Safe Kids Greater Sacramento

Open Water Safety Lessons

Reference Document

2022

**Lessons:**

**1 - Learn to Swim, and Supervise Children**

**2 - Wear a Life Jacket**

**3 - Learn to Float**

**4 - Look Before You Leap**

**5 - Learn to Rescue Safely**

**6 - Don’t Overload Your Boat**

**7 - Stay With Your Boat**

**8 - Learn the Boating Rules of the Road**

**9 - Alcohol, Drugs, and Boating Don’t Mix**

**10 - Keep our Waterways Clean**

**Defining Open Water/Boating-Related Drowning Deaths (Background for the Educator)**

* Drowning is a leading cause of death for children; for children ages 1-14, drowning is the 2nd leading cause of unintentional injury death and is the 3rd leading cause among children ages 15-19.[[1]](#footnote-1)
* In 2019 alone, there were almost 900 fatal drownings among children between the ages of 0-19.[[2]](#footnote-2)
* More children and teens drown in open water vs. pools.
	+ Open water is defined as natural bodies of water, such as lakes, rivers, ponds, and oceans.[[3]](#footnote-3)
* As children age, the risk of open water drowning rises. In fact, in 2019, 70% of the children ages 15-19 who drowned, did so in natural or open waters.
* Males are at the greatest risk of fatal drowning. The natural water fatal drowning rate is more than four times higher for boys compared to girls.3
* There are also disparities by race in natural water settings. Overall, American Indian/Alaskan Native children have the highest rates of fatal open water drowning, followed by Black/African American children. The risk of drowning in open water among Black/African American children between the ages of 10-19 is two times higher than their White peers.3
* Drowning remains a leading cause of death for children with autism and accounts for approximately 90 percent of deaths associated with elopement (wandering) by those age 14 and younger.[[4]](#footnote-4)
* Drowning is the second leading cause of unintentional injury related death among Sacramento County children ages 0-17, following only motor vehicle traffic (CDPH EpiCenter, 2010-2019).
* The Sacramento County Child Death Review Team reports that 50 children ages 0-17 died due to drowning from 2007-2016. 16 of those children died in open water. Our drowning death statistics follow national trends, with younger children drowning in backyard pools more often, and older children typically drowning in open water.

**Lesson 1: Learn to Swim, and Supervise Children!**

* **Learn to Swim**
	+ Everyone should learn how to swim; it is a skill that can save your life
	+ Identify locations near you that offer low-cost swim lessons or even better, free swim lessons
	+ Swim with an adult or a buddy who knows how to swim
	+ Teach children how to swim. Every child is different, so enroll children in swim lessons when they are ready – consider their age, development and how often they are around water.
	+ Make sure kids learn water survival skills. Children should be able to do these five things:
		- 1. Step or jump into water over their head and return to the surface.
		- 2. Turn around in the water and orient to safety.
		- 3. Float or tread water.
		- 4. Combine breathing with forward movement in the water.
		- 5. Exit the water.
	+ Teach children that swimming in open water is different from swimming in a pool. Know the hidden hazards of open water such as limited visibility, sudden drop-offs, uneven surfaces, currents and undertow.
* **Supervise Children**
	+ Watch kids when they are in or around water, without being distracted. Keep young children and weak swimmers within arm’s reach of an adult.
	+ Make sure older children swim with a partner every time.
	+ Choose a Water Watcher. When there are several adults present, choose one to be responsible for watching children in or near the water for a certain period of time, such as 15 minutes. After 15 minutes, select another adult to be the Water Watcher.
	+ Water Watchers should face the water at all times and avoid distractions.
* **Swim Safely**
	+ Always tell someone where you are going and how long you expect to be there. Know the address or location of where you are swimming, and have a phone to call 9-1-1.
	+ Weak swimmers and children who cannot swim should wear life jackets when they are in or near water.
	+ Swim where there is a lifeguard.
		- Even when a lifeguard is on duty, you are responsible for watching your child.
		- Always obey the lifeguard or responsible adult. You may not know there is a hazard nearby, listen to the lifeguard, it will save your life.
	+ Swim in a designated area reserved for swimmers. These areas are considered “safer” because there are less hazards, and the depth is known.
	+ Look before you leap! (see Lesson #5).
	+ Be aware of big waves and tides.
		- Big waves can knock the strongest person off their feet, never turn your back on the ocean and stay away from the water’s edge if you can’t swim and you are fully clothed.
		- Be aware that tides can change throughout the day
	+ Wear sunscreen - Spending all day at the river can give you a painful sunburn. Be sure to wear SPF 15 or better and reapply frequently.
	+ Don't get too tired! - People, especially children, can make unsafe choices when they are too tired.
	+ Stay hydrated.
	+ Watch out for hypothermia - If you experience excessive shivering or fatigue, get out of the water at once.

