

Personal Protective Equipment (PPE)

These notes are intended to provide a framework for a return to diving following easing of government restrictions as a result of the COVID-19 pandemic. This guidance is based on current knowledge and understanding of the risks associated with the outbreak and the current scientific evidence informing decisions by government and other relevant authorities. It is acknowledged that the evidence base and knowledge surrounding the outbreak is rapidly and continually evolving and so the guidance will be reviewed regularly and be subject to update and amendment as appropriate.

STATUS

Currently in the UK different criteria applies within each of the devolved administrations. Please refer to the [STATUS document](#).

Protecting others and reducing the demands on the NHS

Current advice on avoiding transmission of the virus can be found on the Government Website. <https://www.gov.uk/government/collections/coronavirus-covid-19-list-of-guidance>

The advice for anyone in any setting is to follow these main guidelines:

- The most common symptoms of coronavirus (COVID-19) are recent onset of a new continuous cough and/or high temperature. If you have these symptoms, however mild, stay at home and do not leave your house for 7 days from when your symptoms started (if you live alone), or 14 days (if you live with someone who has symptoms). You do not need to call NHS 111 to go into self-isolation. If your symptoms worsen during home isolation or are no better after 7 days, contact [NHS 111 online](#). If you have no internet access, you should call NHS 111. For a medical emergency dial 999.
- Wash your hands more often than usual, for 20 seconds using soap and hot water, particularly after coughing, sneezing and blowing your nose, or after being in public areas where other people are doing so. Use hand sanitiser if that's all you have access to.
- To reduce the spread of germs when you cough or sneeze, cover your mouth and nose with a tissue, or your sleeve (not your hands) if you don't have a tissue, and throw the tissue in a bin immediately. Then wash your hands or use a hand sanitising gel.
- Clean and disinfect regularly touched objects and surfaces using your regular cleaning products to reduce the risk of passing the infection on to other people.

Anyone displaying any symptoms should NOT engage in any activity outside the home.

Ensure you are not showing any symptoms of Coronavirus (temperature, cough, difficulty breathing, or loss of smell and/or taste).

Protecting ourselves and others

Personal protective equipment (PPE) does not replace the need for self-isolation, social distancing and good hand hygiene. As we return to diving there are going to be situations where it will be difficult to maintain 2m of social distancing. For example, in our club equipment store or boathouse. While it will be necessary to regulate the number of persons entering any area (to maintain social distancing) there will be occasions where, when moving heavy or bulky equipment for example, it is going to be hazardous to do so without assistance. In these situations face-coverings are recommended as a minimum. PPE will also be necessary where we are in contact with shared surfaces and where air movement might disperse droplets more widely.

Face-coverings

A face-covering is not the same as the surgical masks or respirators used as part of PPE by healthcare and other workers; these supplies should continue to be reserved for those who need them to protect against risks in their workplace, such as health and care workers.

If you can, wear a face-covering in an enclosed space where full social distancing isn't possible, such as a dive club boathouse or equipment store, or in the cabin of a boat. Also where you will come into contact with people you do not normally meet, for example on a charter boat. Using a face-covering may also be relevant on your way to or from the dive in crowded areas, for example on public transport or in some shops.

Homemade cloth face-coverings can help reduce the risk of transmission in some circumstances. Face-coverings are not intended to help the wearer, but to protect against inadvertent transmission of the disease to others if you have it asymptotically.

The evidence suggests that wearing a face-covering does not protect you, but it may protect others if you are infected but have not developed symptoms.

If you have symptoms of COVID-19 (cough and/or high temperature) you and your household should isolate at home: wearing a face covering does not change this.

It is important to use face coverings properly and wash your hands before putting them on and taking them off. You can make face-coverings at home; the key thing is it should cover your mouth and nose.

Making and wearing a face-covering

A cloth face-covering should cover your mouth and nose while allowing you to breathe comfortably. It can be as simple as a scarf, snood or bandana that ties behind the head. When wearing a face-covering, take care to tuck away any loose ends.

Wash your hands or use alcohol hand sanitiser before putting it on and after taking it off after use. Do not touch the front of the face-covering, or the part of the face-covering that has been in contact with your mouth and nose. Once removed, make sure you clean any surfaces the face-covering has touched.

Avoid touching your eyes, nose, or mouth at all times and store used face-coverings in a waste bag until you have an opportunity to wash or dispose of them safely. You should wash a face-covering regularly. It can go in with other laundry, using your normal detergent.

For more information on making your own face-covering go to:

<https://www.gov.uk/government/publications/how-to-wear-and-make-a-cloth-face-covering/how-to-wear-and-make-a-cloth-face-covering>

Face masks

Many of you will be familiar with the PPE surgical masks and half masks we see being worn by personnel working in hospital, healthcare and emergency services. Each of them offers different levels of protection. The use of these masks should be minimised, so as not to divert them from professional users.

