

Water Safety Trainer Curriculum

Objectives:

1. Trainers will learn the basics of boating safety and swimming safety.
2. At the end of the Train the Trainer course, prospective instructors will have all information, handouts, lesson plans, and tools needed to teach soldiers basic water safety information in a 15-30 minute class format.

Swimming Safety

45 minute PowerPoint showing basics of Swimming Safety

Drownings on Belton and Stillhouse Hollow Lakes

- Drowning is second leading cause of accidental death for people 0-44 years old
- 25% are soldiers or dependents of soldiers
- 2 main causes are swimming activities and boating activities
- Many drownings are within 10 feet of safety and are people who did not intend to be in the water
- Over 6000 people drowned last year

Causes of Swimming Fatalities –

- Not admitting you are a poor swimmer (to yourself or to your group)
- Over Estimating One's Ability
- Alcohol or Drug Use
- Trying to Rescue Someone Else
- Fall off Steep Drop-off
- Falling in without intending to Swim Wade/drop-off
- Cold Water – Hypothermia decreases physical ability
- Unsupervised Children or Adults swimming alone
- Falling Off Flotation TOYS
- Swimming after wind-blown objects
- Jumping Off Cliffs or Bridges

Recognize the Drowning “Look”

- Drowning is called the “Silent Killer”
- Vertical in water, head back, arms out, working to keep head out of water
- Show video clip of drowning position

Ways to Decrease Swim Drownings in Open Water

- Education - Teach Basic Water Safety Concepts
- Teach “Reach, Throw, Row- Don't Go!”
- Natural Hazards – Lake level Changes at BN/SH, Flash Flooding
- Watch Your Children – Stay within an arm's reach
- Swim with a Group – (Battle Buddy = Swim Buddy)
- Forget the Booze
- Respect the Water – it is very unforgiving. In Texas it changes fast

Boating Safety – 45 minute session with PowerPoint

Know Before you GO! Take a Boating Course

- BLORA Courses
- Tx Parks and Wildlife on-line
- Tx Parks and Wildlife instructor led classes – Check web site for classes
- US Coast Guard Aux and US Power Squadron

Single best way to prevent boating fatalities is to Wear a PFD.

PFDs – Personal Flotation Devices (aka Life Jackets)

- Type I, Offshore Life Jacket - Extra Flotation, Will turn an unconscious person face up in the water, For use offshore when rescue may be a long time coming
- Type II, Nearshore Life Jacket – Cheapest and most common, Will turn an unconscious person face up, Uncomfortable so rarely not worn by boaters
- Type III, Flotation Aid – More comfortable, Will NOT always turn an unconscious person face up in the water, Used with specific water sports like fishing, skiing, paddling, etc
- Type IV, Throwable PFD – Ring Buoy or Seat Cushion, good to have a line attaché to them to retrieve or re-throw, Must have one on board any vessel over 16 feet long
- Type V, Hybrids – Kinds that don't fit categories, included inflatable PFDs and some Work vest PFDs

PFD Information

- Number Required – One for each person on board,
- They must be easily accessible – not locked in storage compartments,
- Must be in servicable condition,
- Must be the right size for passengers on board – Sizes based on weight – Over 90 pounds is adult size
- New styles more comfortable and no longer “geeky”
- Inflatables are now USCG approved

Required Safety Equipment on Board

- PFD's
- Fire Extinguishers
- Boat Identification/Registration, Certificate of Numbers
- Sound Producing Device
- Proper Ventilation (Inboards and Inboard/Outboards)
- Navigation lights if out at night
- LIVES acronym

Best Practices on Board

- Basic Boating Equipment - Basic Tools, Oar or Paddle, Anchor, Boat Ladder
- Be prepared for unexpected- Flashlight, First Aid Equipment, Maps
- Let someone Know where you are – File a Float Plan
- Working Cell Phone
- Know the Rules of the Roads

- Easy on the Suds

Causes of Boating Fatalities

- Falling Overboard – ie, Standing up to Urinate
- Collisions
- Boat Capsizing
- Alcohol Use
- Exposure – Hypothermia
- Sudden Weather Changes
- Trying to Swim to Shore
- Basically – Poor Decisions or a combination of them

Discuss January Boating Fatality – What Caused it.