**Lesson 2: Wear a Life Jacket!**

* **Why we wear life jackets**
	+ The Sacramento region is home to the American and Sacramento Rivers. These rivers originate from snow melt in the Sierra Nevada Mountains, and by the time they reach the Sacramento Valley, their waters are fast, cold, and full of debris.
	+ Drowning is the second leading cause of unintentional injury related death among Sacramento County children ages 0-17.
	+ Experts agree that whether you are swimming, fishing, boating, floating or just wading, you should always wear a properly fitted, U.S. Coast Guard-approved life jacket.
	+ Even the strongest swimmer can be pulled under.
	+ All participants in sporting activities should wear protective clothing. A life jacket is a necessary piece of sports equipment.
	+ Anyone on a raft, kayak, canoe, SUP or inner tube should always wear a life jacket.
	+ Floats, such as tubes, air mattresses or ‘floaties’ are toys and are not substitutes for a life jacket.
* **California and Sacramento laws**
	+ CA law states that all persons on board a personal watercraft (like a jet ski) and all persons being towed behind a vessel (as in water skiing) must wear a life jacket.
	+ California law states that all children 13 and under must wear a properly fitting, U.S. Coast Guard-approved life jacket while underway on a vessel of 26 feet or less. <https://dbw.parks.ca.gov/?page_id=28751>
	+ There is a Sacramento County ordinance requiring any child under the age of 13 to wear a life vest before accessing any public waters and violation of the ordinance punishes parents with a fine of $500 and/or six months in jail. It’s your responsibility to make sure your child is wearing a life vest. (Includes boating, swimming, and wading.) <https://regionalparks.saccounty.gov/Rangers/Pages/RulesRegulationsLifeJacketOrdinance.aspx>
* **How to choose and fit a life jacket**
	+ Demonstrate how to properly fit a life jacket
	+ Demonstrate what happens when a life jacket does not fit properly (too loose, slips off over head)
	+ The Best life jacket is one that:
		- Fits properly
		- Is marked with a U.S. Coast Guard-approved number.
		- Is in good condition. At the beginning of each boating season:
			* Check that all hardware and straps are in good shape, firmly attached, and in working order.
			* Faded material can indicate loss of strength. Weathered lifejackets may tear more easily and can result in loss of flotation material.
			* Check for leaks, mildew, & oil saturation in the fabric.
			* Make sure there are no rips or tears in the fabric.
			* Make sure the label stating USCG approval is attached, and that it is readable.
			* Discard and replace life jackets that show signs of deterioration – faded material, tears, mildew stains, punctures, etc. When not in use, store lifejackets in a dry, cool, and dark place.
		- Has reflective tape and a whistle attached
		- Is the right type of life jacket for the type of swimming, boating, or water sports you will be doing.
		- Types of Life Jackets - <https://dbw.parks.ca.gov/?page_id=29182>
	+ If a life jacket fits properly...
		- It will help keep your head above the water.
		- If it's too big, the life jacket will ride up around your face.
		- If it's too small, it will not be able to keep your body afloat.
		- Life jackets designed for adults will not work for children!
	+ Try it on for size!
		- Check the manufacturer's label to ensure that the life jacket is a proper fit for your size and weight.
		- Make sure the jacket is properly fastened.
		- Hold your arms straight up over your head.
		- Ask a friend to grasp the tops of the arm openings and gently pull up.
		- Make sure there is no excess room above the openings and that the jacket does not ride up over your chin or face.
		- For the best fit, try the life jacket in shallow water under safe and supervised conditions.
* **Borrow a life jacket**
	+ The "Kids Don't Float" life preserver loaner program provides jackets for temporary use that are hung on loaner boards along local waterways. There are also borrowing stations at some local fire stations.
	+ River Loaner Boards - <https://regionalparks.saccounty.gov/Rangers/Pages/KidsDontFloat.aspx>
	+ Fire Department loan stations - <https://dbw.parks.ca.gov/?page_id=29179#sac>

