

# Medical Care during the COVID-19-Pandemic

9. information for the offshore wind industry from the WINDEAcare® network  
09 March 2021

Some time has passed since the last information letter. A lot has changed, and in some areas little has happened. Bright spots on the horizon due to the vaccination campaigns that have started are obscured by reports of viral mutations, insufficient vaccine supplies, and (emerging) uncertainties about the effectiveness of individual vaccines.

Regarding the assessment of all issues related to the vaccination campaigns, we certainly have no more expertise than the scientists involved and follow their judgments as well as recommendations. We also share the opinion that the only the broadest possible vaccination coverage of the entire population is the major milestone that will make the pandemic manageable and enable a way to a normal life.

In addition to the availability of vaccines, there are also developments in the testing strategy, especially in area of antigen tests, which we would like to present and assess.

## 1 New antigen tests– also for laymen

In the last information we presented the antigen tests in detail. In their previous form, they are now very well established and recognized for their value. However, a limiting factor was that this test- especially the swab taking- could only be carried out by medical professionals. The main reason for this was that inadequately invasive samples have a high probability to give false negative results and thus suggest a false "certainty".

Very recently, rapid antigen tests that are approved and tested for use by laymen are introduced to the German market. Several products have already received the necessary special approval. These antigen tests are not new in themselves. The only new feature is that the swab no longer has to be taken in the deep nasopharynx but can be done from the anterior nasal area. This reduces the risk of injury and extensive anatomical knowledge is no longer required. The necessary care in performing the test remains the same. In principle, these tests can be used by laymen to carry out rapid antigen tests of the same quality as the tests that could previously only be performed by qualified personnel. However, in addition to the performance of the test, the responsibility, liability, and duty of care for the correct testing are now transferred to the user. The potential sources of error and the limitations of these tests must therefore be known.

The tests approved so far will certainly not remain the only ones. Other tests with (even) more user-friendly sample collection (saliva, gargle solution, swabs from cheek mucosa, etc.) are also in the process of being approved or have already received approval and will expand and supplement the range of products

available to the market. When which of these tests will be commercially available in sufficient quantities cannot be foreseen at present. The situation will certainly become clearer in the



Figure 1: Example Sample Collection, Source: viromed®

coming weeks, also with regards to the equivalence in the detection of infected persons. The reliability already differs to some extent relevant to the manufacturers' specifications. In practical tests - especially with asymptomatic patients - the true positive results are sometimes even lower. In our opinion, the selection of suitable preparations should therefore be made with caution and care.

With the new antigen tests for laymen, regular screening of population groups or work groups can now also be realized where no medical professionals are present. We are currently unable to make a final assessment of whether their use – especially for the offshore wind industry – can achieve the same significance as the previous antigen tests by qualified personnel in a professional setting. Due to the additional potential sources of error of the lay tests and the potential effect this may have on individual offshore projects, we will initially maintain our offer with the established test stations and -strategies that have been set up.

Detailed information and a list of tested products can be found at the Federal Institute for Drugs and Medical Devices (Bundesinstitut für Arzneimittel und Medizinprodukte – BfArM): <https://www.bfarm.de/DE/Medizinprodukte/Antigentests/node.html>

In general, it should again be noted again that a positive antigen test means that an adequate amount of viral protein is present in the swabbed mucosa. The person is therefore most likely infected and **infectious to others**. A positive antigen test always requires isolation and verification by PCR test.

A negative antigen test indicates that the person tested does not have a high viral load at that moment. The person is therefore most likely not infectious for others. Nevertheless, the person may already be infected and only become ill or/and infectious for others in the further course of the disease.

False positive tests are possible, but in total rather rare. Reasons can be, for example, incorrect storage conditions or certain bacterial colonization of individual persons that have no disease value. With regards to the storage conditions, we have made the experience that especially low ambient temperatures, even if only temporarily, can already cause entire test groups to become false positives. Therefore, in our test stations, for example, the samples are only stored under temperature monitoring.

