


10-22-2018

## Understanding the Role of the Personal Floatation Device: Workshop

Patrick Buck Ph.D., REMT  
Cork (Ireland)

Follow this and additional works at: <https://scholarworks.bgsu.edu/ijare>

 Part of the [Exercise Physiology Commons](#), [Exercise Science Commons](#), [Health and Physical Education Commons](#), [Leisure Studies Commons](#), [Other Rehabilitation and Therapy Commons](#), [Outdoor Education Commons](#), [Recreation Business Commons](#), [Sports Management Commons](#), [Sports Sciences Commons](#), [Sports Studies Commons](#), and the [Tourism and Travel Commons](#)

---

### Recommended Citation

Buck, Patrick Ph.D., REMT (2018) "Understanding the Role of the Personal Floatation Device: Workshop," *International Journal of Aquatic Research and Education*: Vol. 11 : No. 2 , Article 1.

DOI: 10.25035/ijare.11.02.01

Available at: <https://scholarworks.bgsu.edu/ijare/vol11/iss2/1>

This Abstract is brought to you for free and open access by ScholarWorks@BGSU. It has been accepted for inclusion in International Journal of Aquatic Research and Education by an authorized editor of ScholarWorks@BGSU.

## Understanding the Role of the Personal Floatation Device: Workshop

Dr. Patrick Buck, PhD, REMT (Ireland)

[patrick@watersafety.eu](mailto:patrick@watersafety.eu)

### Introduction

No matter what the watersport or water-based activity, it is important that an appropriate lifejacket or Personal Flotation Device (PFD) is worn. It is also important that an individual understands why they are wearing one, what it does, how it operates, how to maintain it and why it is next to useless if it is just lying in the bottom of the boat. This hands-on workshop addressed the definitions and roles of flotation devices, sizing and fitting, deployment and use in the water, while giving participants in-water opportunities to experience different PFDs and lifesaving apparatuses in the water.

Water users frequently cite a number of reasons for not wearing PFDs (e.g., “I have one close by;” “I don’t need one because I am a good swimmer;” “It’s too hot and cumbersome and gets in the way;” “I’m okay. Nothing is going to happen to me.”). Obviously, the only guarantee of being safe is to wear a properly-fitted lifejacket or PFD when in, on, or around water. Terminology and definitions distinguishing between lifejackets, PFDs, and buoyancy aids often confuses people. It is generally accepted that both lifejackets and buoyancy aids fall under the PFD category. A lifejacket is designed as a life saving device which fully supports a person in the water while protecting the airway by turning the face up. By contrast, a buoyancy aid simply assists a person to float in the water either as part of instructional practices or in an emergency, but it is not a recognized or approved life saving device. Finally, a personal flotation device (PFD) often is synonymous with lifejacket, but due to its definition changes between countries, institutions, and even within organisations, a great deal of confusion exists.

During the workshop we reviewed four principal standards around the world that are relevant to lifejackets and PFDs. Any lifejacket or PFD should conform to one of these standards or not be used.

**US Standards.** US Coast Guard Approved (buoyancy measured in US pounds). USCGA standards determine five categories of PFDs ranging from Type I (use in rough/remote waters and required on ferries and commercial vessels to Type V (special use such as kayaking or water skiing).

**International Standards.** International Organization for Standardization (ISO 12402) is a worldwide federation of national standards bodies which has established recognized standards for life jackets. Compliant lifejackets meeting these standards are marked with ‘ISO’ plus the flotation type. ISO compliant does not necessarily make the vest USCG approved.

**European Standards.** CE standards have four categories based on buoyancy measured in Newtons as determined by European Standards (EN) and are recognized by the 34-member European Union and by the European Free Trade Association. Compliant vests are marked with ‘CE’ and the flotation type. CE compliant also does not necessarily make the vest USCG approved.

**Commercial Standards.** The International Convention for Safety of Life at Sea (SOLAS) resulted from an international maritime treaty that required participating countries with ships registered in their country to comply with minimum safety standards in construction, equipment, and operation. SOLAS compliance does not make PFDs USCG approved, although lifejackets can be both SOLAS compliant and USCG-approved. SOLAS Type I life jackets generally provide up to 35 pounds (155 Newtons) of flotation and are required to have a safety whistle, hauling in/up strap for recovering wearers, reflective tape, and an attachment line for joining to others in the water.

### Fitting Lifejackets and PFDs

During the workshop, we reviewed how to select the correct and appropriate PFD or lifejacket and how to fit them appropriately while trying them out and using them in the water.

### Adults

For adults, chest size, not waist or weight determine the PFD size needed. Five steps were identified in the workshop for appropriately fitting an adult PFD and several gender- and activity-specific tips were provided.

### Children

For children, weight determines the size, not chest circumference. Children's lifejackets are labeled as appropriate for an infant (8–30lbs), child (30–50lbs) or youth (50-90lbs).



Dr. Patrick Buck Ph.D., REMT is a marine biologist, Remote EMT, and marine guide. He has a deep interest in wilderness and austere survival and currently is researching the design of modified PFD's to prolong life in cold water. Patrick lectures on the effects of cold water immersion and drowning to various NGO's and Government departments and in 2015 published *A Field Guide for the Treatment of Drowning and Cold Water Immersion Incidents*. He lives in Cork, Ireland, and regularly paddles his surf ski in Roaring Water Bay.

