

2-1 RESCUE EQUIPMENT

Aquatic facilities must have the appropriate rescue equipment available for emergency response and in proper working order at all times. Using rescue equipment makes a rescue safer for both you and the victim. You also must have immediate access to communication devices used at your facility to activate an emergency action plan (EAP), which may include a whistle, megaphone, radio, call box, intercom, telephone, flag or other signaling equipment.

As a lifeguard, you must always wear or carry certain equipment so that it is instantly available in an emergency. The primary piece of rescue equipment used to perform a water rescue is the rescue tube. Another piece of equipment that must be immediately accessible is the backboard, which is used to remove victims from the water. Some facilities, like waterfronts, may use specific or specialty rescue equipment to meet the needs of their particular environments.

Equipment That You Wear or Carry

To respond quickly and appropriately to an emergency, a rescue tube, resuscitation mask and gloves must be instantly available. The best way to ensure this is to always keep the strap of the rescue tube over your shoulder and neck and wear a hip pack containing the gloves and resuscitation mask (Figures 2-1, 2-2, 2-3). You should wear the hip pack at all times, even when not on surveillance duty.



Figure 2-1 | Resuscitation mask, gloves and whistle.

Rescue Tubes

The rescue tube is used at pools, waterparks and most non-surf waterfronts. It is a 45- to 54-inch vinyl, foam-filled tube with an attached tow line and shoulder strap. A rescue tube is capable of keeping multiple victims afloat.

When performing patron surveillance, always keep the rescue tube ready to use immediately.

- Keep the strap of the rescue tube over the shoulder and neck.
- Hold the rescue tube across your thighs when sitting in a lifeguard chair or across your stomach when standing.
- Hold or gather the excess line to keep it from getting caught in the chair or other equipment when you move or start a rescue.

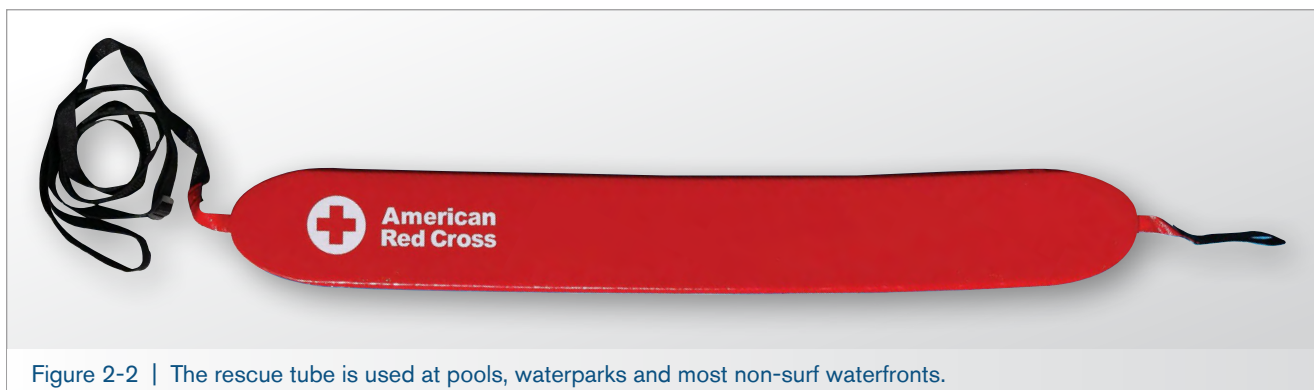


Figure 2-2 | The rescue tube is used at pools, waterparks and most non-surf waterfronts.

Resuscitation Masks

A resuscitation mask is a transparent, flexible device that creates a tight seal over the victim's mouth and nose to allow you to breathe air into a victim without making mouth-to-mouth contact. All masks should have a one-way valve for releasing exhaled air. Some masks also have an inlet for administering emergency oxygen. Masks come in different sizes to ensure a proper fit and tight seal on adults, children and infants.

Gloves

Disposable (single-use) gloves are used to protect employees that may be exposed to blood and other potentially infectious material (OPIM). Gloves should be made of non-latex materials, such as nitrile. Gloves also should be powder free.

Whistle

Whistles are important signaling devices for lifeguards. They are used to activate their facility's EAP, and get attention of other members of the safety team as well as patrons for policy enforcement. Whistles should be loud, made of a material that will not rust and have breakaway lanyards.



Figure 2-3 | It is important to wear your lifeguard gear properly.

Equipment You Can Easily Reach

Other first aid and rescue equipment should be easily accessible for emergency use. This additional equipment may include backboards, rescue buoys, other personal protective equipment (PPE), other resuscitation equipment, an automated external defibrillator (AED), first aid supplies and rescue boards.

Backboards

A backboard (Figure 2-4) is the standard piece of equipment used at aquatic facilities to remove victims from the water when they are unable to exit the water on their own or when they have a possible injury to the head, neck or spine. Some backboards have runners on the bottom that allow the board to slide easily onto a deck or pier. A backboard must have straps to secure a victim in cases of head, neck or spinal injury, in addition to a device for immobilizing the head.



Figure 2-4 | A backboard is used to remove a victim from the water.

