**AED Safety**

In some situations, such as when you are around water or the patient is on a metal surface, you may question whether or not it is safe to use an AED. The answer is yes. AEDs are very safe and built for almost any environment.

As long as the ill or injured patient is not actually in water, you can use an AED near water and in light rain or snow. Light rain, mist or snow does not generally pose a concern for AED operation. However, take steps to make sure that the patient is as dry as possible, is sheltered from the rain, is not lying in a pool or puddle of water and his or her chest is completely dry before attaching the pads. Also make sure that you and other responders are not in contact with water when operating the AED. Moreover, avoid getting the AED or AED pads wet if possible. Do not delay defibrillation when taking steps to create a dry environment. The same is true for metal surfaces. Just make sure that the pads are not touching the metal surface.

It is also safe to use AEDs on patients who have pacemakers, other implantable cardioverter defibrillators or metal body piercings. To maintain safety, avoid placing the AED pads directly over these items. Position the pads so that they are at least an inch away, just to be safe.

Some patients may be wearing a medication patch. Medication patches on the chest can create a hazard or interfere with analysis and defibrillation when AED pads are applied on top of them. If this is the case, act swiftly and remove the patch with a gloved hand and wipe away any of the remaining medication from the skin. Then, make sure the chest is dry and apply the pads.

For an AED to work properly, it is important that the pads are attached securely to the patient's chest. However, some patients have excessive chest hair that may cause problems with AED pad-to-skin contact. If the chest hair is excessive (typically on the right upper chest), quickly shave the right upper chest area before applying the AED pads. See Do's and Don’ts for AED Use for more information.

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**Do's and Don’ts for AED Use**

*Follow these general precautions when using an AED.*

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<th><strong>DO’S</strong></th>
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<td>• Before shocking a patient with an AED, do make sure that no one is touching or in contact with the patient or any resuscitation equipment.</td>
<td>• Do not use alcohol to wipe the patient's chest dry. Alcohol is flammable.</td>
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<td>• Do use an AED if a patient is experiencing cardiac arrest as a result of traumatic injuries. Follow local protocols or practice.</td>
<td>• Do not touch the patient while the AED is analyzing. Touching or moving the patient may affect analysis.</td>
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<td>• Do use an AED for a patient who is pregnant. Defibrillation shocks transfer no significant electrical current to the fetus. The mother's survival is paramount to the infant's survival. Follow local protocols and medical direction.</td>
<td>• Do not touch the patient while the device is defibrillating. You or someone else could be shocked.</td>
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For AEDs to perform properly and safely, they must be maintained as with any medical device. AEDs require minimal maintenance, but responders should be familiar with the various visual and audible prompts to warn of malfunctions or a low battery. To maintain the AED:

• Know the manufacturer’s recommendations for maintenance, because many manufacturers require that they be contacted for service.
• Periodically check equipment.
• Have a fully charged backup battery, when available, that is properly sealed and unexpired, and also have correct AED pads available.
• Replace all used accessories, such as pads.