

WA State Boating PFD Use Report: Summary of Findings and Recommendations

Summary of PFD Use in Washington State

The following is a summary of observations of the Washington State 2010 PFD Observations:

Children 12 and under had the highest rate of PFD use while adults had the lowest rate of PFD use. 89% of children age 0-5 and 80% of children age 6-12 were observed wearing PFDs. PFD use decreased to 50% among age 13-17. PFD use decreased again for people age 18 and over. 22% of people age 18-64 wore PFDs and 18% of people age 65 and over wore PFDs. Compared to adults, children age 12 and under were 4 times more likely to wear PFDs than adults and youth age 13-17 were 2 times more likely to wear PFDs than adults.

PWC and kayak occupants had the highest rate of PFD use while motor boat occupants had the lowest rate of PFD use. 97% of PWC and 80% of kayak occupants wore PFDs while 21% of motor boat occupants wore PFDs. PWC occupants were 5 times more likely to wear a PFD than motor boat occupants and kayak occupants were almost 5 times more likely to wear a PFD than motor boat occupants.

PFD use was low among people who were swimming off their boats. 50% of boaters who were swimming off their boats wore a PFD. Non-PFD use while swimming off a boat presents a risk. The majority of fatal drowning occur while swimming in lakes or rivers. The depth of water, water temperature, distance from shore, and difficulties climbing back into a boat can put a boater at risk for drowning if they tire or the boat moves locations.

Children and youth fisherpersons had the highest rate of PFD use while adult fisherpersons had the lowest rate of PFD use compared to all children, youth, and adults. Children and youth age 0-17 were more likely to wear PFDs than all children. 93% of children age 6-12 who were fishing wore a PFD compared to 80% of all children the same age. 78% of youth age 13-17 who were fishing wore a PFD compared to 50% of all youth. 22% of adults age 18-64 who were fishing or intending to fish wore a PFD compared to 30% of all adults age 18-64. Results may not be representative of fisherpersons because observations were conducted during a low fishing activity period.

Children and youth were more likely to wear a PFD if any adult in the boat was wearing a PFD. 95% of children less than 6 years old wore a PFD if an adult wore a PFD compared to 89% for all children less than 6 years. 93% of 6-12 year olds wore PFDs if an adult wore a PFD compared to 80% for all children 6-12 years old. 78% of 13-17 year olds wore a PFD if an adult was wearing a PFD compared to 50% for all youth.

PFD use was highest in groups that are legally mandated to wear PFDs. Water skiers, PWC users, and children <13 years old in boats under 19 feet are all required to wear PFDs by law. PFD use by water skiers was 93%, by PWC users 97%, and by children <13 years 82%. This suggests that PFD mandates work.

Several non-mandated boats, such as paddlers, had higher PFD use than other boats. More kayakers than canoers were observed wearing PFDs, a finding consistent with national studies.

Emerging water sports users represent a potential high risk group. Less than two thirds of paddle boarders were wearing PFDs. They were small in numbers but may be a group at risk as this sport gains in popularity.

Of the water conditions evaluated, PFD use was only higher in choppy water. Boaters may perceive waves as a higher risk for capsizing. The significantly lower use of PFDs during rainy weather suggests confounding factors exist. These results may reflect the activity and type of boaters who continued to boat in those conditions.

Inflatable PFD use was low. Inflatable PFDs represented 6% of all life jackets worn. Men age 18-64 had the highest use of inflatable PFDs. Men were 2 times more likely to wear inflatable PFDs than women. Men may be early adopters in wearing inflatable PFDs. Cost may be a large factor in inflatable ownership. The greater use by those on sailboats suggests that the sailing community has done more to promote the use of inflatables.

Youth PFD use and PFD use in smaller boats increased between 2000 and 2010. However, the age groups observed differed between 2000 and this observation period. The increase in PFD use may be due to several factors: a) youth and their families may have been influenced by the PFD law that has required preteen PFD use over the past decade; b) teens and their families may have grown up familiar and comfortable with and therefore familiar with PFD use; c) changes in PFD design may have made PFDs more attractive; d) efforts to increase statewide visibility and availability of PFDs through PFD loaner programs, manufacturer marketing; and e) continued efforts to increase parental awareness. Overall PFD use in smaller boats increased between 2000 and 2010 from 29 to 35%.