**Lesson 3: Learn to Float!**

* Learning to Float can save your life!
	+ Floating can help you rescue yourself.
	+ Floating keeps your head above water until help comes.
	+ Floating helps you to remain calm.
	+ Floating gives you time to look for help.
	+ Floating helps keep you from getting tired.
* Wearing a life jacket when playing near the water is a good idea even when you know how to swim and float.
* Treading water is a way of staying afloat by calmly moving your arms and legs in wide circles.
* Treading water is useful when:
	+ It is necessary to catch your breath and assess the situation.
	+ It is necessary to look around for the nearest safe place.
	+ The nearest safe place is too far, and you are not able to swim to it.
* Floating down river:
	+ Float on your back.
	+ Float feet-first downstream with your toes up out of the water.
	+ Use your feet to push away from rocks, logs, or other obstacles.
	+ Never attempt to stand up in swiftly moving water or your feet can be entrapped.
* Never practice floating in a river because the currents can be dangerous.

**Lesson 4: Look Before you Leap!**

* Before jumping in, enter the water slowly, feet first. If you are not familiar with the water, and cannot determine the depth or observe potential hazards, do not enter the water.
* Obey the signs – read any signs in the area and look for “No Swimming” or “No Diving”.
* The water surface may look smooth, but the current and undertow can be strong.
* Riverbeds can drop off sharply. Stay close to shore to avoid drop-offs and currents. While there may be a gradual slope as you enter the water near shore, there might be a sudden drop-off further out.
* Never use rope swings or jump off bridges - No matter how deep the water is, these activities can result in serious injury or death
* Always assess the situation before you jump into the water.
* Ask yourself the following questions:
	+ Is the water deep enough? The depth of the water changes with the seasons and weather patterns. While the surface may be calm, there may be undercurrents. Take care around crumbling riverbeds and slippery edges.
	+ How cold is the water? Rivers and mountain lakes are filled by snow runoff making for cold temperatures.
	+ Are there obstacles under the water that are not visible from the surface? There may be hidden hazards such as branches, rocks, or trash littering the bottom that can catch or cut your feet. The clarity of the water might not allow you to see what’s below.
	+ If you get into trouble, is there help nearby? Look for designated swimming areas and lifeguard station.
* Don’t jump or dive into shallow water.
* Hitting your head can have big consequences.
* It is hard to judge the depth of the water. Jumping into shallow water can cause dangerous leg injuries.
* Don’t swim in an aqueduct or a canal.
	+ Aqueducts or canal water levels can change suddenly, they often have steep, slippery slopes and can be challenging to get out of.
	+ The current is usually swifter than it appears.
	+ The bottom may be lined with debris.
	+ Aqueducts and canals often carry our drinking water supply.
	+ Swimming in a canal is against the law. If you enter a canal, you are trespassing and can be arrested or fined.

**Lesson 5: Learn to Rescue Safely!**

* Always tell someone where you are going and how long you expect to be there.
* Know the address of the location where you are swimming, or name of the park or beach.
* What does 9-1-1 need to know?
	+ How would someone driving to you find you?
	+ What is the emergency?
	+ Landmarks near you, clothing/vehicle/vessel description
	+ Stay on the phone
* Learn CPR
* Know the signs of drowning:
	+ Child cannot yell for help. (\*Instructor: Note to audience that drowning is often depicted incorrectly in movies.)
	+ If adult calls to child or asks them if they are ok and they give no answer or look at adult with a blank stare, this may indicate child is struggling and needs assistance.
	+ Head back and low in the water with mouth at water level
	+ Not using legs; person is vertical in the water, often bobbing up and down
* Accidents can happen at the pool, lake, river and ocean. To safely save someone, know how to reach, throw, or find an adult to row.
* Rescue Safety Checklist:
	+ Reach out with your hand, pool equipment, branch or other object to a person who is struggling in the water. Hold on to someone or something stable while you are reaching. Do not lean over the water while you are trying to save someone, you could get pulled into the water too. Keep a low center of gravity by staying low to the ground. If you are in a boat, make sure that most of your weight remains in the boat.
	+ If you can’t reach the person, throw out something that will float, something the person can hold on to that will help him or her stay afloat until help comes. You can throw an empty ice chest, inner tube, PFD, or other object that floats.
	+ If you can’t reach or throw, find an adult who can row out to the person. A large inner tube, an air mattress, surfboards, or raft are examples of what to row.
* If you can’t reach, throw or find an adult to row, go call 9-1-1 to get help.
* Don’t take your eyes off the person that needs help.