Two recently re-deployed soldiers died while fishing at Stillhouse Hollow Lake. They were in a small overload boat when a winter storm quickly blew in. Their boat sank and both men were drowned.

- **Inexperienced Boaters**
- **Life Jackets Not Worn – One was Non-Swimmer**
- **Did Not Heed Weather Warning**
- **Flotation of Boat had Been Altered**
- **Small Boat was modified and overloaded**
- **Didn't Realize Danger of Hypothermia**

Personal Watercraft (PWC) – A Whole New Ball Game

- Speed – Easily up to 60 mph
- Does not steer when not under power
- Extra Rules
 - Must Wear PFD
 - Can not ride more than no-wake speed within structures, other boats or shoreline

Summary

- Know Before You Go! – You Train as a Soldier – You Should Train as a Boater
- Wear A PFD – You Gear up for Battle – You should Gear up for Boating
- Think – Don't Sink!

Handouts for Trainers:

Texas Water Safety Act Digest,
COE Adult Boating Pamphlet

Web sites for more info:

National Safe Boating Council - <http://www.safeboatingcouncil.org/>

National Water Safety Congress- <http://www.watersafetycongress.org/>

US Army Corps of Engineers National Water Safety Program- <http://watersafety.usace.army.mil/>

National Safety Council - <http://www.nsc.org/library/facts/drown.htm>

American Red Cross Water Safety - http://www.redcross.org/article/0,1072,0_312_6726,00.html

More Water Safety Lesson Plans-

<http://corpslakes.usace.army.mil/employees/watersafety/pdfs/resguide.pdf>

Water Safety Lesson Plans

If you want to get your water safety students more involved these are some tried and proven water safety activities for adult audiences. Each is on one sheet of paper and explains the theme of the lesson, the instructions and the materials need.

One next pages contain the following water safety education activites:

1. Cry for Help Lesson Plan – Drowning, the Silent Killer
2. Rescuing a Person in Distress Lesson Plan - Reach, Throw, Row – Don't Go!
3. Common Causes of Drowning Lesson Plan - The Swimming Top Ten
4. "Captain Alcohol" Lesson Plan - Showing Effects of Alcohol on Motor Skills
5. "Cold Hand Luke" Lesson Plan - Showing Hypothermia's Effects on Muscles
6. "Sink Fast" Lesson Plan - Active Game to show how hard it is to put on a Life Jacket after an accident

Cry for Help – Lesson Plan
Drowning – The Silent Killer

Topic/Subject: Demonstration of what a drowning person usually looks like

Target Audience: Soldiers

Time: 10-15 Minutes

Equipment Needed: Yardstick or pole, string, \$20 bill or small snicker bar

Goal: Audience members will realize a drowning person cannot call for help

Objective: Participants will be able to identify the four signs of a drowning victim.

Description:

1. Chose a willing or unwilling volunteer from the audience. They stronger and more fit the better.
2. Have the volunteer simulate the “instinctive drowning response”:
 - Extend arms laterally or to the front pushing down on imaginary “water”
 - Extend head and neck back so “victim” is looking up in the air
 - Mouth open as he is trying to grasp for air
3. Have another person hang a \$20 bill from a string and a yardstick or pole. Have the person hold the item a foot or two above the “victim’s” mouth (just above of jumping reach).
4. Tell the victim that the surface of the water is right below his mouth (with his head tilted back). So as he is holding is arms out, making small pushing down motions with his arms and holding head back and his mouth open he should try to grab the prize (the air) with his mouth. He can not use his arms to grab the prize or he will sink underwater – his arms are busy holding him just at the water’s surface.
5. AT THE SAME TIME HE IS DOING THAT, ask the “victim” try to yell “Help” . Remember if he breathes in while he is on the floor he will suck in “water”.
6. If done properly, the volunteer will only register a weak call, barely audible to someone in the back of the room. If victim “cheats” and grabs the prize with his hands he has to do push-ups.
7. Explain to the group that it is practically impossible for a true drowning victim to shout for help because there is not sufficient air supply to do so.

