



National  
Operational  
Guidance

## Control measure

**Personal protective equipment (PPE):  
Water rescue and flooding**



**NFCC**  
National Fire  
Chiefs Council

Developed and maintained by the NFCC

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### Control measure knowledge

Protecting rescuers when dealing with flooding and water rescue requires different clothing and accessories than protecting them during land-based rescues. When working in, on or near water personal protective equipment (PPE) suitable for the task and environment should be used.

A personal flotation device (PFD) should be compatible with any other PPE in use. There are two main categories of PFD, buoyancy aids and life jackets. Buoyancy aids are designed to allow wearers to swim and allow for other postural movements; they are suitable for use by trained responders during rescue but are not compatible for use with fire kit. Once saturated, the additional weight of fire kit will negate any buoyancy offered by buoyancy aids; they will also not assist in maintaining a clear airway. Life jackets, which offer a greater level of buoyancy and hold the wearer face up when immersed regardless of levels of consciousness, are more appropriate for working near water. Any life jackets used should provide enough buoyancy to keep an adult wearing structural fire kit afloat, considering the weight when saturated.

The risk of thermal injury during response to an incident involving water, including hyperthermia and hypothermia, should be considered when selecting appropriate PPE for responders. The choice of PPE and thermal layer should reflect the expected activities and environmental conditions. See National Operational Guidance: Operations – [Physiological stress](#).

### Working near a body of water

Firefighting helmets are not designed for submersion and may pose a risk of neck injury if accidental entry into water occurs. When working near water responders should consider the need to wear a helmet that is suitable for use near water, consider relaxing helmets or wearing them without fastening the chin strap. Any decision to change the standards of PPE in use should reflect the levels of risk presented by other hazards personnel may be exposed to.

### Working in or on water

Responders committing to water should have PPE specifically designed for expected activities considering the nature of deployment and the conditions present. For example, immersion in offshore waters may require greater thermal protection and the effects of salt water on equipment seals may need to be considered.

PPE selection for use in water should include footwear suitable for use on slippery surfaces.

Snag hazards should be removed from all PPE used in moving water.

Rescue buoyancy aids are designed to allow freedom of movement. They should include a quick release securing system designed for responder retrieval and provide suitable buoyancy for the conditions they will be used in. Information on buoyancy aid requirements can be found [here](#).

Any suit or buoyancy aid should be appropriate for the individual's height, weight and size to ensure the appropriate level of buoyancy. The use of dry suits or other watertight clothing may affect the performance of PFDs.

### **Working at night or with poor visibility**

If accidental entry into water occurs, it may be difficult to see or track personnel that are partially submerged. Fire and rescue services should consider some means of illuminating individuals who are working near, on or in water. Waterproof beacons, lights or other personal illumination devices should be attached to personnel so that they can be identified if accidental entry into water occurs. Lights attached to PFDs should be activated. Where possible they should correspond to colours used to identify levels of competence.

- Water rescue technicians and rescue boat operators: Red light
- Water rescue first responders: Yellow light
- Lines and throw line bags: Green light

### **Strategic actions**

Fire and rescue services should:

- Ensure PPE provided is fit for purpose and complies with current legislation
- Provide appropriate maintenance and care of water PPE

### **Tactical actions**

Incident commanders should:

- Ensure all personnel wear PPE according to service risk assessment and procedures for incidents near, on or in water



- Consider adequate means of identifying personnel during night operations or in poorly illuminated areas