**Lesson 6: Don’t overload your boat!**

* Overloading your boat is very dangerous. An overloaded or unbalanced boat can turn over or capsize, even when there is no wind or rough water. Entering or exiting a small boat can also be dangerous. If you plan to move, make sure someone else moves the opposite way to counterbalance the boat.
	+ Keep your boat balanced by distributing weight evenly.
	+ If a person must move, counterbalance to offset the change in weight distribution.
	+ Be sure to secure gear to prevent it from shifting and unbalancing the boat.
	+ Riding on the bow (front), transom (back), or gunwales (sides) may unbalance the boat.
* Operating a boat safely by maintaining stability and balance requires good judgement and proper behavior. Limit the number of people on your boat to the number of passengers recommended on the boat’s capacity plate. The capacity plate tells you the maximum number of passengers and weight your boat can safely carry.

**Lesson 7: Stay with your Boat!**

* There are safe and wise procedures to follow if you are in an accident and your boat capsizes or turns over.
	+ If you boat capsizes, stay with the boat. It is easier for rescuers to see the boat than heads bobbing in the open water. Most boats have floatation built into them so they will not sink.
	+ If in a lake or the ocean, do not try to swim to shore. Judging distance on the water is difficult, so the shore may appear to be closer than it is.
	+ If you are in a river, stay with your boat if you can, lay on your back with your feet out of the water and down river.
	+ If help is nearby, yell, gesture, or use the whistle attached to your PFD to attract attention. If help is far away, don’t yell. Save your energy and blow your whistle.
	+ Grab onto anything that floats. To attract the attention of someone nearby, wave your arms slowly over your head and blow your whistle.
	+ Don't follow your equipment downstream - Never risk your life to save equipment or belongings
* To prevent hypothermia when you are in the water:
	+ If you can, climb onto the boat’s hull as far out of the water as possible
	+ Do not remove shoes or clothing
	+ Keep your head out of the water
	+ If there are other people with you, huddle together to keep warm
	+ If you are alone, curl up into the fetal position. To curl up in the fetal position, bring your knees as close to your chin as possible, and hold onto your legs. This posture minimizes the amount of heat that escapes form your body, keeping you warmer.

**Lesson 8: Learn the Boating & Jetski Rules of the Road!**

There are rules for operating a boat in order to maintain safety for everyone on the water. Boaters need to be courteous, safe and follow the rules of the road.

* Follow the rules when leaving or returning to the dock or launch
* Maintain safe speed. Travel 5 mph or less within 100 feet of swimmers or within 200 feet of beaches, swimming flats, diving platforms, lifelines or docks.
* Know the right-of-way when involved in crossing, passing, or overtaking other boats.
* Do not block boats leaving or entering the water
* Follow safe boating signs and recognize channel markers
* Observe red (starboard, right) and green (port, left) channel markers when headed upstream or returning from the ocean.
* Remember, an orange diamond on a buoy means danger.
* Know navigation rules.
* Use a whistle, bell, or other sound-producing device: one blast to pass on my left (port side), two blasts to pass on my right (starboard side), one blast to pass on the right (port to port) when meeting head-to-head.
* All persons aboard a jet ski regardless of age must wear an appropriate life-jacket.
	+ Must be USCG approved for jet skis.
* Do not operate boats and jetskis near swimmers in the water.
* In Sacramento County, there are many no-wake zones, including near most local public marinas as well as the entire American River.

**Lesson 9: Alcohol, Drugs, and Boating Don’t Mix!**

* Drinking alcohol and using other drugs while boating cause many boating accidents. Using alcohol or drugs by themselves can make your judgement poor and slow your response time-and reduce your ability to respond to dangerous incidents.
* It is unlawful to operate a boat while under the influence of alcohol or other drugs
* The blood alcohol concentration indicates if a person is driving under the influence
* It is illegal to operate a boat with a BAC of 0.08% or more.
* Four youths under the age of 21 years, it is illegal to drink alcohol and operate a car or boat with a BAC of 0.01% or more. It can jeopardize your privilege of obtaining or keeping a driver’s license
* The boating conditions that increase the impact of alcohol and other drugs are called stressors
* There are 4 main stressors: sun, wind, noise and waves (or movements).
* The stressors increase the effects of alcohol and other drugs on your sense of balance, vision, judgement, and reaction time.