SUMMARY:

- A. Review the four signs of Drowning: 1. Head Back, 2. Mouth Open, 3. Arms moving up and down slapping the water or making small circles, 4. No Sound
- B. Very important to watch your swim buddies and children for these signs while swimming
- C. Next Week – How to Rescue Someone when you See these Signs (Reach, Throw Row – Don’t Go Safety Session)

Reach, Throw, Row – Don't Go! – Lesson Plan
Rescuing a Person in Distress

Topic/Subject: Safe methods of water rescue

Target Audience: Soldiers

Time: 15-20 Minutes

Equipment Needed: None. Optional: A picture of a typical beach scene.

Goal: Teach safe methods for people to help other swimmers in distress without endangering themselves.

Objectives: 1. Soldiers will be able to identify methods they can use to safely rescue someone. 2. The soldiers should realize they should not rescue a drowning victim by swimming to them and getting within their reach unless they have a flotation device or aid or unless they are trained in life guarding rescue procedures.

Description:

1. Explain that drowning is the second leading cause of accidental death for people 0-44 years of age. Most Victims know how to swim. People who cannot swim usually stay out of the water.
2. Optional: Have a medium size person be a drowning "victim". Have him kneel on the floor and tell them to imagine the water surface right at their nose level. His head should be back and he should be grasping for air. Have another person, who is somewhat bigger than the victim, walk on their knees toward them in attempt to help the victim.
3. Tell the victim (without the class hearing if possible) to grab onto his rescuer and try to push him down under the imaginary water. Remember, the victim is trying his best to get his head high above the water so he can breathe. He will "climb" up the rescuer to get air and push the rescuer under. This will show how dangerous it is to attempt to rescues a person without lifeguard rescue training.
4. Inform soldiers that a significant number of people drown within ten feet of safety. People fall out of boats, step off a steep drop-off, fall off flotation toys like inner tubes, etc. To help these people, a person can REACH if they are close. If they are farther one can THROW a floatable object to them. If there is a boater nearby you can ask them to ROW to them. You should not GO to them unless you are trained or unless you take along a floatable object to toss to them. The victim will grab onto the floatable object and not the rescuer.
5. Tell students to imagine a beach scene at their favorite beach. (Or have them look at the beach picture if you use one.) Imagine they see a person in distress in deep water a few feet away. Ask them to name items they could use to REACH of r a victim in distress. Answers include: long towel, styrofoam noodle toy, fishing pole, long stick, etc. Ask them what items they could use to throw to a victim. Answers include: an ice chest, a 3 liter soda bottle, some lake toys, etc. You remind them to look for a canoer or jet-skier to help the person. If they elect to GO for the person ask them what they could use to put between them and the victim. Answers include: An inner tuber, an air mattress, a spare tire and of course a life jacket if they have some nearby.

SUMMARY:

- A. Several double and triple drownings have occurred because a would-be rescuer entered the water to rescue another person. That type of rescue should only be done by trained lifeguards. At Somerville Lake in 2001, 5 members of one family drowned by attempting rescues of two children, including the 2 kids.
- B. Jumping into the water without thinking ahead is only done in the movies and TV. In real life double drownings are often the result.

C. REMEMBER: REACH, THROW, ROW, Don't GO!

Sample picture to use for Reach, Throw, Row – Don't Go



Things in the picture you could use to help someone in distress –

- inflatable toy inner tube on ground
- Styrofoam “noodle” in water with boy,
- Long beach towels
- Life jacket (take off little boy on shore and throw to victim)
- Holler at nearby boaters to help

Common Causes of Drowning Lesson Plan
The Swimming Top Ten:

Topic/Subject: Common Causes of Swimming Fatalities

Target Audience: Soldiers

Time: 15-20 Minutes

Equipment Needed: None. Optional:

Goal: Teach causes of swimming fatalities of adults and children so students can avoid them.

Objectives: 1. Soldiers will be able to identify causes of drowning and ways to avoid those casues.

Description:

The following are the top ten reasons people drown in Belton and Stillhouse Hollow Lakes.

