Press pads to skin.

5. Stand clear of patient while machine analyzes heart rhythm.

6. If treatment (SHOCK) is indicated, make sure no one is touching the patient (CLEAR) and then press the lighted "Heart" in center of unit.

7. If no ~~treatment-shock~~ is ~~indicated~~ advised, perform CPR and for two minutes with cycles of 30 compressions and, 2 breaths ~~for 2 minutes~~.

8. After two minutes of CPR, unit will re-analyze rhythm. ~~up to four more times~~. If "No Shock Treatment" is indicated ~~after five "No Treatment" messages~~, continue CPR until professional help arrives.

9. When the EMS personnel arrive, follow their instructions.

C. Transferring the patient to the EMS personnel upon arrival

1. Give a brief summary of the event including:

- a. Time of event
- b. Total number of shocks
- c. Any additional pertinent information about the patient.

2. EMS personnel will take over the resuscitation efforts

- a. EMS personnel will have their own equipment and may transfer the patient over to their own monitors or continue the use of the attached AED depending on the step of the process.
- ~~b. If EMS personnel use the defibrillator pads that are attached to the patient, ask if they will provide us with replacement pads.~~
- ~~e.b.~~ EMS personnel will direct ongoing CPR efforts and you may be asked to continue with CPR or to step aside.

D. Report the event

1. After the event, complete the AED Incident Report (Exhibit 1) and forward to Human Resources Department.
2. The Human Resources Department will notify the Medical Director and verify the AED will be available for future use.
- ~~3. Notify a Safety Committee Member to check the AED status and perform indicated maintenance.~~

VI. NOTIFICATION OF USE

Human Resources will notify the City's Medical Director immediately after each AED use.

A. Incident Review

1. The Medical Director should review a detailed download from the AED.
2. A review and report of the incident should be provided to the Human Resources Department.
3. The Medical Director may discuss the incident with the local EMS personnel to obtain feedback.
4. The Medical Director may check with the hospital on the patient and provide feedback to the site.

B. Debriefing

1. If requested by anyone involved in the emergency occurrence, an ~~on-site~~ incident review and debriefing conducted by Police, Fire or Gold Cross should be scheduled as soon as it can be arranged (Exhibit 2).
- ~~2. The debriefing will be coordinated by the City's Risk Manager and will include all employees who would like to review the incident.~~
- ~~3.2.~~ The debriefing is intended to provide support in the following areas:
 - Success rates and expectations during a resuscitation
 - The human dimension of CPR
 - Recognition of successful aspects of the rescue efforts
 - Stress reactions of rescuers, witnesses, and families after resuscitation attempts
 - Identify any areas for improvement

~~4.~~ 3. Equipment Readiness

After each use, the Parks, Recreation and Facilities Management Department should be notified to check the AED batteries ~~should be checked~~ and the equipment ~~should be so it can be~~ restocked and checked for readiness by the ~~Human Resources or Parks, Recreation and Facilities~~ ~~Grounds and Construction~~ Management Department.

VII. TRAINING

A. CPR and AED Certification and Re-Certification

CPR and AED certification and re-certification will be conducted according to the American Heart Association and the American Red Cross Guidelines.

B. CPR and AED Refresher Course

The ~~Police or~~ Fire Departments may direct a CPR and AED refresher course that may be provided periodically for City employees.

VIII. EQUIPMENT MAINTENANCE

The following are suggested steps to maintain the AED:

- A. The Parks, Recreation and Facilities ~~Grounds and Construction~~ Management Department ~~or the designated person for the facility that has an AED~~ will conduct equipment checks on a quarterly basis ~~using the Maintenance form (Exhibit 3) kept in each AED cabinet~~. Batteries and equipment will be replaced as needed.
- B. Replace the AED pads if ~~the gel gets dry or~~ the date on the pads is expired.
- C. Replace CPR supplies after each use of the equipment.

