

## *Kids Don't Float* Cold Water Survival

Grade: Pre-Kindergarten through 2<sup>nd</sup> Time Requirement: 30 minutes

#### Program Overview:

This curriculum is based on the primary risk factors in recreational boating in Alaska, laying a foundation of boating safety. The concepts are aligned with Alaska's education and early development standards, and designed for the physical and psychological developmental levels commonly reached at this age. Cold Water Survival teaches the physiological effects of cold water immersion, how to select and the properly fit a life jacket, safe boating behaviors, and laws pertaining to life jacket use. Skill-based activities attach experiences to the safety concepts from this lesson. Our program's goal is to familiarize students with how to keep themselves safer when in and around Alaskan waters.

Instructor Note: The Office of Boating Safety tracks the number of participants in the *Kids Don't Float* program, Please contact the office after teaching this lesson. Thank you! Annie Grenier (<u>annie.grenier@alaska.gov</u>) (907) 269-6041

#### Goals:

- Participants will understand the effects of cold water immersion, the life jacket law in Alaska, and the importance of wearing a life jacket and practicing safe habits around the water, such as always having an observing supervising adult.
- Participants will try on at least one life jacket during the lesson.

#### **Essential Question:**

• Why is it important to wear a life jacket?

#### **Objectives:**

Participants will be able to:

- Demonstrate one way to signal for help in the water.
- State that it is the law that they must wear a life jacket.
- Demonstrate how to check the fit of a life jacket.
- Describe damage on a life jacket that would make it unserviceable.

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#### Physical Education Grades K-2:

E.4. Identify reasons for rules and procedures during physical activities (e.g., safety, equipment, directions).

E.5. Demonstrate respect for self and others during physical activities (e.g., taking turns, appropriate etiquette, and cooperation).

E.7. Describe appropriate reactions to threatening and/or emergency situations common to physical activity settings (e.g., bear or moose on playground).

E.8. Understand the importance of dressing appropriately for outdoor physical activity (e.g., layering clothing during winter, sunglasses, sunscreen).

E.9. Select appropriate safety equipment for specific physical activities (e.g., bike helmet, personal floating device).

#### Skills for a healthy life:

A.2. Understand how the human body is affected by behaviors related to eating habits, physical fitness, personal hygiene, harmful substances, safety, and environmental conditions.A.3. Understand and identify the causes, preventions, and treatments for diseases, disorders, injuries, and addictions.

A.6. Use knowledge and skills related to physical fitness, consumer health, independent living, and career choices to contribute to well-being.

B.1 Demonstrate an ability to make responsible decisions by discriminating among risks and by identifying consequences.

#### Materials:

As a resource, review the Prezi located online at: <u>https://prezi.com/bo\_8wuxvh1sb/kids-dont-float-l1/</u>

- *Kids Don't Float* teaching kit, which may be checked out from Resources (ASD) or request from Office of Boating Safety.
- KDF kits with bracelets, stickers, tattoos, whistles, pencils, and Pledge to Live cards.
- <u>Kids Don't Float Instructor Evaluation</u>

#### Introduction: Questions to ask the class (five minutes)

How do participants play on or around the water?

- Fishing, sightseeing paddling, tubing, subsistence activities such as hunting, gathering wood, berry picking. Outdoor activities are a great way to stay active and participate regularly in physical activity.
- Participants can achieve and maintain a health enhancing level of physical fitness, by boating, swimming, paddling and tubing on Alaska's waters.

#### Is water in Alaska warm or cold?

• Water in Alaska is cold all year, and cold water can be dangerous, **especially** if not wearing a life jacket.

What are some things that everyone can do to be safe on and around the water?

- Wear a life jacket! That is the best way to be safe around the water. Life jacket loaner boards are a place where anyone can borrow a life jacket. Twenty-six children to date have been saved by a *Kids Don't Float* loaner board life jacket.
- STEP onto a boat, never jump or leap.
- Keep three points of contact with the boat at all times when moving around.
- Balance the load in a boat by spreading out the weight.
- Keep weight low when moving and sitting in a boat.
- Walk on docks and around water, where surfaces can be slippery.

• Always be with a designated and responsible adult, never go near water alone.

#### The First Three Stages of Cold Water Immersion (15 minutes)

- I. Cold Shock Response: Ask if anyone has accidently fallen into cold water. If yes, ask the student to describe what happened to his or her breathing. When a person first falls into cold water, he or she may gasp, hyperventilate, or experience dizziness and changes in heart rate, blood pressure.
  - i. Within the first three minutes, wait for the effects of the cold shock response to subside.

Ask: How do you think a life jacket can help during the first stage of cold water immersion?

- **II. Cold Incapacitation**: The second stage of cold water immersion is Cold Incapacitation. This means that it will become hard to move your arms and legs, and they may feel numb. This makes it difficult to swim or help oneself. Ask participants if they have gone outside in the winter without gloves or mittens. What happened to the feeling in their fingers? In cold water, it does not take very long for the arms, legs, and fingers to get cold and not work as well. There are some important things that can be done before loss of feeling occurs.
  - i. Tighten life jacket.
  - ii. Get help, blow a whistle, and wave both arms. This is why it is important to have a responsible adult close by when on or near the water.
  - iii. Try to get out of the water. Grab onto something nearby and get out of the water as much as possible.