Rescue Buoys

A rescue buoy (Figure 2-5), also known as a rescue can or torpedo buoy, often is the primary piece of rescue equipment used at waterfronts and surf beaches. Most rescue buoys are made of lightweight, hard, buoyant plastic and vary in length from 25 to 34 inches. Molded handgrips along the sides and rear of the buoy allow the victim to keep a firm hold on the buoy. Rescue buoys are buoyant enough to support multiple victims.

Personal Protective Equipment

Personal protective equipment (PPE) is the specialized clothing, equipment and supplies used to prevent you from coming into direct contact with a victim's body fluids. In addition to gloves and resuscitation masks, other PPE may be available at your facility, including gowns, masks, shields and protective eyewear. A blood spill kit should also be available to safely clean up blood.



Figure 2-5 | Rescue buoys are often used at waterfronts.

Bag-Valve-Mask Resuscitators

A bag-valve-mask (BVM) resuscitator is a hand-held device (Figure 2-6) attached to a resuscitation mask that is used to ventilate a victim in respiratory arrest or when performing CPR. BVMs come in various sizes to fit adult, children and infants. The appropriately sized BVM should be used based on the size of the victim. Using a BVM requires two rescuers: one to maintain a tight seal for the mask and one to squeeze the bag.

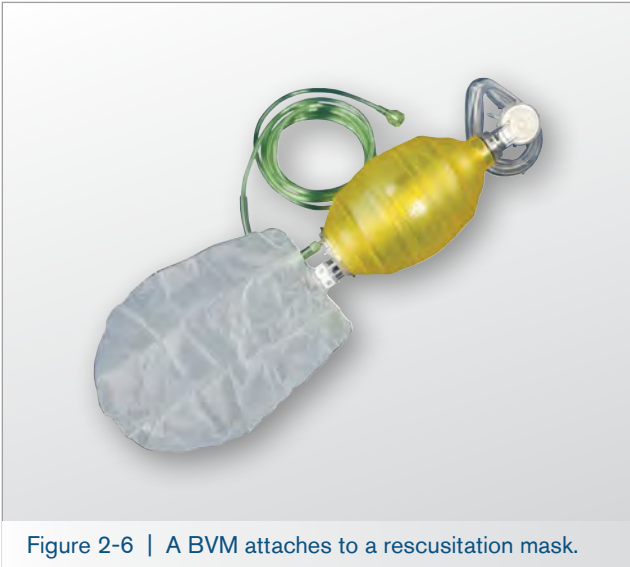


Figure 2-6 | A BVM attaches to a resuscitation mask.

Automated External Defibrillators

An AED (Figure 2-7) is a portable electronic device that analyzes the heart's rhythm and can deliver an electrical shock, which helps the heart to re-establish an effective rhythm. This is known as defibrillation. It is used in conjunction with CPR on unconscious victims with no obvious signs of life (movement and breathing). An AED should be available at your facility.



Figure 2-7 | An AED analyzes the victim's heart rhythm.

Other Resuscitation Equipment

In addition to resuscitation masks, other resuscitation equipment is effective in responding to breathing and cardiac emergencies. Use of all of the following supplemental resuscitation equipment is not covered in the Lifeguarding course and requires additional training. This equipment may or may not be used at your facility:

- **Oxygen cylinders and delivery devices.** In a breathing or cardiac emergency, oxygen cylinders and delivery devices (Figure 2-8) are used to administer emergency oxygen to the victim.
- **Suctioning devices.** Suction devices (Figure 2-9) are used to remove fluids and foreign matter from the victim's upper airway. There are two types of suctioning devices: manual suctioning units are operated by hand while mechanical suctioning units are electrically powered
- **Airways.** Oropharyngeal and nasopharyngeal airways come in a variety of sizes and are used to help maintain an open airway in a nonbreathing victim. They do this by keeping the tongue away from the back of the throat during resuscitation.



Figure 2-8 | A lifeguard assists with breathing.



Figure 2-9 | Manual suction devices remove fluids from the upper airway.

First Aid Kit and Supplies

An adequate inventory of first aid supplies (Figure 2-10) must be available at all aquatic facilities. Common contents of a first aid kit include items used to treat bleeding and wounds and to help stabilize injuries to muscles, bones and joints. Ice packs and rescue blankets also may be included since they may help to treat heat- and cold-related emergencies. Your state or local health department may establish specific requirements for the contents of your first aid kit.



Figure 2-10 | A first aid kit must be at all aquatic facilities.

Rescue Boards

Some waterfronts use rescue boards (Figure 2-11) as standard equipment. Rescue boards are made of plastic or fiberglass and may include a soft rubber deck. They are shaped similarly to a surf board but usually are larger to accommodate a lifeguard plus one or more victims. Rescue boards are fast, stable and easy to use. They may be used during rescues to quickly paddle out long distances. They also may be used by lifeguards as a patrolling device, with the lifeguard paddling along the outer boundary of the swimming area.



Figure 2-11 | Rescue boards are standard at some waterfronts.

Ring Buoys, Reaching Poles and Shepherd's Crooks

A ring buoy, reaching pole and shepherd's crook (Figure 2-12) often are required by the health department for swimming pools and waterparks. This equipment is not typically used by lifeguards to perform the professional rescues taught in this course. This equipment usually is used by untrained bystanders. If your facility has any of these items, you should learn how to use them.



Figure 2-12 | Ring buoys and shepherd's crooks are typically used by untrained bystanders.