



# **BSA Snorkeling Safety**

**BOY SCOUTS  OF AMERICA®**

# BSA Snorkeling Safety

**Snorkeling Safety is the recommended procedure for conducting BSA swimming activities using masks, fins, and snorkels. Since snorkeling is a swimming activity, Safe Swim Defense guidelines are applicable. Snorkeling Safety clarifies and extends Safe Swim Defense concepts to situations encountered during training and open water snorkeling.**



## 1. Qualified Supervision

All swimming activity, including snorkeling, must be supervised by a mature and conscientious adult age 21 or older who understands and knowingly accepts responsibility for the well-being and safety of the youth members in his or her care; who is experienced in the water and is confident of his or her ability to respond in the event of an emergency; and who is trained in and committed to compliance with the eight points of BSA Safe Swim Defense.

An experienced snorkeler must supervise snorkeling instruction and open water snorkeling activities. At a minimum, the supervisor must possess skills and knowledge matching the Snorkeling, BSA award, and have experience with environments similar to those of the planned activity. The supervisor is responsible for compliance with each point of BSA Snorkeling Safety.

Unit leaders may rely on the expertise of other adults to supplement their knowledge and training. They may delegate the task of supervision, for example, when the unit is participating in a snorkeling activity conducted by a tour operator; provided they are satisfied that the operator's training and experience will provide a safe activity with appropriate safeguards.

## 2. Physical Fitness

All persons must present evidence of fitness for snorkeling activity with a complete health history from 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. Recent sinus or ear infections may temporarily preclude surface dives while snorkeling. Those with known adverse reactions to stings from marine life, or with chronic conditions such as diabetes or asthma, may need special medications at hand. Adults with known risk factors for cardiovascular disease should not undertake strenuous activities without the advice of their physician. In the event of any significant health conditions, a medical evaluation by a physician should be required by the adult leader. Those with chronic disease or physical disabilities may still be able to enjoy and benefit from aquatics if the conditions are known and necessary precautions are taken.



**By the way, the snorkeling photographs in this brochure were taken at the BSA's Florida National High Adventure Sea Base by Philip E. Davis.--The Sea Base offers spectacular snorkeling and other aquatic activities.**

# 3. Safe Area

Training in the use of snorkeling equipment shall be performed in clear water in a confined area that conforms to Safe Swim Defense guidelines. 'Clear water' implies pool-like visibility. At a minimum, an 8-inch disk with white and black quadrants at a depth of eight feet should be recognizable from above the surface. 'Confined area' denotes either a pool or an established summer camp swimming area with direct access from the shore or a dock.

Safe conditions for open water swimming and snorkeling depend on water clarity, area definition, depth, access, and other environmental factors. Snorkeling is limited to clear water. 'Open water' denotes a temporary swimming area of flexible extent in a natural body of water that may not be close to shore.

An open water snorkeling area need not have physical boundary markers, but the activity should be restricted within a specified distance of a point on shore, an anchored vessel, a moving guard boat, or a float with a dive flag attached. Generally, a 50-foot radius is recommended, and may be dictated by local regulations concerning the use of a dive flag. The area covered by the snorkeling group should be small enough to allow rapid assistance from rescue personnel.

Emergency response places limitations on safe water depth as well as water clarity and area. Guards should be able to quickly and easily reach the bottom, locate, recover, and transport a submerged victim to shore or vessel. At the start of the activity, and periodically if the group moves along a reef or other feature, the guards should check their ability both to see and to reach the bottom. The group should be directed towards shallower water whenever the guards experience any difficulty. (Twelve feet is designated as a reasonable maximum depth in Safe Swim Defense. In practice, slightly shallower or deeper depths may be appropriate. Different guard personnel will be able to easily recover objects from different depths, particularly if wearing fins. The practical way to confirm a safe depth is to test that the bottom is within comfortable reach of all designated rescue personnel.)

Limited or distant access to the snorkeling area may require additional consideration. Underwater features close to a sloping beach or near an anchored vessel are ideal. If the snorkeling site is a considerable distance from a beach or permitted anchoring location, the ability to rest becomes important and may restrict the activity close to shallow water or dictate the use of inflatable vests and/or small guard craft. Tide tables should be consulted in areas with large tidal changes, especially when beach access is at the base of a cliff. Snorkeling in a river may require an exit point downstream of the entry.

Snorkeling should not be done if water depth, clarity, or temperature, boat traffic, waves, current, weather, marine life, or bottom conditions, including vegetation, are deemed unsafe by the qualified supervisor. Time in the water should be adjusted based on water temperature and sun exposure. Snorkeling at night is limited to lighted pools unless the activity is conducted at a BSA nationally accredited high-adventure base.