Take each drowning cause one at a time. Discuss it and ask if anyone has seen it or known it to happen to someone. Then explain the ways to avoid that risk. Start from Number 10 and go up in sequence from ten to one.

1. Not admitting you are a poor swimmer (to yourself or to your group)
Remedy – Don't have false machocismo, Know your limits, not everyone is a good swimmer. Tell your friends you don't want to swim out to the island, tell a friend boat operator you would like to wear a life jacket, By one of your own and bring it along to wear on outings.
2. Alcohol or Drug Use
Remedy – Drink responsibly and don't do illegal drugs
3. Trying to Rescue Someone Else
Remedy – Remember – Reach, Throw, Row, Don't go! If you do go have a floating object between you and the victim.
4. Jumping Off Cliffs or Bridges or other High Risk Behaviors
Remedy – Know your "Stupid Line" that you won't cross no matter what your so –called friends are trying to get you to do.
5. Wading off Steep Drop-off
Remedy – Know the type of water you are wading in. Poor swimmers should wear life jackets when wading or surf fishing
6. Swimming after wind-blown objects
Remedy – Don't swim after them. They are usually valueless toys. Ask a boater to pick it up for you or watch wear it blows and drive to it on the opposite shore where it ends up.
7. Falling in Without intending to Swim Wade/drop-off
Remedy – Don't stand up in boats, no roughhousing on docks or marina walkways. When walking on steep banks watch your footing and stay sober.
8. Cold Water – Hypothermia decreases physical ability
Remedy know that you have only a few minutes in cool water before you muscles won't work. Don't try to swim in cool water. Always stay on a capsized boat and do not try to swim to a nearby shoreline.
9. Falling Off Flotation TOYS
Remedy – If you or a child are on inner tubes are air mattress or small rafts, wear a life jacket if you will be drifting into deep water.
10. Over Estimating One's Ability
Remedy – Don't be Mr. Macho, distances on water are farther than they look.

“Captain Alcohol” Lesson Plan for Showing Effects of Alcohol on Motor Skills

TOPIC/SUBJECT: Alcohol and water safety

TARGET AUDIENCE/AGE LEVEL: 3rd Grade – Adult

TIME: Approximately 20 minutes

THEME: Alcohol and boating can be a deadly combination.

GOAL/PURPOSE: Members of the audience will understand that they should never consume alcoholic beverages or do drugs when partaking in water-based recreational activities.

OBJECTIVE(S): To make the visitor aware of the fact that alcohol can affect their thought process, reaction time, and coordination.

DESCRIPTION:

