

Inwater Resuscitation Guidelines

By Lesley Alexander, Ph.D.

Question:

When a nonbreathing diver is found in the water, the rescuer is confronted with a difficult choice. Should the rescuer attempt resuscitation procedures in the water or should the rescuer bring the victim to shore first, and then attempt resuscitation?

Inwater Resuscitation Guidelines

These guidelines serve as a guiding template to provide inwater resuscitation to a nonbreathing victim found in the water.

1. Ensure the safety of rescuer.

[The rescuer should first verify the safety of the scene. You cannot help another if you also become a victim.]

2. Ensure the safety of the rescuer and victim.

[If the rescuer is to successfully assist the victim, the rescuer must maintain a reasonable degree of safety. If the rescuer cannot safely provide ventilation at the location where the victim is found, then the rescuer should immediately move to a position of safety. This may be elsewhere in the water (such as further offshore), on-shore, into a rescue boat, etc.]

3. Ensure buoyancy of rescuer and victim.

4. Assess responsiveness and check for breathing.

5. If you determine the diver is not breathing, give two rescue breaths.

[It can be difficult to determine whether an unconscious victim is breathing spontaneously while the rescuer and victim are still in the water. If the rescuer ventilates a breathing victim, it is very unlikely to have a negative impact. On the other hand, ventilating a victim who is not breathing may revive the victim, or at least maintain circulation.]

6. If ventilation is restored, proceed toward shore intermittently stopping to check that the victim is still breathing.

[The rescuer should always keep the victim under observation during the rescue, even if the victim is breathing spontaneously, since during the first 5 to 10 minutes the victim could again cease breathing.]

7. If you have determined the diver is not breathing and you can get the victim to immediate assistance (i.e., the boat or shore) do so while giving 1 rescue breath every 5 seconds.

[If respiratory arrest has occurred or spontaneous respirations are inadequate, the establishment of an open airway and rescue breathing can be life saving. When primary respiratory arrest occurs, the heart and lungs can continue to oxygenate the blood for several minutes, and oxygen will continue to circulate to the brain and other vital organs. Respiratory arrest is followed by cardiac arrest at a variable but short time interval determined by physical condition of the victim, water temperature, previous hypoxia, emotional state, and associated disease.]

8. Evaluate circumstances (your ability, opportunities for assistance, environmental conditions) while giving 1 rescue breath every 5 seconds and proceed depending upon conditions.

- A. If it appears you are less than five minutes from safety, tow the diver to safety while continuing to provide rescue breaths. Get the diver out of the water, continue rescue breaths and perform a circulation check. Begin CPR if necessary.

[Attempting in-water resuscitation immediately decreases the possibility of cardiac arrest. The higher death rate resulting from cardiac arrest (33%-93%) versus respiratory arrest alone (0 to 44%) justifies the risk of attempting in-water resuscitation immediately. In the majority of cases, breathing is usually restored by "mouth-to-mouth" ventilation in the first minute. Initiating artificial ventilation while still in the water in cases of isolated respiratory arrest may improve chances of survival of the nonbreathing victim by more than 50%.]

- B. If it appears you are more than 5 minutes from safety, continue to ventilate while checking for movement or other reaction to ventilations. If present, continue providing rescue breaths while towing to safety.
- C. If movement or reaction to ventilations is absent, the diver is probably in cardiac arrest. Discontinue rescue breaths and tow the victim to safety as quickly as possible, exit the water, perform a circulation check and begin CPR and resume rescue breathing as you learned in your CPR training.

[If the victim is in cardiac arrest, there's no blood circulation and rescue breathing provides no benefit. The emphasis is then more appropriately placed on getting the victim out of the water as quickly as possible to begin CPR. Further attempts at in water rescue breathing only delay getting the victim out of the water CPR, so rescue breathes are discontinued in favor of speed.]

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