# 4. Proper Equipment

- (a) All snorkeling equipment shall be properly fitted and in good repair.
- (b) The use of inflatable snorkeling vests and personal flotation devices is at the discretion of the qualified supervisor based on local conditions and the abilities of the participants and guards. Use of individual flotation devices is required in open water whenever there is a noticeable current or swells, when the bottom is not visible from the surface (due to vegetation or limited visibility beyond 8 feet), or when the activity is an extended distance (> 50 yards) from shore or craft.
- (c) A dive flag should be used at all open water sites. It may be displayed from a dive boat or attached to a float and towed with the snorkeling party. Local rules and regulations may specify the type of flag and how close snorkelers must stay to it.
- (d) Protective clothing may be worn. Gloves are appropriate in areas with sharp rocks or encrusted structures. A shirt or a diver's body suit will provide limited protection from sun, abrasion, or coral burns and minor insulation in warm water. In temperate water, a partial or full wet suit may be worn. Weight belts may not be used.
- (e) Lifesaving equipment in good repair shall be ready for immediate use by guard personnel. A flotation device is recommended, such as a rescue tube, bodyboard, or PFD, supplemented, as appropriate, by reaching and throwing devices, and small craft. Dive boats should be equipped with radios and first aid kits, and should deploy a safety line.



## 5. Lifeguards/ Lookout

It is the responsibility of the qualified supervisor to designate personnel for emergency response whenever lifeguards are not provided by a facility or tour operator. The snorkeling party should be divided into groups of 2 to 8 swimmers with two guards, paired as buddies, assigned to each group. (Units may be divided by patrols or crews.) The guards should be competent swimmers with basic water rescue skills. Emergency procedures, including entries, exits, and the role of everyone in the group, should be reviewed and practiced prior to the activity using rescue aids at the site. The guards should be stationed either afloat or ashore where they can see and hear all those in their group. To improve visibility, the guards and the swimmers should be positioned so that they do not face into the sun. Snorkelers in a group should remain off the same side of a vessel. Inflatables or rigid dinghies with oars are appropriate guard craft. The guards and snorkelers should remain close enough for rapid rescue response, generally within 50 feet of one another. In some situations, the qualified supervisor may deem it appropriate for the guards to tow rescue aids while accompanying their group in the water.

Guards are responsible for surveillance as well as rescue. If there is more than one group, then a separate lookout, who may be the qualified supervisor, should coordinate the entire activity and monitor changing conditions. The lookout should have audible or visible means, such as an air horn or flag, to recall all groups. If a boat is used to transport snorkelers to the site, then at least one person should remain aboard who knows how to drive the boat and use the radio. At least one person in the party must be trained in CPR.

It is the combined responsibility of the adult supervisor, the lookout, and the guards to know the number of people in the water at all times and to make frequent visible confirmations of that number. Buddy boards and tags, or their equivalent, must be used to account for everyone in the water.

## 7. Buddy System

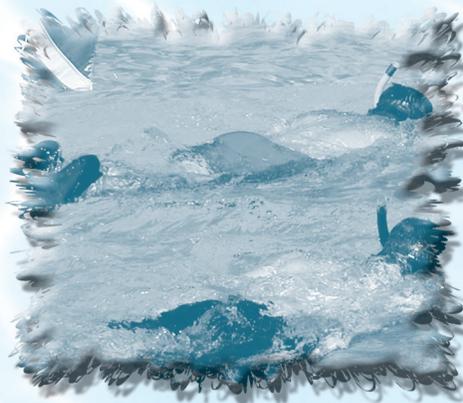
All participants in snorkeling activities are paired as buddies. Buddies should check each other's equipment prior to the activity and review hand signals. During the activity, they should remain close enough that they are constantly aware of their buddy location and condition. Generally, buddies should take turns making breath-holding dives. That is, one buddy remains at the surface, floating with his mask in the water while breathing through the snorkel, and keeps an eye on the buddy who is down. When the diver surfaces, both buddies check their position relative to the group before moving on or letting the other buddy dive.

The adult supervisor, lookout, or guards may call buddy checks as needed to keep the buddies together. Buddy checks may also be called to aid communication. Buddy pairs should be instructed to routinely watch for pre-determined audible and visual signals of a buddy check.



## 6. Ability

Scouts classified as beginners or nonswimmers may use snorkeling equipment in clear, confined water of appropriate depth, as specified in Safe Swim Defense (points 3 and 6), during instructional swims or during closely-supervised recreational activity. Training for the Snorkeling BSA award is limited to Scouts and adults classified as swimmers. Only those who have completed the Snorkeling BSA requirements may participate in open water snorkeling.



## 8. Discipline

Be sure everyone understands and agrees that snorkeling is allowed only with proper supervision and use of the complete Safe Swim Defense and BSA Snorkeling Safety standards. The applicable rules should be presented and learned prior to the outing, and should be reviewed for all participants at the beginning of the snorkeling activity. Scouts should respect and follow all directions and rules of the adult supervisor. When people know the reasons for rules and procedures they are more likely to follow them. Treatment should be strict and fair, with no favoritism.

# Information for Counselors

**Purpose** The Snorkeling, BSA requirements introduce Scout-age children and adult leaders to the special skills, equipment, and safety precautions associated with snorkeling; encourage the development of aquatics skills that promote fitness and recreation; and provide a foundation for those who later will participate in more advanced underwater activity.