- A. Remind the audience that alcohol is involved in at least half of the boating related fatalities nationally.
- B. Tell the audience that alcohol consumption slows down reaction time, affects vision and dexterity, and dulls the thinking process. Also remind the audience of any statistics on the local level that relates to the use of alcohol and drowning.
- C. Set up 1-2 chairs representing the boat.
- D. Select a good-natured volunteer from the audience. It is recommended that you request a volunteer that does not have any health problems such as asthma, as they will be portraying several simulated effects of drinking too much alcohol. You could also select a second volunteer who will remain sober throughout the demonstration. They can assist you with the props for the other person.
- E. Hand the one volunteer a can of beer (soda can marked as beer), and have them sit down in the “boat.” Start explaining the effects that alcohol has on a person as they continue to “drink.”
- F. Place a hat on the volunteer’s head to represent the effect on the thought process/judgment. The person no longer has the ability to think clearly, and may take chances they would not take when sober. Anticipation, sense of judgment, and caution slowly slip away.
- G. Next, place a pair of sunglasses, tinted safety goggles, goggles, or a diver’s mask over the volunteer’s eyes. Explain that alcohol consumption can affect a person’s peripheral vision, which leads to tunnel vision.
- H. If using a diver’s mask, place a piece of clear lamination over the front of the mask. Then mark the lamination with red and green magic markers. This is done to represent how alcohol can actually take away the person’s ability to clearly distinguish colors. The colors red and green are very important while boating, as they are on the highways. When boating at night or during times of reduced visibility, the running lights on the boat should be turned on. There is a red and green light on the front or bow of a boat. The red light is on the port or left side of the boat, and the green light is on the right or starboard side of the boat. These lights tell you from which direction another boat may be approaching your boat. This is very important to know, so you can avoid collisions. At night, red can easily be mistaken for green when under the influence of alcohol.
- I. Place headphones or earmuffs over the volunteer’s ears, thus restricting his or her hearing ability. When under the influence of alcohol, a person may not hear what is going on around them, because they are not paying attention. A person’s attention span is reduced while under the influence of alcohol.
- J. Next place a pair of gloves on the volunteer’s hands to represent the loss of dexterity.
- K. This is followed with weights that are placed on the volunteer’s wrists to show not only loss of coordination or dexterity, but also how one’s movements and reactions are slowed down; they begin to feel tired.
- L. This part is optional. Assist the person that is simulating the effects of alcohol in putting on a pair of coveralls and a pair of boots (optional), which represents how the consumption of alcohol can affect coordination. When coordination suffers, the brain’s commands cannot be properly executed.
- M. At this point, explain once again that the various items have been placed on the volunteer to demonstrate through a step-by-step process how alcohol can affect a person as he or she continues to drink. The combination of the sun, wind, water, and motion of the boat intensifies the effects of alcohol. Place two life jackets on the floor near the volunteers. Create a story of how they ended up in the water, and instruct the volunteers to put their life jackets on. Give the volunteers sixty seconds to do this. Very rarely does the person simulating the effects of alcohol get his or her life jacket on correctly.
- N. Explain that when a person falls into the water they become disoriented and if they are under the influence of alcohol or drugs this could be intensified. They may actually swim towards the bottom of the body of water, instead of towards the top and possible safety. Explain that generally it only takes 60 seconds for an adult to drown whether they are under the influence of alcohol or not.
- O. Compare the two volunteers to one another. How much time did it take each one of them to put on their life jacket? If this was a real boating accident what’s the possibility of them surviving? You could also discuss briefly the importance of wearing a life jacket while boating. Involve the audience in this discussion.

SUGGESTED MATERIALS & EQUIPMENT:

Two chairs, Funny hat

Pair of sunglasses (goggles, safety glasses, or diving mask will also work)

Gloves, Wrist weights, 2 life jackets

Optional: A pair of coveralls and boots

“Cold Hand Luke”
Lesson Plan for Showing Hypothermia Results

TOPIC/SUBJECT: Dangers of cold water

TARGET AUDIENCE/AGE LEVEL: 3rd-6th Grades

TIME: 10 minutes

THEME: Cold water can kill you faster than you may realize

GOAL/PURPOSE: To make the students aware of the dangers of cold water.

OBJECTIVE(S):

- A. To teach the audience what to do if they find themselves in a cold water situation.
- B. Create an awareness of just how important it is to wear a life jacket or personal flotation device (PFD) when around cold water, but that alone will not save your life.
- C. The audience will be able to name two methods of conserving body heat when in a cold water situation.

DESCRIPTION:

- A. Fill a large bucket or cooler with water and ice. Place the bucket or cooler on a table.
- B. Remind the audience that cold water conducts heat away from the body 25-30 times faster than air at the same temperature.
- C. Stearns Manufacturing Company “rule of fifty” states that “in water of 50 degrees Fahrenheit, you have a 50-50 chance of surviving beyond 50 minutes without a protective life jacket or PFD.
- D. Remind the audience that movement, such as swimming, will cause their body to cool down faster. The movement is causing the victim’s heart to work faster in order to pump blood into the extremities. This causes the internal organs to cool down, which speeds up the effects of hypothermia. It is best to stay with the boat.
- E. Tell the audience about the H.E.L.P. (Heat Escape Lessening Posture) and huddle positions that can be used to conserve body heat.
- F. Drop loose change into the bucket of water.
- G. Select a volunteer from the audience to participate in the activity. This activity is not recommended for people with heart problems.
- H. Ask the volunteer to remove any jewelry he or she is wearing on their hands or wrists. The volunteer will then place either one of their hand(s) in the water. Explain to the volunteer that they have to pick up one coin at a time and place it on the table. They should try and get out as many coins as they can in one minute. Ask them what their hand feels like at 15, 30, 45, and 60 seconds. Explain to them that they can stop at any time they choose to before the minute is up.
- I. You can point out the decreased dexterity, skin color, numbness, and weak pulse of the exposed hand and arm caused by only a short time the in cold water. Ask the volunteer what they think it would feel like if their entire body was emerged in the cold water.
- J. Point out how difficult it would be to try to put on a life jacket if your entire body was immersed in water this cold. It would be nearly impossible due to the loss of dexterity, among other things.
- K. If you have time have other volunteers try this activity.
- L. While the volunteers are participating in the activity explain what hypothermia is and what the early warning signs are. Explain that if a person doesn’t notice the early warning signs and doesn’t get help it could lead to unconsciousness and even death.

