

Out-of-Hospital Cardiac Arrest

Bureau of Mine Safety
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Pennsylvania
Department of
Environmental Protection

CPR Facts & Statistics

- According to the American Red Cross, each year EMS cares for more than 350,000 individuals in the United States experiencing a non-traumatic out-of-hospital cardiac arrest (OHCA). Approximately 90% of persons who experience an OHCA die.
- For the past 20 years, the survival rate for cardiac arrest has hovered around 10% for out-of-hospital incidences. Yet research shows that high-quality CPR has a significant impact on survival outcomes.
- Survival chances decrease by 10% for every minute that immediate CPR and use of an AED is delayed.

CPR Facts & Statistics

- Immediate CPR can triple the chance of survival.
- 41.2% of patients received bystander CPR.
- 26.1% of patients survived hospital admission.
- 11.7% of patients who suffer a cardiac arrest in public had bystander applied AED.
- 10.2% of patients survived to hospital discharge.
- 79.6% of discharged patients had a positive neurological outcome.

Time to ALS (Advanced Life Support)

- What is the travel time to the surface of your mine?
- How long can someone perform high quality chest compressions?
- Brain damage is likely to occur if cardiac arrest lasts longer than five minutes without CPR, and death is likely after eight minutes without CPR.

5 Links in the Chain of Survival

1. **Early recognition and activation of the emergency response system:**
Recognizing signs of cardiac arrest and promptly calling for help is crucial. This ensures timely access to professional medical assistance.
2. **Early CPR:** Starting chest compressions and breaths (or chest compressions alone) can help maintain blood flow to the brain and vital organs until advanced medical care arrives.
3. **Rapid Defibrillation:** If an AED is available, using it to deliver an electrical shock can help restore a normal heart rhythm.

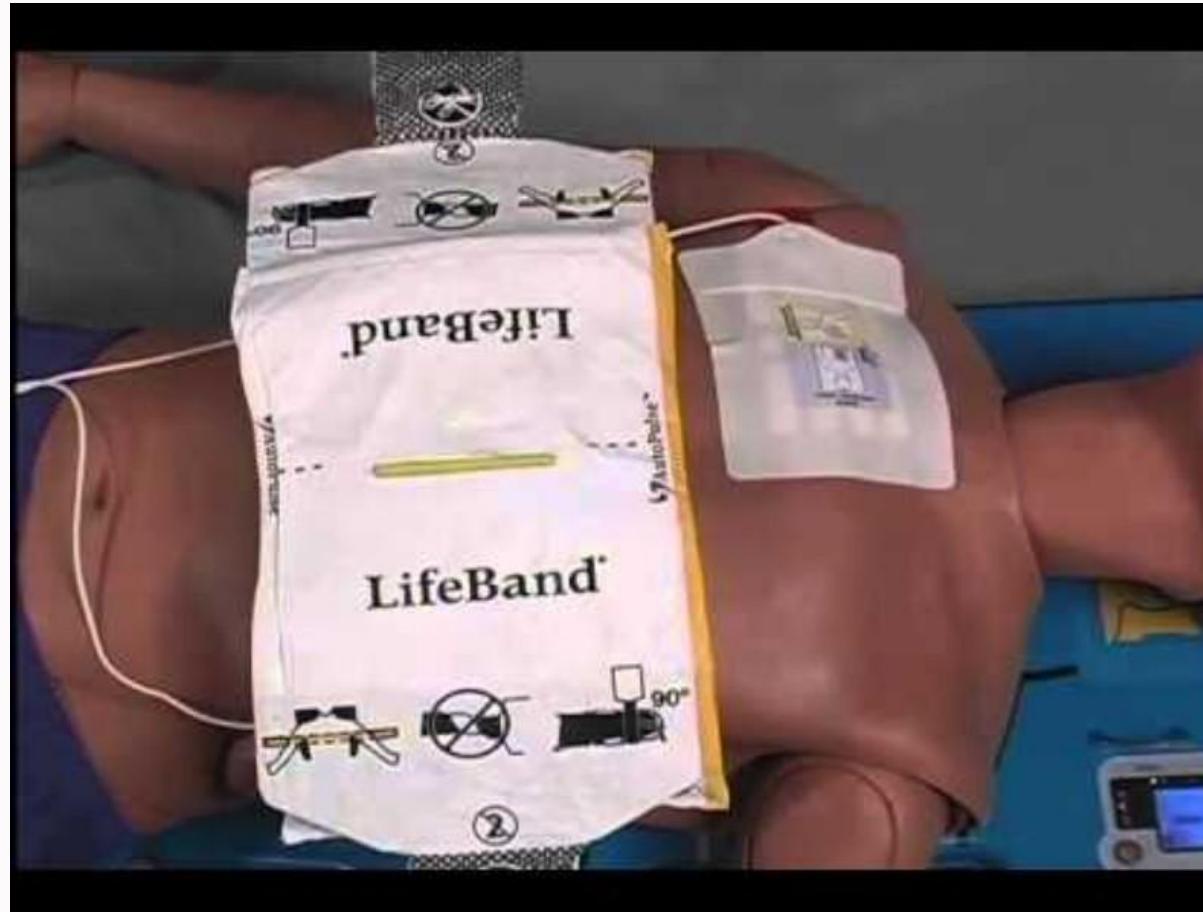
5 Links in the Chain of Survival

4. **Effective Advanced Life Support:** Once emergency medical services arrive, they provide advanced interventions like medication, airway management, and monitoring to stabilize the patient.
5. **Integrated Post-Cardiac Arrest Care:** This involves continuing care for neurological and other complications after the patient has been successfully resuscitated. This includes ongoing monitoring, treatment, and rehabilitation.

Current Models Available

- Lucas 3 Mechanical CPR Device
- Zoll Autopulse

Zoll Autopulse





QUESTIONS?



Get In Touch

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The Department of Environmental Protection's mission is to protect Pennsylvania's air, land and water resources and to provide for the health and safety of its residents and visitors, consistent with the rights and duties established under the Environmental Rights Amendment (Article 1, Section 27 of the Pennsylvania Constitution).