

Required personal equipment	Importance for Safety
Appropriately fitting drysuit and warm underlayers	<p>A dry suit is the required exposure suit for cold-water diving as it provides sufficient thermal protection for prolonged diving activities in cold environments.</p> <p>A dry suit must be appropriately fitting, as there can be concerns for a dry suit that is either too tight (not enough air space) or too loose (too much air space). It is also imperative that the dry suit be 'leak tested' as leaking can occur through a) neck and wrist seals, valves and the zipper.</p> <p>It is also expected that warm underlayers, appropriate for the temperature of the water, are worn. This is necessary to prevent hypothermia while diving in cold-water.</p>
Boots	Boots are important for cold-water diving to ensure that divers can use their drysuit fins effectively. They are also helpful to maintain proper buoyancy.
Elapsed-time and depth indicator	An essential piece of safety equipment that allow divers to know their depth and bottom times while on a dive. This ensures that divers stay within the limits of their dive plan and prevents the risk of decompression illness as a result.
Face mask	Scuba masks are essential as they allow divers to see while underwater. They are foundational to ensure that divers can communicate with their buddies, observe their dive computers, and practice safe diving protocols.
Inflatable buoyancy control device (BCD)	A BCD is a critical piece of safety equipment as it allows divers to control and adjust their buoyancy while at the surface and underwater. A BCD must have the capability of being inflated both manually, through the inflator, as well as orally. It is important to ensure that a BCD has functioning dump valves to prevent overinflation incidents.
Neoprene gloves or a dry glove system	Gloves (either neoprene gloves or a dry-glove system) are required for cold-water diving to ensure thermal protection from cold ocean water while diving.
Neoprene hood	A neoprene hood is necessary for cold-water diving to provide sufficient thermal protection from cold ocean water.



Open-circuit demand regulator, cylinder and an alternate air source easily accessible	An open-circuit demand regulator and alternative air source are required for divers to breathe underwater during diving operations. They are important life-saving equipment and must be inspected yearly in accordance with the <a href="#">UVic Dive Safety Manual and the CAUS Standard of Practice for Scientific Diving</a> .
Submersible pressure gauge (SPG)	SPGs are essential for divers to monitor their air consumption while underwater. They are a critical piece of safety equipment for preventing out-of-air emergencies.
Suitable knife	Dive knives are important safety tools as they decrease the risk of entanglement, particularly when diving in areas with kelp or fishing line. A dive knife allows a diver the chance to free themselves (or their buddies) in the event of entanglement.
Swimming fins that are appropriate for use with drysuit boots	Fins must be compatible with drysuit boots in order to be appropriate for cold-water diving. They allow divers to swim effectively, efficiently, and with control.
Weight system with a quick-release system	A quick release weight system is a critical safety feature that allows a diver to ditch their weights quickly in an emergency, helping them to regain positive buoyancy and surface easily. They are also important to ensure that divers have enough negative buoyancy to compensate for the natural floatation of a drysuit and other neoprene equipment items.
Whistle or other audible signaling device	A whistle can be used to attract attention in the event that a diver at the surface needs help. They are inexpensive and provide an effective way to gain the attention of others.
<b>Recommended</b>	
Dive light	A dive light is required to ensure that divers have adequate visibility when operating in dark environments. They can help divers to identify landmarks underwater more easily and improve navigation. Dive lights may also be used for communication between divers.
Surface marker buoy	Surface marker buoys allow for boaters identify the location of divers, particularly while surfacing. They are also important for emergency situations as they quickly display the location of a diver at the surface.