**Lesson 10: Keep our Waterways Clean!**

* Keeping our waterways clean is very important not only for recreation purposes but also for the environment. People, plants and animals depend on clean, safe water. Why keep our waterways clean?
	+ All living things require water to live
	+ California is an agricultural state, requiring vast quantities of water to grow food.
	+ Water is an important resource for recreation: boating, fishing and other water sports
	+ Water pollution and non-native species have a negative impact on the pleasure of boating.
	+ Destroy native wildlife and wildlife habitat
	+ Eliminate bodies of water as a recreational resource
	+ Water pollution has a negative impact on our daily lives.
	+ Decreases the amount of water available for agriculture
	+ Affects our health and well-being.
* Let’s do our part! Common waterway pollutants include:
	+ Fishing and hunting products such as lead shot and weights, fishing line, and fishing hooks
	+ Oil and fuel spills
	+ Packaging and food containers such as aluminum, paper, Styrofoam, and plastic products such as sixpack rings, utensils, cups, plates, and bags
	+ Food scraps that either poison the wildlife or pollute the water
	+ Human waste
	+ Sewage discharges, industrial wastes
* Learn to properly dispose of waste products:
	+ Plastics, Styrofoam’s, aluminum, and paper should be recycled.
	+ Food and vegetative wastes should be composted
	+ Human waste should be properly disposed of at a pump out or dump station
	+ Boaters should use floating restrooms, or when they are not available bathrooms on shore
	+ Oil and fuel spills can be avoided by fueling before dark, filling portable tanks on the dock instead of in the boat, keeping the fill nozzle in contact with the fuel tank, wiping up spilled gas, and discarding fuel-soaked cloth in a sealed container. Do not leave the gasoline pump unattended while it is dispensing fuel.
	+ Oil and fuel should never be dumped in storm drains because storm drains empty directly into the ocean, rivers and bays.
* Respect the plant and animal inhabitants - Do not bother animals, and watch out for stinging insects and poison oak
* Follow healthy water habits
	+ Actively supervise children and pets in or near water.
	+ Avoid algae blooms (brightly colored water) and trash in the water.
	+ People with immuno-suppressive diseases should avoid direct contact with the river.
	+ Wash hands/shower after swimming.
	+ DO NOT drink river water, cook or wash dishes with river/lake water, change diapers in or near water, swim when you are sick, enter the water if you have cuts or open sores as these are pathways for bacteria to enter your body, or enter the water for several days after a significant rainstorm as storm flows spike bacteria levels.

**Additional Resources for Parents and Caregivers**

* How to choose the right life jacket
	+ <https://www.uscgboating.org/images/howtochoosetherightlifejacket_brochure.pdf>
* Water Watcher card
	+ <https://www.safekids.org/other-resource/water-watcher-card>
* Open water checklist
	+ <https://www.safekids.org/checklist/open-water-safety-checklist>
* Lake water temperatures source
	+ <https://anglerspy.com/>
* Boating License courses by state
	+ <https://idash.nasbla.net/idashboards/viewer/?guestuser=guest&dashID=233&c=0>
* Video: How to properly fit a life jacket
	+ <https://www.youtube.com/watch?v=_5iNjvx62zI>
* Video: Engine cut-off switch
	+ <https://www.youtube.com/watch?v=TD1uZBktG0I>
* Video: Carbon monoxide poisoning
	+ <https://www.youtube.com/watch?v=s1jAobkyzPc>
* Testimonial videos:
	+ Phyllis Kopytko – kill switch: <https://www.youtube.com/watch?v=AW7151iup0k&list=PLgOje37c-b1P97AslPoTtqfA3sTetv9Jt&index=2>
	+ Dana Gage – life jacket wear

<https://www.youtube.com/watch?v=dxRaAzJqjE0>

* + Michael Fugate – life jacket wear/cold water

<https://www.youtube.com/watch?v=ogHJ1-S6Gm4>

* + Camilla Molica – life jacket wear/cold water

<https://www.youtube.com/watch?v=SO5gGMhvHQg>

* + Cassandra Free – carbon monoxide poisoning

<https://www.youtube.com/watch?v=9GYH3iv-uNs>

1. Centers for Disease Control and Prevention. (2021). *Drowning prevention*. <https://www.cdc.gov/drowning/facts/> [↑](#footnote-ref-1)
2. Centers for Disease Control and Prevention, National Center for Injury Prevention and Control. Web-based Injury Statistics Query and Reporting System (WISQARS) [online]. (2020) [2021 Oct 22]. Available from URL: <https://wisqars.cdc.gov/fatal-reports> [↑](#footnote-ref-2)
3. Safe Kids Worldwide. (2018). *Hidden hazards: An exploration of open water drowning and risks for children*. <https://www.safekids.org/sites/default/files/water_safety_study_2018.pdf> [↑](#footnote-ref-3)
4. National Autism Association. *Autism and safety facts*. <https://nationalautismassociation.org/resources/autism-safety-facts/> [↑](#footnote-ref-4)