Surgical face masks

Fluid-resistant (Type IIR) surgical face mask (FRSM) A disposable fluid-resistant mask worn over the nose and mouth to protect the mucous membranes of the wearer's nose and mouth from splashes and infectious droplets. FRSMs can also be used to protect patients. When recommended for infection control purposes a 'surgical face mask' typically denotes a fluid-resistant (Type IIR) surgical mask.



Respiratory protective equipment

Respiratory protection that is worn over the nose and mouth is designed to protect the wearer from inhaling hazardous substances, including airborne particles (aerosols). In some recreational diving situations, such as when ventilating a casualty, it may be appropriate to wear tight-fitting disposable FFP3 respirators. There are 3 categories of FFP respirator: FFP1, FFP2 and FFP3. FFP3 provide the highest level of protection and are recommended when caring for patients in situations where high risk aerosol generating procedures (AGPs) are being performed. The protection provided by FFP3 masks can only be achieved where the sealing surfaces are clear of facial hair and stubble, and should be tested in advance of use. This level of protection may be necessary when performing CPR with ventilation of the casualty.

More commonly and where a risk assessment shows an FFP2 respirator is adequate they may be a safe alternative. N95 (USA standard) respirators are tested against different standards but are broadly equivalent to a FFP2.

FFP2 (N95)



FFP3 (N99)



It is recommended that you keep either a surgical face mask (FSRM), FFP2/N95 or FFP3 in your first aid and oxygen kits in case of the need to resuscitate a casualty.

The Resuscitation Council UKs (RCUK) latest statement says, “During CPR, there is always the potential for rescuers to be exposed to bodily fluids, and for procedures (e.g. chest compressions, tracheal intubation or ventilation) to generate an infectious aerosol.” We therefore strongly recommend that Level 3 PPE is used for all cardiac arrest situations or airway management where there is any possibility of COVID-19 being present,

(www.resus.org.uk/media/statements/resuscitation-council-uk-statements-on-covid-19-coronavirus-cpr-and-resuscitation)

RCUK have also produced a video which demonstrates the use of a cloth or towel over the casualty’s mouth and nose to reduce risk of infection when applying **compression only BLS**.

<https://www.resus.org.uk/media/statements/resuscitation-council-uk-statements-on-covid-19-coronavirus-cpr-and-resuscitation/covid-community/>

Gloves

Single-use disposable gloves (eg Nitrile or Vinyl) provide a simple barrier, protecting the wearer against surface deposited droplets. We should always have such gloves in our first aid and oxygen kits, to provide a barrier when dealing with body fluids such as blood. In the current COVID-19 pandemic, with contamination by SARS-CoV-2 in airborne droplets most often not being so obvious and visible we need to take additional care.

These gloves only protect the hands of the person wearing them while handling materials, equipment, etc. However they do not protect other people and the surrounding environment from contamination.

Always wash your hands before and after using gloves, and remove/dispose of them with care. Before using gloves check their integrity. Wash your hands thoroughly (at least 20 seconds in soap and water) before taking them from their container and putting them on. While in use, disinfect them regularly to prevent transfer of the virus from one surface to another. After use they should be removed carefully, avoiding skin contact with the outside of the gloves and 'flicking' of droplets from outside surface.

Removing disposable gloves



Soiled fingers hook outside of cuff



Fingertips pull cuff to fingers



Contaminated surfaces inside



Hold while removing next glove



Clean fingers inside cuff and lift



Pull down over contaminated



outer surface towards fingertips



All contaminated surfaces now



Inside the glove for disposal

Remember, wash hands thoroughly (>20 seconds) before donning and after removing gloves

It is important to note that the use of gloves often gives a false sense of security. Wearers tend to contaminate many more surfaces and perform hand hygiene less often when they wear gloves. This is a particular problem when the face, eyes and mouth are touched while wearing gloves. They should be changed regularly, and good hand hygiene should be performed while wearing them and after removing them.

After use gloves must be disposed of in a closed container or waste bag.

Eye protection

Eye shields and glasses reduce the opportunity for aerosol drops to get into the eyes. A dive mask will provide similar protection for the eyes and prevent inhalation of droplets through the nose. After use all of these items should be handled with care to prevent contamination by droplets which have landed on them. If they are to be re-used they must be thoroughly disinfected, following the procedures referred to in the Equipment guidelines.

First aid kits and emergency oxygen sets

Surgical face masks or FFP3 masks should be carried in first aid kits and medical oxygen sets. It is important that those who may be required to use PPE are practiced in its use.

To be used in conjunction with other guidance including:

- Medical guidance
- Equipment guidance
- Shore diving
- CPR and rescue procedures
- Diver Training
- Travel Guidance
- Charter boat diving
- RIB diving
- Swimming pool usage
- Etc.