



Société Belge de Médecine Hyperbare et Subaquatique asbl
Belgische Vereniging voor Overdruk- en OnderwaterGeneeskunde vzw

Position of the Belgian Society for Diving and Hyperbaric Medicine on Diving and COVID-19 Vaccination

26 March, 2021

In the documentation provided by the European Medicine Agency, as part of the assessment process of the vaccine regarding the vaccines approved for use in Europe, it has been noted that some adverse reactions may result following the vaccination. These side effects are generally mild and usually common to any type of vaccine, e.g. headache, mild fever, nausea, pain at the site of injection, dizziness, gastrointestinal disorders, lymphadenopathy, thromboembolic events, etc. Side effects have been shown to occur mostly between 12 and 48 hours following the vaccination and, in isolated cases, symptoms may extend up to 7 days. Severe side effects such as anaphylaxis, fortunately, are extremely rare and have been observed mostly in persons with multiple allergies; they tend to appear immediately, in the first 30 minutes following the vaccination. Side effects were also reported more frequently after the second dose of the vaccine.

Although the vast majority of side effects reported so far are mild and do not put into question in any way the safety of the approved vaccines, they may be further enhanced by diving conditions, such as immersion, pressure and hypoxic/hyperoxic environment. Furthermore, it is possible that some of the immunologic effects of COVID-19 vaccination may temporarily influence the risk for diving-related illness. Anecdotal cases (reported in social media) of symptoms possibly related to decompression illness (DCI) after uneventful dives in the safe range for DCI, have caused some concern in diver communities.

At this time, no evidence is available regarding the impact of diving conditions on the severity of the side effects, nor on the resulting impact on the performance of divers with regard to diving safety. Taking into account that these vaccines are new pharmacological products, and in order to ensure that the side effects described above do not interfere with the completion of any safety-related tasks, we would like to draw the diving community's attention to information and guidelines provided by WHO, EMA, and ECDC on COVID-19 vaccination (see references), and would add the following specific recommendations for divers:

- 1) In view of the necessity to contain or end the COVID-19 pandemic as soon as possible and because at this point, widespread vaccination appears to be the only way this could ever be achieved, **it is highly recommended for all persons to receive the COVID-19 vaccine** as soon as vaccines become available, in accordance with the national COVID-19 vaccine roll-out plan.
- 2) **Divers should consider a waiting period of minimum 7 days** after each dose of COVID-19 vaccine, before engaging in compressed-gas or breath-hold diving activities.

- 3) **It is advised to extend this interval to 14 days** for divers
- i. who have had side effects after vaccination persisting for more than 48 hours,
 - ii. with personal health risk factors such as, but not limited to:
 1. excessive body weight
 2. chronic metabolic disease (including diabetes)
 3. smoking
 4. use of medication which may increase the risk of thromboembolic incidents (including oral contraceptives)
 5. or any combination of the above
 - iii. who wish to perform dives which require specific technical skills or which are exceeding the limits of no-decompression recreational diving (technical diving, deep decompression diving).
- 4) Divers are advised to **consult with their general practitioner in case side effects of the COVID-19 vaccination persist for more than 48 hours** following the vaccination.
- 5) In case any symptoms, possibly related to diving disease, should appear after seemingly low-risk dives performed in the 7-day period after a COVID-19 vaccination, **consultation with a diving medicine specialist is advised**. Notification of the event to a central diving safety organization such as Divers Alert Network (DAN) Europe is considered useful; local scientific societies for diving medicine may assist in this effort.
- 6) As COVID-19 vaccination does not completely protect against the possibility of transmission of SARS-CoV2 virus to other persons, **protective measures (distance, mask, hygiene) must continue to be observed by all divers**, vaccinated or not.

References:

- European Centre for Disease Prevention (ECDC) [Overview of the implementation of COVID-19 vaccination strategies and vaccine deployment plans in the EU/EEA](#).
- ECDC [COVID-19 vaccination and prioritisation strategies in the EU/EEA](#).
- European Medicines Agency (EMA) [Comirnaty EPAR -public assessment report](#).
- EMA [Comirnaty - Procedural steps taken and scientific information after the authorisation](#).
- EMA [COVID-19 vaccine Moderna- EPAR-public assessment report](#).
- EMA [COVID-19 vaccine AstraZeneca - EPAR-public assessment report](#).
- World Health Organization (WHO) [Guidance on developing a national deployment and vaccination plan for COVID-19 vaccines](#).
- [WHO COVID-19 vaccines technical documents](#).

These recommendations are based on available scientific knowledge on the date of March 26th, 2021. They may possibly evolve and will be updated accordingly.

For the Board of SBMHS-BVOOG:

(signed)

Dr Guy Vandenhoven
President

(signed)

Dr Peter Germonpre
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(signed)

Dr Jean-Pierre Rézette
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