A. Cleaning the Unit

- A. After each use, clean and disinfect the unit with a soft damp cloth using 90% isopropyl alcohol, soap and water or chlorine bleach and water mixture (30ml/liter water).
- B. Do not immerse any part of the unit in water.
- C. Do not use ketones (MEK, acetones, etc.) to clean the unit.
- D. Avoid using abrasives (e.g. paper towel) on the display unit or IrDa port.
- E. Do not sterilize the device.

B. AED Tracking

U.S. Federal Law requires the tracking of defibrillators. The City is responsible to notify its Medical Director immediately if the AED is lost, stolen, or removed in any way from the locations.

Exhibit 1

AED INCIDENT REPORT

Patient & Incident Data	
Patient Name:	Patient Age :
Incident Date:	Incident Time
Incident Location:	

Incident History		
Patient activity prior to incident		
Patient complaints prior to incident		
Was incident witnessed? Yes <input type="checkbox"/> No <input type="checkbox"/>	If Yes, by whom?	What Time?
Was CPR started? Yes <input type="checkbox"/> No <input type="checkbox"/>	If yes, by whom?	What Time?

Assessment and Treatment		
Was patient unresponsive?	Yes <input type="checkbox"/> Time:	No <input type="checkbox"/>
Were the airway, breathing, and circulation checked?	Yes <input type="checkbox"/> Time: No <input type="checkbox"/>	If yes, by whom?
Was rescue breathing started?	Yes <input type="checkbox"/> Time:	
Was CPR Started? Yes <input type="checkbox"/> No <input type="checkbox"/>	Time?	If yes, by whom?
Was Shock Advised? Yes <input type="checkbox"/> No <input type="checkbox"/>	Time	
Was shock #1 delivered? Yes <input type="checkbox"/> No <input type="checkbox"/>	Time?	If yes, by whom?
Was shock #2 delivered? Yes <input type="checkbox"/> No <input type="checkbox"/>	Time?	If yes, by whom?
Was shock #3 delivered? Yes <input type="checkbox"/> No <input type="checkbox"/>	Time?	If yes by whom?
Did the person's heart re-start?	Yes <input type="checkbox"/> Time:	No <input type="checkbox"/>
Did the person regain consciousness?	Yes <input type="checkbox"/> Time:	No <input type="checkbox"/>
Return of Pulse:	Yes <input type="checkbox"/> Time:	No <input type="checkbox"/>
Return of Respiration:	Yes <input type="checkbox"/> Time:	No <input type="checkbox"/>
EMS arrival at patient?	Yes <input type="checkbox"/> Time:	No <input type="checkbox"/>
Was the patient transferred to EMS?	Yes <input type="checkbox"/> Time:	No <input type="checkbox"/>
Patient condition at EMS hand-off:		
Care given by rescue personnel:		
Time Patient transported:		
Patient transported to: (hospital)		

COMMENTS:

Report Completed by: _____ Date: _____

AED
POST INCIDENT CRITIQUE FORM

COMMENTS:

| Reported ~~ed~~ Completed by: _____ Date: _____

Medical Director Signature: _____ Date: _____

Police, Fire or Gold Cross Signature: _____ Date: _____

AED MAINTENANCE CHECKLIST

AED Model Number	AED Serial Number					
AED Location						
DATE:						
AED is clean; no dirt or signs of damage. Turn the unit on and off to verify the check indicator on handle shows "green".						
Cable is connected & free of cracks. No wires exposed or broken.						
Batteries are within expiration date. Replace if expired.						
Defibrillation pads are sealed; replace if gel dries out or pads are expired.						
Check Supplies: <ul style="list-style-type: none"> • Defibrillation pads • Razor • 2 pairs of latex free gloves • Facemask or barrier device • Paper Towel • Spare batteries (optional) 	_____	_____	_____	_____	_____	_____
Inspected by: (Signature)	<u>Comments:</u> 					
Inspected by: (Signature)	<u>Comments:</u> 					
Inspected by: (Signature)	<u>Comments:</u> 					
Inspected by: (Signature)	<u>Comments:</u> 					
Inspected by: (Signature)	<u>Comments:</u> 					