Ask participants: What can be worn to help keep someone's head above the water while doing these important things? *A life jacket* 

**III. Immersion Hypothermia:** The third stage of cold water immersion is hypothermia. Hypothermia is when a person's body core starts getting cold. After about thirty minutes or more, the body core temperature begins to drop. Stay positive!

Ask participants: What should someone wear at all times when on or near the water? A life jacket should be worn when on or near the water.

## Optional Activity: Chill Out (See Appendix A)

#### Life jackets and the life jacket law (ten minutes)

Ask participants if they know who has to wear a life jacket according to the law.

EVERYONE UNDER THE AGE OF 13 IS REQUIRED TO WEAR A U.S. COAST GUARD APPROVED LIFE JACKET WHEN IN AN OPEN BOAT OR ON THE DECK OF A BOAT.

\* However, everyone, even excellent swimmers and experienced boaters <u>should</u> always wear a life jacket, especially in an open boat.

#### How to choose a life jacket

Locate the label on the inside of the life jacket. This has information about the size, whether the life jacket is approved by the U.S. Coast Guard, what uses the life jacket is intended for, and other important details.

Demonstrate proper fit by putting a life jacket on and tightening the straps. Test fit by using both thumbs to pull up at the shoulder. Shoulder straps should not rise above the ears. Emphasize that if a life jacket is loose or too big, it can slip over the person's head and make breathing more difficult. Demonstrate the differences in size by comparing an adult's life jacket to a child's life jacket.

Another part of choosing a life jacket is making sure that it is in <u>serviceable condition</u>. This means that there are no rips or holes; flotation material is not hardened or showing; and that straps, buckles, and zippers all work. Compare a serviceable and non-serviceable life jacket (if available). The game "I Spy" is a good way to identify the differences between the two life jackets. Participants should know that if they see a non-serviceable life jacket on a Kids Don't Float loaner board, they should tell an adult, who will dispose of it properly.

#### Off-Shore Life Jacket (Type I)



#### How to identify:

- A. Locate the U.S. Coast Guard approval number
- B. Read the label for specific instructions and intended use
- C. Bright orange color: highly visible with reflective tape
- D. Normally has the most flotation material which means it floats the wearer highest in the water

#### Function:

- A. Turns most unconscious wearers face-up in water
- B. Recommended to be used in rough, open or remote waters
- C. Floats the wearer highest in the water
- D. Not appropriate for impact activities such as water skiing, personal watercraft, or tow sports (i.e. tubing)

Near- Shore Life Jacket (Type II)

#### How to identify:

- A. Locate the U.S. Coast Guard approval number
- B. Bright orange or other colors
- C. Read the label for specific instructions and intended use

#### Function:

A. Intended for inland waters, calm, and areas where there is a good chance of quick rescue

B. Turns some unconscious wearers face up in the water. Not appropriate for impact activities (water skiing, personal watercraft, and tow sports such as tubing)

Buoyancy- Aids: Vests, Float Coats (Type III)





#### How to identify:

- A. Locate the U.S Coast Guard approval number
- B. Wide range of sizes and colors available
- C. Most are very comfortable
- D. Read the label for specific instructions and intended use

#### **Function:**

Some styles are not designed for impact activities, read the label.

Optional Activity: Trying on Life Jackets (See Appendix B)

### The best life jacket is the one you wear!

#### Assessment Plan:

Skill check, participants can:

- Explain at least two survival strategies for cold water immersion.
- Describe one feature of an unserviceable life jacket.
- Demonstrate how to check a life jacket for proper fit.
- Name a responsible adult that can accompany them near water.

Prompts to check for understanding:

- What happens to a person's breathing when they fall in cold water?
- How can someone check to test if their life jacket fits?
- Who should wear a life jacket?
- Should you go near water alone? Who should go with you?



## KIDS DON'T FLOAT Cold Water Survival Course & Instructor Evaluation



Your Name:	Date of class:
School:	Grade:
# of Students:	Instructor's Name:
Did you find the presentation to be:Informative?Useful?Active?Fun?	If 'no' to any, please describe why not:
Did you find the length and content of the presentation to be age appropriate? If not, why?	
What was the <i>most</i> useful piece of information provided?	
Did the instructor cover all of the learning objectives?  Distinguish between risky and safe behavior while on or near the water  Describe three stages of cold water immersion  Explain 1-10-1 and how to survive a cold water immersion event  Describe how to choose a life jacket for its intended use  Locate manufacturers label on a life jacket; is life jacket U.S. Coast Guard approved?  Explain life jacket serviceability  Demonstrate how to wear a life jacket properly and how to check for proper fit Identify legal age requirement for life jacket use	
On a scale of 1 to 5 (1 = poor, 5 = excellent), please rate the instructor. Was instructor on time and prepared? Was instructor dressed professionally? Was the material presented in an understandable manner? Did the instructor demonstrate a thorough knowledge of the subject? Was student participation encouraged?	
What were the instructor's strong points?	
Are there any topics that you would like to see that were NOT covered? Any other comments or suggestions for the instructor or the program?	
Please submit completed form to annie.grenier@alaska.gov or fax to 269-8907.	

