

# Out-of-Hospital Cardiac Arrest

Bureau of Mine Safety  
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# 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.



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# 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

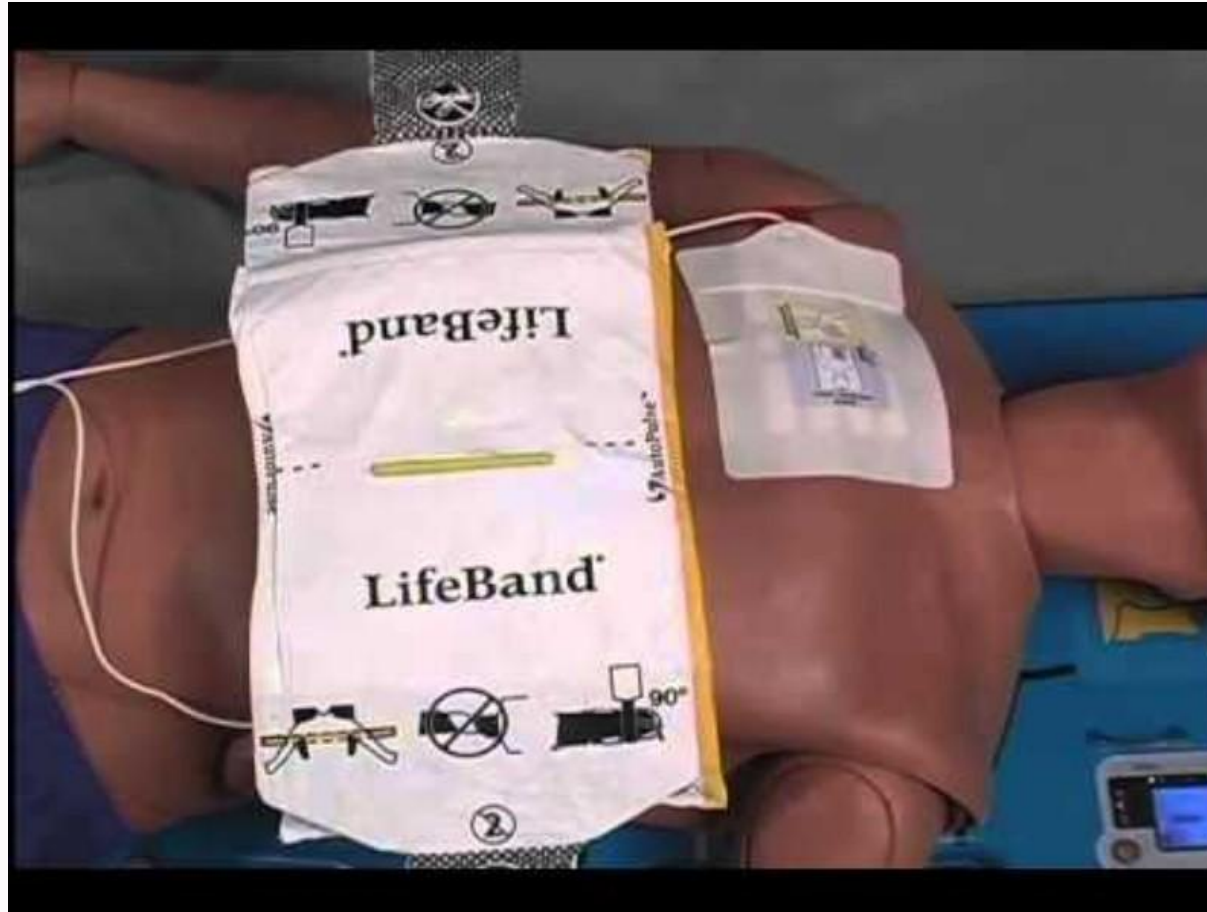
- Lucas 3 Mechanical CPR Device
- Zoll Autopulse





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# Zoll AutoPulse







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QUESTIONS?



# Get In Touch

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