**City of Appleton
AED Inventory**

Building	Location	Manufacture	Number	Monthly Inspections Responsibility	Maintenance and Software Updates Responsibility
City Hall	6th Floor Lobby	Zoll	X04L046541	Facilities	Adam Paiser (AFD)
	5th Floor Hallway	Zoll	X04J045902	Facilities	Adam Paiser (AFD)
	1st Floor Lobby	Zoll	X06H093080	Facilities	Adam Paiser (AFD)
Facilities & Grounds Operations Center	Office Lobby	Zoll	X08H168049	Facilities	Adam Paiser (AFD)
Library	1st Floor	Zoll	X04E033372	Facilities	Adam Paiser (AFD)
MSB	Hallway by Office	Zoll	X08H168091	Facilities	Adam Paiser (AFD)
Police Station	1st Floor Lobby	Phillips	B07H-01403	Facilities	Adam Paiser (AFD)
Transit Center	1st Floor Lobby	Phillips	B07L-01040	Facilities	Adam Paiser (AFD)
Wastewater Plant	Hallway between A & S Building	Zoll	X08H168063	Facilities	Adam Paiser (AFD)
Water Treatment Plant	1st Floor Lobby	Zoll	X09L434424	Facilities	Adam Paiser (AFD)
Jones Building in Memorial Park	Memorial Park Complex	Zoll	X12H562454	Facilities	Adam Paiser (AFD)
Mead Pool				Dennis Weyenberg	Dennis Weyenberg
Appleton Police	Mobile in squads	Zoll	X07H124702	Ryan Neff	Ryan Neff/Gold Cross
		Zoll	X07H124898	Dennis Weyenberg Ryan Neff	Dennis Weyenberg Ryan Neff/Gold Cross
		Zoll	X07H125110	Dennis Weyenberg Ryan Neff	Dennis Weyenberg Ryan Neff/Gold Cross
		Zoll	X07H124859	Dennis Weyenberg Ryan Neff	Dennis Weyenberg Ryan Neff/Gold Cross
		Zoll	X07H125113	Dennis Weyenberg Ryan Neff	Dennis Weyenberg Ryan Neff/Gold Cross
		Zoll	X07H125115	Dennis Weyenberg	Dennis Weyenberg Ryan

				<u>Ryan Neff</u>	<u>Neff</u> /Gold Cross
Appleton Police	Command Post	Philips Heart Start	B06L-00094	Dennis Weyenberg <u>Ryan Neff</u>	Dennis Weyenberg <u>Neff</u> /Gold Cross

