



## Why Drownings Occur

Millions of people safely enjoy water sports year-round. Water and people can mix well. But water also can be hostile. Every year there are many cases of drowning and near drowning in the United States.

What goes wrong? What precautions can prevent tragedy? How often, and under what circumstances, are lifesaving skills likely to be needed? The following facts are useful in answering these questions.

- Drowning follows car accidents as the second leading cause of accidental death for Scout-aged youth.
- Roughly three-fourths of all drowning victims are males.
- Drownings occur more often in warm-weather months.
- In some warm-weather states, deaths from drowning for 1- to 4-year-olds match those from car accidents.
- Most drownings of those under age 4 happen in residential pools.
- In pools where lifeguards are on duty, relatively few drownings occur.
- Headfirst entry into the water is a major cause of spinal injuries.
- Many victims did not intend to enter the water. Drowning can result from falls, boating accidents, and cars going into the water.
- Floods are second only to fires as the most common natural disasters. Drowning is the main cause of flood-related deaths.
- Boating activities account for roughly one-fourth of all drownings.
- Most boating fatalities occur in small, open motorboats on inland waters due to capsizing or to passengers failing overboard.
- Personal flotation devices (PFDs) are not worn in more than 80 percent of fatal boating accidents.
- Alcohol is estimated to be a factor in more than half of all swimming and boating fatalities.
- Cardiovascular disease is the No. 1 cause of death in the United States. More than a million people suffer heart attacks each year. A person who has a heart attack or stroke in or on the water has a smaller chance of surviving.



So why do people drown? How do the circumstances affect rescues, and how could the drownings have been prevented? Here are some answers.

- **Inadequate supervision.** A toddler left alone near a pool is an example of inadequate supervision. Allowing groups to take part in unsafe activities is another. Qualified supervision and discipline provide protection. A potential lifesaver who notices an unsafe situation should try to prevent the need for a rescue.
- **Poor swimming skills.** Many people who drown lack the skill to swim only a few feet to safety, which means that rescues can often be made from shore or over short distances. Small children are often poor swimmers, and many victims that Scouts rescue are young. Knowing how to swim is the best protection against drowning.
- **Unsafe areas.** Extra precautions are needed when poor swimmers take part in water sports. For example, a sudden drop-off is unsafe for a nonswimmer. **Other** unsafe situations for swimming and boating include swift water, submerged obstacles, ocean rip currents, high waves, and cold water. The rescuer needs to identify hazards that will jeopardize a rescue attempt and plan accordingly.
- **Unsafe activities or poor judgment.** Often, the skill of those taking part determines how safe an area or activity is. People who participate in an unsafe activity show that they lack knowledge or judgment. Examples include overestimating swimming or boating skill, failing to wear a PFD, diving into shallow water, using alcohol or other drugs, and driving a vehicle into a flooded roadway. Education one key to prevention; enforcing safety rules is another. Once again, the rescuer needs to evaluate the situation before taking action.
- **Medical complications.** People can drown when they suffer strokes, heart attacks, diabetic reactions, or seizures in the water. Such conditions can disable an otherwise good swimmer. The rescuer will need to make physical contact if the victim loses consciousness, and speed may become critical. Prevention relies on medical screening. People with known medical conditions should check with their physicians before participating in active water sports. Supervisors must know when medical or physical conditions may affect safety in the water.

You might notice how closely these items match points of the Safe Swim Defense plan you learned for Second Class rank. **Qualified supervision** and **discipline** guard against unsafe activities. **Physical fitness** and **safe area** address medical complications and unsafe areas, and **ability groups** put bathers together by swimming ability. The remaining points, **lifeguards on duty**, **lookout**, and **buddy system**, provide eyes and ears on the alert for trouble. If trouble does arise, then someone is available to give safe and effective assistance.

From your work on Second and First Class advancement, you have already learned basic water-rescue skills needed for a safe troop swim. The Lifesaving merit badge will add to your skill and knowledge of water rescue. Those skills should

allow you to handle a wide range of emergencies, and aid you in protecting a troop or family swim. However, earning the Lifesaving merit badge does not qualify you to be a lifeguard for summer camp or a public pool. After you earn the Lifesaving merit badge, you may wish to pursue BSA Lifeguard training.



## BSA Safe Swim Defense

All swimming activity in Scouting is conducted according to BSA Safe Swim Defense standards. Your adult leaders must be trained in Safe Swim Defense before your troop goes swimming. You should help your unit leaders conduct safe aquatics programs by assuring that *all* swimming activity conforms to these proven safety rules. As a lifesaver, you should consider accident prevention as important as rescue skills. A complete statement of *Safe Swim Defense* standards can be found in the *Swimming* merit badge pamphlet.

