OVERVIEW

PFDs That Work

Researchers from the NIOSH Alaska Pacific Office asked commercial fishermen from 4 gear groups (crabbers, trawlers, longliners, gillnetters) to rate the comfort and acceptability of six modern personal flotation devices (PFDs). About 200 fishermen evaluated various PFDs for one month while working on deck so that wearable PFDs could be identified.[1]

Fishermen evaluated inflatable PFDs and foam PFDs that were either integrated into their rain gear or were worn in addition to raingear. Since deck work and fishing season varies for each gear group, fishermen had different preferences. Each gear group identified PFDs that are comfortable and easy to wear and are currently available for sale. The gear group specific results can be found at www.cdc.gov/niosh/topics/fishing .

Personal Flotation Devices Prevent Fishermen Deaths

The key to finding the proper PFD is to try on many to make sure they will work for the specific activities related to your type of fishing. Working on crowded decks and in close proximity to gear make it vitally important that a PFD not become a snagging hazard. Fishermen who work in colder weather may prefer a PFD with more foam padding for insulation against the weather.

Regatta Fishermen's Oilskins with Flotation

NIOSH researchers teach gillnet fishermen about their inflatable PFDs

Crab fishermen in Dutch Harbor try on two different inflatable PFDs

Mustang Inflatable Suspenders (MD3188)

Inflatable PFDs

- Slim, lighter weight
- Higher maintenance
- Must purchase re-arm kits
- Must be worn over rain gear
- Slightly more expensive

Stearns Foam Work Vest (I424)

Foam PFDs

- Thicker, sometimes heavier
- Low maintenance
- No accessories needed
- Can be worn under rain gear
- Typically lower cost

One thing to consider when choosing a PFD is the amount of care and maintenance they require. Manufacturers' recommendations must be followed to maintain the PFD. Depending on the type of inflation mechanism, inflatable vests must be checked every year to make sure the inflation mechanism is armed (no leaking CO_2 bottle, no degraded dissolvable tablet), and that there are no holes in the air bladder (checked by manually inflating the vest and re-folding it). Foam vests, however, only require an inspection of zippers, straps, and buckles, but will still float you if there are small punctures to the foam. Another thing to keep in mind is the availability of re-arming kits for the PFDs. Some remote locations may not have the specific kit for your PFD. It is best to buy an extra one or two before heading out for the season.

Inflatable PFDs require regular maintenance and you should practice rearming the inflation mechanism as well

Find a PFD that works for you! Check out the gear specific evaluations on the NIOSH website, visit your local marine safety trainer to see what varieties they have, ask around the dock to see what others are using. Fishery supply shops carry a variety of models and can order ones they may not have in stock. Check with your local retailer to see what they have and what they can special order.

Mustang PFD inflated

A PFD, dirty from regular usage on deck, may still be operable if properly maintained

Dungeness crab fisherman wearing the Regatta Fishermen's Oilskins with flotation

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DHHS (NIOSH) Publication Number: 2013-131, November 2012

[1] Lucas, D., Lincoln, J., Somervell, P., & Teske, T. (2012). Worker satisfaction with personal flotation devices (PFDs) in the fishing industry: Evaluations in actual use. Appl Ergon, 43, 747-752.

The use of trade names and commercial sources is for identification purposes only and does not imply endorsement by the National Institute for Occupational Safety and Health (NIOSH), the Centers for Disease Control and Prevention (CDC), or the U.S. Department of Health and Human Services (HHS) or imply that one product is preferred by NIOSH, CDC, or HHS over other products manufactured by other companies. The products identified in this brochure are based on the results of the study referenced below which was designed to identify barriers and objections to PFD use and highlight the PFD features preferred by study participants. Six PFD products of varying styles and features were evaluated by commercial fishermen from different vessel types.

CDC Workplace Safety and Health

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For more information on commercial fishing safety research at NIOSH visit:
www.cdc.gov/niosh/topics/fishing