

2024 Focused Update on Resuscitation Following Drowning: Implications for Training Heartsaver®, BLS, and PALS Providers



CPR & Emergency Cardiovascular Care

The “2024 American Heart Association and American Academy of Pediatrics Focused Update on Special Circumstances: Resuscitation Following Drowning: An Update to the American Heart Association Guidelines for Cardiopulmonary Resuscitation and Emergency Cardiovascular Care” contains updated and new recommendations. These recommendations are listed below and can be reviewed in the full 2024 focused update to the recommendations for resuscitation following drowning at the [American Heart Association's flagship journal, *Circulation*](#), and the *Highlights of the 2024 American Heart Association and American Academy of Pediatrics Focused Update on Special Circumstances: Resuscitation Following Drowning: An Update to the American Heart Association Guidelines for Cardiopulmonary Resuscitation and Emergency Cardiovascular Care* on [this web page](#).

- **Updated:** It may be reasonable for appropriately trained rescuers to provide in-water rescue breathing to an unresponsive person who has drowned if it does not compromise their own safety.
- **New:** Trained rescuers should provide supplemental oxygen if available to persons with cardiac arrest following drowning.
- **New:** In cardiac arrest following drowning, CPR with rescue breaths should be started before AED application.
- **New:** AED use is reasonable in cardiac arrest following drowning.
- **New:** The initiation of CPR should not be delayed to obtain or apply an AED in cardiac arrest following drowning.
- **Updated:** In cardiac arrest following drowning and after removal from the water, CPR with rescue breaths and chest compressions should be provided to all persons.
- **New:** In cardiac arrest following drowning, if the rescuer is unwilling, untrained, or unable to provide rescue breaths, it is reasonable to provide chest compressions only, until help arrives.
- **New:** In cardiac arrest following drowning, it may be reasonable for trained rescuers to initiate CPR with rescue breaths followed by chest compressions.
- **New:** Implementation of PAD [public access defibrillation] programs is reasonable in areas where there is a high risk of cardiac arrest, including aquatic environments (eg, areas with high population density, frequent utilization, other forms of exercise, long distances or response times to nearest AED).
- **New:** It is reasonable for trained rescuers to provide rescue breaths by the first means available (mouth-to-mouth, pocket mask, or bag-mask ventilation) for persons in cardiac arrest following drowning to avoid any delay in ventilation.

- **New:** Provision of rescue breathing using equipment (bag-mask or advanced airways) should be optimized by providing rescuers a competency-based training program with regular retraining and maintenance of equipment.
- An important concept highlighted in this focused update is the **Drowning Chain of Survival** (originally published in *Resuscitation*; reproduced with permission from Elsevier). When put into action by trained rescuers or untrained lay rescuers, the actions within the links may reduce mortality associated with drowning. The links are
 - Prevent drowning; be safe in and around water
 - Recognize distress; ask someone to call for help
 - Provide flotation to prevent submersion
 - Remove from water only if safe to do so
 - Provide care as needed; seek medical attention

These recommendations may be relevant to

- *Heartsaver Pediatric First Aid CPR AED Instructor Manual*; Part 5: Heartsaver Pediatric First Aid CPR AED Lesson Plans, Instructor-Led Course; Pediatric First Aid Lesson Plans; Lesson 6: Injury and Environmental Emergencies
- *Heartsaver First Aid CPR AED Instructor Manual*; Part 5: Heartsaver First Aid CPR AED Lesson Plans, Instructor-Led Course; Adult CPR AED Lesson Plans; Lesson 8: Water Safety
- *Basic Life Support (BLS) Provider Manual*; Part 10: Other Life-Threatening Emergencies; Drowning
- *Pediatric Advanced Life Support (PALS) Provider Manual*; Part 5: Recognizing and Managing Cardiac Arrest; Managing Cardiac Arrest; Pediatric Cardiac Arrest Algorithm; Pediatric Cardiac Arrest: Special Circumstances

Heartsaver Instructors may explain the above principles and answer questions after completing the relevant lessons. BLS and PALS Instructors may discuss the above guidelines if treatment of drowning is discussed during the course.

No modifications to the course or course materials are required at this time. The American Heart Association is reviewing how these recommendations will be incorporated into future American Heart Association products and training.