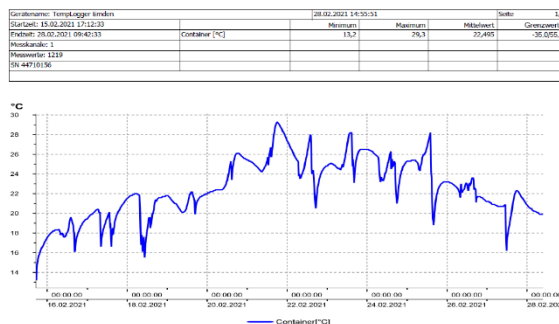


Figure 2: Example – temperature monitoring, Teststation Emden

No statements can be made about the "best" or "most sensible" frequency of testing in the offshore wind projects after the initial testing, as the highest level of safety is achieved if testing is carried out daily. This is impractical for various reasons. For the offshore working situation, it can be a compromise to repeat the test after 5 to 6 days.

Further information and a very good summary on the topic can also be found in the current Epidemiological Bulletin: [https://edoc.rki.de/bitstream/handle/176904/7826/EB-8-21-Heimtest-Beitrag\\_22-02-21-zur%20Veröffentlichung.pdf?sequence=1&isAllowed=y](https://edoc.rki.de/bitstream/handle/176904/7826/EB-8-21-Heimtest-Beitrag_22-02-21-zur%20Veröffentlichung.pdf?sequence=1&isAllowed=y)

## 2 Updated DGUV recommendations on suspension trauma<sup>1</sup>

In this revised version, there is one significant change to all previous publications - the **crouching position** is no longer attributed any significance. The previously theoretically comprehensible considerations could not yet be proven with practical, scientific certainty and, in case of critically ill patients, are in conflict with other requirements for positioning.

Suspension trauma remains a potentially life-threatening clinical picture that still deserves full attention.

Rapid primary rescue and situation-appropriate positioning after rescue - depending on the patient's condition - are now recommended and are now also taught at all training centers. For example, an unconscious patient with spontaneous breathing should be positioned in the lateral position and a patient with respiratory distress should rather be positioned upright/sitting.

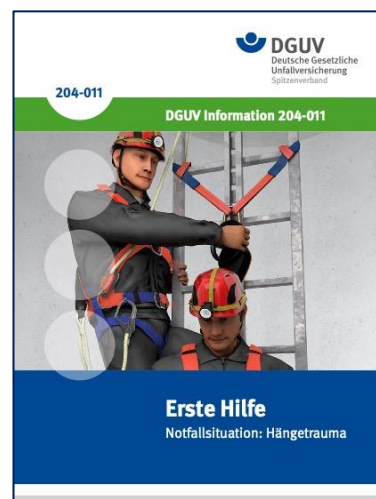


Figure 3: DGUV Information 204-011

<sup>1</sup> <https://publikationen.dguv.de/widgets/pdf/download/article/897>

### 3 Updated DGUV-recommendation on first aid<sup>2</sup>

Also new in 2021 is the updated DGUV information on "Extended first aid in wind turbines and wind farms". In addition to many minor editorial revisions, there is also new content.

The most striking aspect is certainly that the recommendations from this information are not exclusively aimed at employees and operators of offshore wind farms but are also intended to serve as a reference for onshore wind farms in order to ensure sufficient operational first aid.

However, in our opinion, one small change will have a real impact on the quality of medical treatment. It is said that the rescue service personnel described *is* under a medical supervision and should no longer *supposed to be* under it. In our opinion, there is no alternative to a responsible medical management who specifies medical and pharmacological measures and treatment paths, approves their implementation, is responsible for them and monitors their compliance. This is the only way to avoid a proliferation of potentially dangerous care by poorly trained personnel.

What has not changed so far in this publication is the designation of appropriate pain therapy by first aiders under telemedicine consultation/delegation. However, we now see pharmacological options and treatment strategies that could very well be used in the "offshore wind" setting and offer real value to injured workers. **Please do not hesitate to contact us for further information.**

#### Download of information

This letter as well as the previous information specifically on the topic of "Medicine and Corona Pandemic" can be viewed at any time in our download area of the WINDEAcare homepage.

Please note the dynamic nature of the situation. Not all statements we have created in the early days of the pandemic have to apply equally now:

<https://www.windea-care.de/de/downloads>



Figure 4: DGUV Information 204-041

<sup>2</sup> <https://publikationen.dguv.de/widgets/pdf/download/article/3752>