1. **Qualified supervision.** A mature and conscientious adult 21 years of age or older who understands and knowingly accepts responsibility for the well-being of the youth in his or her care must supervise all swimming activity. This person must be experienced in the water and confident of being able to respond in the event of an emergency.
2. **Physical fitness.** Evidence of fitness for swimming activity is required in the form of a complete health history from a physician, parent, or legal guardian. The adult supervisor should adjust all supervision, discipline, and protection to anticipate any potential risks associated with individual health conditions.
3. **Safe area.** Scouts never swim in an area that has not been carefully inspected and prepared for safe swimming. Depth, bottom and perimeter hazards, water quality and clarity, access control, other use or traffic, and temperature are all important safety factors.
4. **Lifeguards on duty.** Swim only where trained and specially equipped lifeguards are on duty.
5. **Lookout.** Station a lookout on the shore where it is possible to see and hear everything in all areas. The lookout may be the adult in charge of the swim and may give the buddy signals.
6. **Ability groups.** Each participant's swimming ability must be evaluated, and participants are limited to the swimming area and activities that suit their abilities. The classification tests (nonswimmer, beginner, swimmer) should be renewed annually, preferably at the beginning of the season.

**7. Buddy system.** Scouts never swim alone. Each Scout must stay close to a buddy so that each knows where the other is and what he is doing. The supervisor always knows the number of buddies in the water and checks everyone (conducts a **buddy check**) in the water about every 10 minutes.

**8. Discipline.** Scouts know and respect the rules of Safe Swim Defense, and always follow directions from their lifeguards and adult supervisor.

## Line Tender Rescue

You should remember the line tender rescue from your First Class requirements. It is specified in Safe Swim Defense as the procedure to be used on unit outings at pools or in remote swim areas where no lifeguards are provided. One rescuer carries a rope or line to the victim, and a second rescuer on shore pulls both the victim and the line carrier to safety. This procedure is a type of reaching rescue because the line carrier never loses contact with the shore. In this sense, it is similar to the in-the-water extension or the human chain illustrated in the *Boy Scout Handbook*.

The only critical skill for the line carrier is the ability to swim quickly to the victim. (Safe Swim Defense specifies that the Scouts on the line tender rescue team be "capable swimmers.") Any secure grab or hold between the line carrier and the victim is more than adequate because the line tender on shore makes the rescue by pulling in both the line carrier and the victim. Note that this procedure is specified for use in a safe swim area set up and supervised according to the eight points of Safe Swim Defense.

The line tender rescue lets Scouts swim safely on outings with their units even if special equipment such as ring buoys and PFDs cannot reasonably be packed and carried. The single piece of line for a line tender rescue can be carried easily in a backpack (100 feet of  $\frac{1}{2}$ -inch nylon line is recommended). Also, the skills needed for this procedure are simple and can be taught easily to capable swimmers by the Safe Swim Defense certified supervisor.

Of course, if other equipment or opportunity is at hand for an even simpler rescue, such as a pole reach or arm extension, then do the simpler and safer procedure.

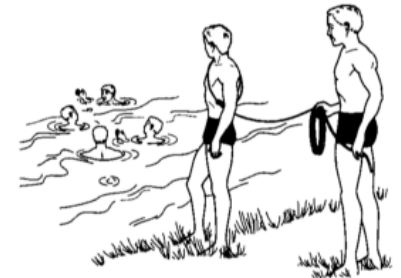
To prepare for the line tender rescue, a bowline loop is tied in one end of the rescue line and placed over one shoulder and under the opposite arm of the line carrier. The loop should be snug enough to ensure that it will not come off while the line carrier is swimming or being pulled in. The team should be stationed next to the beginner and swimmer areas so all deep water used for swimming is within easy reach (approximately 50 feet) -

When a swimmer needs help, the line carrier makes an appropriate entry and swims quickly to the victim. The line carrier may swim past the victim and bring the line to the victim's side so that they can both hang on and be pulled in. Or the line carrier can grab the victim (or be grabbed by the victim) and both get dragged to the dock or shore in whatever tangle results. If the victim is unconscious, the

rescuer should try to keep the victim's head above water as they are pulled in. (In the sections that follow, you will learn ways to avoid tangles and to support unconscious victims.)

The rescuer tending the line is first responsible for feeding out the line to prevent tangling as the line carrier delivers the line to the victim. The line should be ready in a neat, loose coil or in a throw bag. The line tender then pulls in his partner and the victim hand-over-hand, grasping the rope with thumbs toward himself to bend the rope and prevent its slipping through his grasp. The line tender must be well-braced on the shore or dock and must have strength and weight enough to pull in his partner and the victim. A strong, rapid pull will *plane* the line carrier and victim to the surface; that is, it will make them skim across the surface of the water.

This procedure should be practiced until both team members are capable and confident in their roles. All troop members should understand the procedure and know to "clear the way" when the team is responding. This need for practice and understanding is one important reason the line tender rescue is a First Class requirement.



Line tender rescue