SUGGESTED MATERIALS & EQUIPMENT: Bucket or cooler, ice, coins, towel, and table.

"Sink Fast"

Active Game to show how hard it is to put on a Life Jacket after an accident

TOPIC/SUBJECT: Boating safety

TARGET AUDIENCE: 3rd Grade – Adult

TIME: 15-20 minutes

THEME: You must wear your life jacket while participating in water recreation activities in order for it to save your life.

GOAL/PURPOSE: Participants will realize that a life jacket is useless, unless it is worn.

OBJECTIVE(S):

A. Participants will be able to identify a US Coast Guard approved, proper fitting, and good/serviceable condition life jacket.

B. Participants will be motivated to wear their life jacket.

DESCRIPTION:

A. Set up 4-8 chairs (depending upon the size of your imaginary boat and the amount of volunteers you wish to involve). Place a different type and size life jacket and flotation aid under each chair. A good assortment might include a large life jacket, a small child's life jacket, a ripped life jacket, a ski belt, a life jacket in a plastic wrapper, water wings, or other types of water toys, and nothing at all under one chair.

B. Select enough volunteers to be boat passengers, and have them sit in the "boat." Remember to have a small person sit where the large life jacket is, and the opposite at the small life jacket chair. You can pass out additional props such as sunglasses, cooler, etc. to the boat passengers.

C. In order to involve the additional members of the audience, you can select three groups of volunteers to:

1. Represent the wind. The volunteers will surround the boat and make sounds associated with wind and water.

2. Represent an unseen obstruction (rock, tree stump, etc.). The volunteers will rush out and say "kaboom," indicating that the boat hit something and is sinking.

3. Represent the water. Armed with spray bottles, they will rush out and spray the boating passengers when cued to do so.

D. After all of the volunteers are in place, begin your narration of their boat excursion. Their excursion quickly goes from a fun day on the lake to a frightening experience. They are speeding across the lake, as they have been all day. Other boaters are rather upset with them because they came close to their boats, causing various problems (swamped canoe, etc.). At one point the boat operator, who is showing off to his/her friends, goes real close to some swimmers, spraying them with the boat wake. But the skipper is not watching where he/she is going and hits a tree stump. The boat quickly takes on water, and begins to sink. Passengers (volunteers) rush to put their life jackets on (allow about 30 seconds), before the boat sinks. Have the volunteers remain seated when they are putting their life jackets on so as to better simulate being in the water.

E. At the conclusion of the "boating excursion," ask the audience if they see anything wrong with the boaters and their life jackets. Discuss the problems and how they can be corrected. Do their life jackets fit correctly, are they in good condition, and are they actually considered life jackets? Stress that improper fitting life jackets, ripped life jackets, and life jackets that are left in the wrapper can be deadly.

F. You can possibly tie in statistics from your lake, community, or state that relate to fatalities or injuries that occurred because of failure to use life jackets. The majority of people who drown were not wearing a life jacket even though one was available. Also, it takes the average child 20 seconds and an average adult 60 seconds to drown.

SUGGESTED MATERIAL & EQUIPMENT: 4-8 chairs representing the boat, life jackets (large, small, ripped, and still in the wrapper), ski belt, water wings or inner tube, variety of props for "boating passengers" (sunglasses, sun tan lotion, fishing gear, etc.), and spray containers.