Recommendations for Increasing PFD Use in Washington State

Based on the 2010 PFD observation study results boating organizations and advocates may want to consider the following recommendations:

- ✓ **Improve enforcement of existing PFD mandate among 0-12 year olds.** PFD use in WA State was mandated in 1998 for children less than 13 years of age in boats under 19 feet in length. Although children less than 13 have high rates of PFD use, they had lower PFD use than PWC users and water skiers who are also mandated to wear PFDs. Greater enforcement of the existing mandate may increase PFD use among children age 0-12 as greater enforcement led to higher seatbelt use in Washington State.
- ✓ **Increase the PFD mandate to age 17.** The rate of PFD use decreased from 80% for age 6-12 to 50% for age 13-17. However, youth are at risk of drowning. From 2000-2009, all but one youth who drowned in boating accidents were not wearing PFDs. Education and social media about PFDs are important components of policy change.
- ✓ **Require PFDs for all boats under 18 feet and all paddle craft.** PFD use was between 23-57% for boats 18 feet and under, which is a concern. Most drownings occur in boats under 18 feet and in paddle craft. This is a nationally recognized problem. The National Boating Safety Advisory Council recommends that the US Coast Guard consider requiring PFD use while underway or riding in or upon PWC regardless of length, human powered vessels (e.g. canoes, kayaks, rowboats) regardless of length, any vessel < 18 feet, and any person towed while engaged in watersports. Washington State has an opportunity to educate policymakers, boaters and others in this proposed legislation and to pursue state requirements.
- ✓ **Encourage boaters to wear PFDs when they swim off the boat.** Swimming off a boat poses a risk due to distance from shore, water temperature, fatigue, and difficulty getting back into the boat. Their risk increases when they do not wear PFDs.

- ✓ **Advocate for PFD use among fisherpersons.** Fisherpersons have the lowest rate of PFD use. Show fisherpersons and motor boaters wearing PFDs at fishing shows, and boating shows and in publications, television, and other media outlets.
- ✓ **Encourage adults to wear PFDs when children and youth are in boats – “Protect the ones you love.”** There were great differences in PFD use between children and youth when at least one adult in a boat wore a PFD compared to when no adult wore a PFD in a boat. Role modeling is critical to child and youth PFD use. PFD use among age 13-17 was high when an adult wore a PFD compared to all youth age 13-17: 78% v 50%. These findings are consistent with adult bike helmet and seatbelt role modeling. Adult use of bike helmets and seatbelts have been shown to significantly increase use among children and youth. Including role modeling messages in PFD education and marketing will help promote increased PFD use. A policy requiring PFD use by adults when children and youth are in the boat would contribute to the safety of all boat occupants.
- ✓ **Advocate for PFD use in all water conditions.** PFD use was highest when the water was choppy. People may perceive a greater risk of drowning in choppy water. However, there is still a risk of drowning when the water is calm. Washington State waters are cold even in the summer when water may be calmer. Promotion of PFD use in all water conditions, especially calm water, may increase people’s awareness of their risk and improve PFD use.
- ✓ **Increase promotion of and education about Inflatable PFDs.** More promotion of and education about inflatable PFDs are needed to increase their use. Helping boaters find less expensive inflatable options is important. Fisherpersons and people in small motor boats who have low rates of PFD use may benefit from the promotion of inflatable PFDs. Inflatable PFDs can be promoted as a comfortable, easy-to-use option.
- ✓ **Conduct PFD observations and focus groups with fisherpersons and hunters.** A PFD observation of fishers and hunters can be conducted during high fishing season – Fall and early Spring – which may provide more information on PFD use among this group. Focus groups and surveys of fisherpersons and motor boaters would also be helpful in understanding PFD use differences and how to motivate fisherpersons to use PFDs.
- ✓ **Conduct focus groups and surveys with kayakers and canoeists to understand the differences in PFD use.** In national studies of kayakers and canoeists, kayakers have higher PFD rates and canoeists have higher drowning rates. These drowning rates may reflect differences in water experience and skills, however, more information is needed. Information gathered from focus group may help explain the differences in PFD use. This information can be used to develop strategies to increase PFD use among canoeists.
- ✓ **Continue surveillance for emerging water sport users.** PFD use was low among paddle boarders. This group may potentially be an at risk group.

To view the full report: <http://www.seattlechildrens.org/classes-community/community-programs/drowning-prevention/data/>

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