City of Appleton AED Inventory

Building	Owner	Address	Location	Unit	Number	Software Updates Responsibility
CH	CoA	100 N. Appleton St	6th Floor Lobby	Zoll AED Plus	X04L046541	Adam Paiser (AFD)
CH	CoA	100 N. Appleton St	5th Floor Hallway	Zoll AED Plus	X04J045902	Adam Paiser (AFD)
CH	CoA	100 N. Appleton St	1st Floor Lobby	Zoll AED Plus	X06H093080	Adam Paiser (AFD)
PRFMD	CoA	1819 E. Witzke Blvd.	Office Lobby	Zoll AED Plus	X08H168049	Adam Paiser (AFD)
PRFMD	CoA	1819 E. Witzke Blvd.	Nate Baldwin's Office	Phillips	B16C-00057	Adam Paiser (AFD)
LIB	Gold Cross HeartStart Fund	225 N. Oneida St.	1st Floor on cement pillar main entry	Zoll AED Plus	X04E033372	Adam Paiser (AFD)
MSB	CoA	2625 E. Glendale Ave.	Hallway by Office	Zoll AED Plus	X08H168091	Adam Paiser (AFD)
PD	Gold Cross HeartStart Fund	222 S. Walnut St.	1st Floor Lobby	Phillips	B07H-01403	Adam Paiser (AFD)
TC	Gold Cross HeartStart Fund	100. E. Washington St.	1st Floor Lobby	Phillips	B07L-01040	Adam Paiser (AFD)
WW	CoA	2006 E. Newberry St.	Hallway between A & S Building	Zoll AED Plus	X08H168063	Adam Paiser (AFD)
WT	CoA	2281 Manitowoc Rd.	1st Floor Lobby	Zoll AED Plus	X09L434424	Adam Paiser (AFD)
AMP	CoA	1620 E. Witzke Blvd	Jones Bldg Main Entrance Lobby	Zoll AED Plus	X12H562454	Adam Paiser (AFD)
Mead Pool	CoA	1430 E. John St.	Mead Pool Managers office	Zoll AED Plus	X06G090475	Adam Paiser (AFD)
Erb Pool	CoA	1800 N. Morrison St.	Erb Pool Managers office	Zoll AED Plus	X07A103774	Adam Paiser (AFD)
Golf Course	CoA	1100 E. Fremont St.	Clubhouse	Zoll AED Plus	X16I864047	Adam Paiser (AFD)

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Building	Location	Manufacturer	Number	Monthly Inspections Responsibility	Maintenance and Software Updates Responsibility
City Hall	6th Floor Lobby	Zoll AED Plus	X04L046541	Facilities	Adam Paiser (AFD)
City Hall	5th Floor Hallway	Zoll AED Plus	X04J045902	Facilities	Adam Paiser (AFD)
City Hall	1st Floor Lobby	Zoll AED Plus	X06H093080	Facilities	Adam Paiser (AFD)
PRFMD	Office Lobby	Zoll AED Plus	X08H168049	Facilities	Adam Paiser (AFD)
PRFMD	Nate Baldwin's Office	Philips	B16C-00057	Facilities	Adam Paiser (AFD)
Library	1st Floor on cement pillar main entry	Zoll AED Plus	X04E033372	Facilities	Adam Paiser (AFD)
Municipal Services Building	Hallway by Office	Zoll AED Plus	X08H168091	Facilities	Adam Paiser (AFD)
Transit Center	1st Floor Lobby	Philips	B07L-01040	Facilities	Adam Paiser (AFD)
Waste Water Plant	Hallway between A & S Building	Zoll AED Plus	X08H168063	Facilities	Adam Paiser (AFD)
Water Treatment Plant	1st Floor Lobby	Zoll AED Plus	X09L434424	Facilities	Adam Paiser (AFD)
Appleton Memorial Park	Jones Bldg Main Entrance Lobby	Zoll AED Plus	X12H562454	Facilities	Adam Paiser (AFD)
Mead Pool	Mead Pool Managers office	Zoll AED Plus	X06G090475	Facilities	Adam Paiser (AFD)
Erb Pool	Erb Pool Managers office	Zoll AED Plus	X07A103774	Facilities	Adam Paiser (AFD)
Golf Course	Clubhouse	Zoll AED Plus	X16I864047	Facilities	Adam Paiser (AFD)
Appleton Police Dept.	1st Floor Lobby	Philips	B07H-01403	Ryan Neff	Ryan Neff/Gold Cross
Appleton Police Department	Mobile in Squads	Zoll	X07H124702	Ryan Neff	Ryan Neff/Gold Cross
		Zoll	X07H124898	Ryan Neff	Ryan Neff/Gold Cross
		Zoll	X07H125110	Ryan Neff	Ryan Neff/Gold Cross
		Zoll	X07H124859	Ryan Neff	Ryan Neff/Gold Cross
		Zoll	X07H125113	Ryan Neff	Ryan Neff/Gold Cross
		Zoll	X07H125115	Ryan Neff	Ryan Neff/Gold Cross