
FACE COVERINGS

Review of Face Coverings in Simulated Sailing Environments

Following the publication of the RYA Return to Sport guidelines, several sailing clubs, events and centres require the use of face coverings afloat. We (*James Osborne; Spinnaker Sailing Club and Keith Sammons; kSail*) decided to experience wearing four different types of face coverings in a simulated sailing environment. This included two generic coverings and two which are designed for use on the water.

Our two generic coverings were a “buff” which is widely available from a range of sources and suppliers; and a single-use 3 Ply CE marked mask, again available from a range of sources.

Through kSail, we sourced face masks from Gill and Zhik. Both are one size fits most and are washable. The Gill mask is available in three colours and is 100% polyester with an RRP of £7.90. The Zhik mask is constructed using a double foam layer; a pack of five is available for £23.95.

Being sailors and not medical professionals we cannot comment on the relative effectiveness of the face coverings in preventing viral spread.

Wearing the Coverings

While the buff is comfortable to wear, we both found it slipped and never quite held on properly around the nose. Our 3 ply masks included wire nose pieces so were reasonably secure although felt very flimsy and inadequate in the environment.

The Gill mask covered the nose and mouth very well and is smooth to the touch. We both felt that we would be quite happy using the Gill mask for day-to-day use, not just for sailing.

The Zhik mask is also soft and comfortable. It fitted securely over the nose and mouth and does not drag on the ears.

Our Experience

We first used the spray of a hose pipe to simulate rain or spray. We tried where possible to provide a reasonably fair spread of water. Additionally, we wanted to experience an immersion such as from a capsize. For safety, we chose to enter the water from the Club pontoon.

Simulated Spray and Rain

In light spray, the buff remained reasonably comfortable. However, at a point of saturation, the buff quickly became impossible to breathe through and stuck to the nose and mouth. The experience was very unpleasant; particularly how quickly breathing became restricted. Once squeezed out, it was possible to breathe again but became saturated again almost immediately.

The three-ply mask initially repelled water effectively with little impact on the ability to breathe. However, once saturated, breathing became difficult. A shake and squeeze did little to improve air flow.

The Gill face mask repelled water very effectively. It took significantly longer for the covering to become saturated. When fully saturated the material did restrict breathing; however never quite to the extent of the 3 ply or buff. Once squeezed out, much of the water was removed, however it did become saturated again quickly.

With the Zhik face mask you feel the light spray saturating the foam. As spray becomes heavier, the mask takes up more water however there remains no restriction to breathing. Eventually, the mask becomes heavy with water and pulls itself down and off the face. A quick squeeze removes most of the water such that it holds back on again.

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Simulated Immersion

Dropping into the water saturated the buff immediately and breathing was restricted on surfacing. It was nearly impossible to begin to breathe again until the buff had been removed and wrung out. The experience was unpleasant and disorientating even in a controlled situation. Subsequent immersions produced the same problems. Neither of us felt that we would be able to right a capsize while wearing a buff.

The 3-ply mask remained in place and, on surfacing, quickly drained of water. There was little restriction to breathing at this stage. A second immersion using the same mask did saturate the material and breathing became restricted; not to the same extent as the buff but enough to be uncomfortable. Neither of us felt that we would be able to right a capsize or escape from an internal air-pocket.

The Gill mask held a lot of water and the first breath on surfacing was restricted. While unpleasant it drained very quickly, and the second breath was easy. Once the mask had drained, we both felt that recovering a capsize or working in the water would be possible.

The Zhik mask drained marginally quicker than the Gill mask on reaching the surface. The first breath was slightly limited but normal breathing was possible almost immediately afterward. We both felt that we would be able to recover a capsize while still wearing the mask.

The Gill and Zhik masks performed consistently during their second and third immersions leading to growing confidence in what to expect on reaching the surface.

Summary and Thoughts

We both agreed that wearing the buff was a very unpleasant experience. While wearing a buff may meet the requirements of wearing a face covering neither of us would choose to wear one afloat.

We were surprised by the 3-ply mask; particularly during the first immersion. While we would not choose to wear one for sailing; we are both going to include a couple as back-ups in our safety packs.

The Gill and Zhik masks performed consistently and predictably and we quickly became comfortable with their performance and characteristics. We both feel that we will be using these two masks going forward.

Wearing a wet face covering is unsettling and unpleasant; particularly to begin with. We were fortunate that we could try this in a controlled environment and in a safe way. Our experience has emphasised the importance of being familiar with the equipment that you choose and what to expect should be part of preparations before going afloat.

Personal Choices

Keith - For coaching and officiating, I will most probably be wearing a Gill mask. They fit and feel secure on the face and can be worn for an extended period. For personal sailing, or where there is an increased risk of needing to enter the water, I would choose to wear the Zhik mask. I will be adding a 3 ply mask into my first aid kit and support packs but would hope not to have to wear it.

James - I already carry a vacuum packed 3 ply mask in my buoyancy aid at work. After my experiences today I will be adding a Gill mask to my regular equipment for teaching, safetyboating and other work around the club as it is comfortable to wear for prolonged periods and is reusable.

If I am in a dinghy with others and likely to capsize I would choose to use a Zhik mask, but for days where I am unlikely to capsize or get wet I would choose the Gill for increased comfort.