Alaska Office of Boating Safety APPENDIX A Kids Don't Float Classroom Activities

# Chill Out!

**Purpose:** To demonstrate the physical effects of cold water on the body, loss of fine motor skills, and numbness in fingers.

#### Materials:

- A bucket or a clean container
- A bag of ice or enough ice/snow to fill the container
- Hand towel or paper towels for drying hands
- Life jackets

#### **Objectives:**

Experience what cold water feels like in a safe, controlled environment.

Experience how cold water affects dexterity.

#### Alaska State Standards:

Physical Education Grades K-2:

E.7. Describe appropriate reactions to threatening and/or emergency situations common to physical activity settings (e.g., bear or moose on playground).

E.9. Select appropriate safety equipment for specific physical activities (e.g., bike helmet, personal floating device).

WARNING: Some people have certain health risks related to this activity; ask participants if anyone has a health condition related to cold prior to beginning this activity. Please do not make this a mandatory activity. Monitor length of time in the water and excuse those who demonstrate discomfort.

#### Procedure:

- 1. Put ice or clean snow in the bucket or container and fill <sup>3</sup>/<sub>4</sub> full with cold water
- 2. Gather participants around the bucket and have them form two or three lines
- 3. Have the participants take turns putting their hands in the ice water
- 4. Have them put on the life jacket and fasten the buckles as quickly as possible
  \*\*Two to three participants can do this activity at a time

#### Discussion points:

1. What is the first reaction when a person's arm enters the water?

Cold shock Response. The gasp may not be as pronounced because it is just part of the body instead of complete immersion.

## 2. How does the person's arm feel after a few seconds of being in the water?

Loss of feeling in fingers makes it hard to put on a life jacket in the water. This is one important reason why participants should wear a life jacket at all times.

## 3. Would it be difficult to buckle buckles, zip zippers, or pull straps on the life jacket when in cold water?

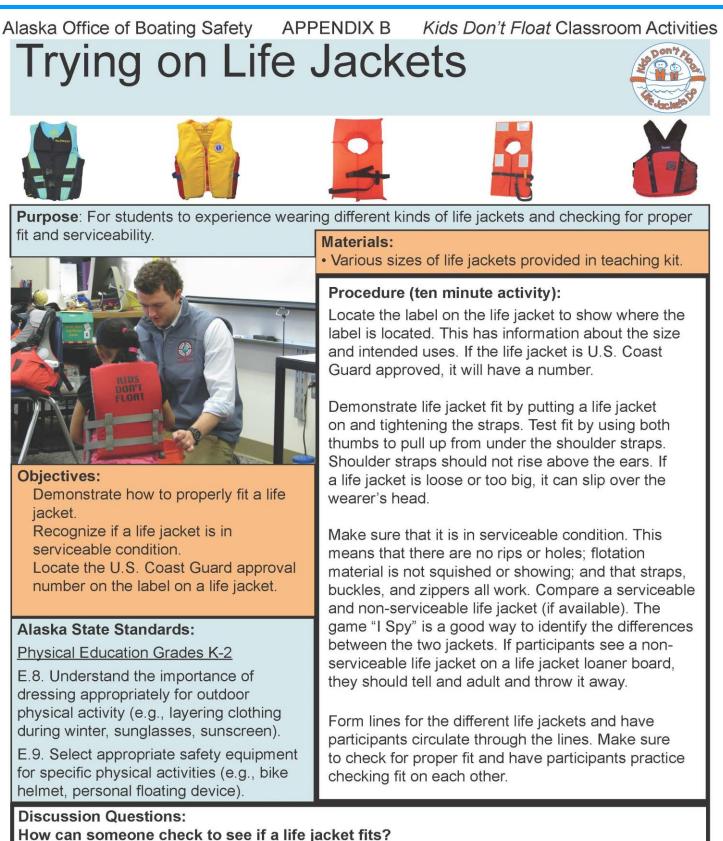
Yes! During the second stage of cold water immersion, blood flow is restricted as blood vessels constrict causing loss of feeling and dexterity.

#### 4. Was anyone wearing a sweatshirt or jacket when putting on the life jacket? Did that make it harder to get the life jacket snug?

It is common to wear warm clothes when boating in Alaska, so it is important to make sure that the life jacket fits over all of the layers being worn.

#### The best life jacket is the one you wear!





Pull up on the shoulder straps to see if the life jacket comes up over the wearer's ears. If so, tighten the life jacket or try a smaller size.

#### What is the best lift jacket?

The one that fits and the one you wear!

#### **References:**

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