## Counselors

Any adult trained and assigned by a currently certified Aquatics Instructor, BSA may serve as a counselor for the Snorkeling, BSA award. A person certified to conduct snorkeling instruction by the Professional Association of Diving Instructors (PADI), or the National Association of Underwater Instructors (NAUI), or other BSA recognized agency, also qualifies as a Snorkeling, BSA counselor.

## Recognition

The individual completing the official requirements qualifies for a recognition card and swimsuit patch. The completed award application should be submitted to the local council service center by the counselor or unit leader.

## Programming

Instruction must be conducted in clear, confined water with a maximum depth of 12 feet. A swimming pool is recommended. Snorkeling, BSA is ideally suited to winter programs using indoor pools. Three 45-minute sessions are recommended for instruction, practice, and completion of requirements.

## References

The Swimming merit badge pamphlet provides reference material for Snorkeling, BSA. NAUI, PADI, equipment manufacturers, and others publish references available through bookstores and dive shops. The PADI snorkeler's field guide, *Discover the Underwater World*, is one such resource. Although few dedicated snorkeling texts are available, instruction manuals for scuba diving contain pertinent information.

## Requirements

All requirements must be completed as stated on the application form. The counselor may not omit, vary, or add requirements. The skill requirements are presented in the order in which they should be taught to the Scout.

The second requirement considers the time-honored and time-proven principle of the buddy system. Snorkelers must use the buddy system at all times. Before beginning the activity, each person helps his buddy fit and check equipment. The principle of the buddy system is that two people can enjoy an aquatics activity together while each provides a critical margin of safety for the other. Each buddy must constantly be aware of the condition and circumstances of his buddy, and must always be prepared to call for aid or give immediate assistance if needed.

# Snorkeling, BSA Application

Name of Applicant \_\_\_\_\_

Council \_\_\_\_\_

Unit Number \_\_\_\_\_

Name of Counselor \_\_\_\_\_

Qualification \_\_\_\_\_

Signature \_\_\_\_\_

Date \_\_\_\_\_

## Requirements

1. Before doing other requirements, successfully complete the BSA swimmer test: Jump feetfirst into water over the head in depth, level off, and begin swimming. Swim 75 yards in a strong manner using one or more of the following strokes: sidestroke, breaststroke, trudgen, or crawl; then swim 25 yards using an easy, resting backstroke. The 100 yards must be completed in one swim without stops and must include at least one sharp turn. After completing the swim, rest by floating.
2. Discuss the importance of using the buddy system at all times while snorkeling and list duties of a buddy, beginning with equipment checks.
3. Explain the function, fit, and selection of mask, fins, and snorkel. Discuss the use of inflatable flotation vests and PFD's when snorkeling in open water.
4. In confined, shallow water (about waist deep), demonstrate use of mask and snorkel:
  - (a) Show how to prevent the mask from fogging and how to equalize pressure in mask, ears, and sinus cavities. With your head underwater, flood the mask, observe the effect on your vision, surface, and drain the water from the mask.
  - (b) With your face in the water, breathe through the snorkel. Then submerge, surface, clear water from the snorkel, and resume free breathing without removing the snorkel from your mouth.
5. In confined, shallow water, demonstrate the use of swim fins: Do first using only fins, and then repeat with a mask and snorkel.
  - (a) Fit and adjust fins to feet.
  - (b) Walk with fins as if entering from a beach.
  - (c) Swim at the surface (10 yards) and underwater (three yards) using the flutter kick.
  - (d) Control direction without using hands while swimming with fins at the surface and underwater.
6. In confined, deep water (six to 12 feet), demonstrate:
  - (a) Proper techniques for entering and exiting the water with snorkeling equipment from a dock or boat.
  - (b) Headfirst and feetfirst surface dives, including proper body position for safe ascent and descent.
7. Show knowledge of snorkeling signals:
  - (a) Demonstrate divers' signs and signals, both audible and visual, for use at the surface and underwater.
  - (b) Set out a diver down flag and explain its function.
8. In clear, confined water eight to 12 feet deep that has a firm bottom, while swimming with a buddy, use mask, fins, and snorkel to locate and recover an object from the bottom.
9. Demonstrate basic survival skills:
  - (a) Float facedown for five minutes while breathing through a snorkel with a minimum of movement.
  - (b) Demonstrate survival floating for five minutes without use of a snorkel.
  - (c) Using fins, show how to tow an exhausted or unconscious buddy to safety.
10. Review and explain the eight points of Safe Swim Defense and BSA Snorkeling Safety. Explain training, preparations, and precautions required for snorkeling in open water. Explain environmental factors that affect snorkeling and discuss special precautions needed for oceans, streams, and lakes.
11. Explain pressure, buoyancy, and submerged optics and acoustics related to snorkel swimming and diving.
12. Discuss the effects of submersion on the body and how to handle potentially dangerous situations:
  - (a) What is hyperventilation and how is it avoided?
  - (b) What are the symptoms and consequences of hypothermia?
  - (c) Why is CPR training recommended for those participating in swimming and snorkeling activities?