



Vaccination of seafarers against COVID-19.

Introduction

Since the start of the current COVID-19 pandemic IMHA has worked closely with the international Chamber of Shipping, the UN agencies, and many others as part of a vaccination taskforce to promote and deliver vaccinations to seafarers around the world. The taskforce has been advised at different times by Prof Pierre van Damme from the University of Antwerp.

Additional information on vaccines for seafarers and a roadmap for the implementation of vaccines can be found at <https://www.ics-shipping.org/supporting-shipping/covid/>

Many seafarers have now received at least one dose of vaccine or a full course of vaccine either in their home country or in ports around the world. Further information on which ports are providing vaccination for seafarers is available at <https://icma.as/vaccines/>.

As the vaccination program has become more widespread a few issues have been noted and addressed by the taskforce. Aside from the obvious challenges of seafarers who have to date received an incomplete schedule and the limitations of what vaccines are available in the different countries or ports, two of the main areas that have caused problems for seafarers, medics, ship owners and regulatory authorities are:

- The mixing of vaccines
- Certification and registration of COVID-19 vaccination

Please note that this is an interim position paper and will be updated in line with future developments.

Why vaccinate seafarers?

Seafarers have an occupational risk for COVID-19 in that they

- must frequently travel across international borders to reach their place of work,
- are often travelling between different countries as part of their work,
- need to interact with different people from different countries such as navigational pilots, stevedores etc.
- Live in a confined space and close contact on board

In addition there are huge consequences of one or more positive cases on board both to the seafarer given the limited medical care available on board, to other seafarers given the proximity of working and living, and economical as ships are quarantined etc. and cannot continue with their operations.

The aim of vaccination is to protect the seafarer and subsequently others and the operation, whilst equally doing no harm to the individual seafarer. IMHA recommends that all seafarers are vaccinated at the first available opportunity.



COVID 19 vaccines

The World Health Organisation (WHO) has recognized several vaccines through its Emergency Use Listing Procedure and the up to date list can be found at <https://www.who.int/teams/regulation-prequalification/eul/covid-19>. National and regional regulatory authorities have also approved vaccines for use in their countries or regions and these can be found on the individual web pages such as the European Medicines Agency (EMA)¹, the US Food and Drug Administration (FDA)². Additional information on which vaccines are approved, where can be found at <https://covid19.trackvaccines.org/>.

At the time of writing 6.06 billion doses of vaccine have been given across the world and 32.6% of the world's population is fully vaccinated. However there is huge variation in vaccination availability and uptake around the world and many of the countries supplying a large proportion of seafarers have vaccination rates of less than 25%. People are considered fully vaccinated when they have received two doses of vaccine in an approved timeline or one dose of the Janssen (Johnson & Johnson) vaccine.

The mixing of vaccines

There is evidence that the Astra Zeneca (AZ) or Covishield vaccines and the mRNA (Pfizer or Moderna) vaccines can be combined safely and effectively^{3 4} and this has been approved by the WHO Strategic Advisory Group of Experts on Immunization (SAGE)⁵. Immunity seems to be improved when an AZ or Covishield is followed by a Pfizer vaccine, but the level of immunity is unknown in other mixed schedules. Other countries are mixing other vaccines, for example, Norway⁶ and Canada are using the two mRNA vaccines from Pfizer and Moderna in mixed vaccine schedules. Preliminary study results suggest that it is generally safe to use heterologous vaccine schedules, but this is yet to be accepted by the WHO⁷ and other countries such as the US⁸.

However seafarers are a mobile population, and it may not always be possible for them to receive the second dose of a vaccine in the same place as the first, or even receive a second dose of the same vaccine in another location due to the different availability of vaccines around the world. If seafarers do receive mixed vaccines

¹ <https://www.ema.europa.eu/en/human-regulatory/overview/public-health-threats/coronavirus-disease-covid-19/treatments-vaccines/covid-19-vaccines>

² <https://www.fda.gov/emergency-preparedness-and-response/coronavirus-disease-2019-covid-19/covid-19-vaccines>

³ <https://www.aljazeera.com/news/2021/7/19/mixing-covid-vaccines-what-you-need-to-know> (with links to the different studies)

⁴ <https://www.nature.com/articles/d41586-021-01359-3>

⁵ <https://apps.who.int/iris/bitstream/handle/10665/341786/WHO-2019-nCoV-vaccines-SAGE-recommendation-BNT162b2-2021.2-eng.pdf?sequence=1&isAllowed=y>

⁶ <https://www.fhi.no/en/news/2021/vaccines-from-biontech--pfizer-and-moderna-can-be-combined/>

⁷ <https://www.reuters.com/business/healthcare-pharmaceuticals/who-warns-against-mixing-matching-covid-vaccines-2021-07-12/>

⁸ <https://www.cdc.gov/vaccines/covid-19/clinical-considerations/covid-19-vaccines-us.html#:~:text=Interchangeability%20of%20COVID%2D19%20vaccine%20products,-Any%20currently%20FDA&text=However%2C%20COVID%2D19%20vaccine%20products%20are%20not%20interchangeable.&text=Data%20on%20the%20safety%20and,completed%20with%20the%20same%20product.>



because of these issues, they have often not been recognized as fully vaccinated when they return to their home country. As a result, seafarers have received 2, 3 or even 4 doses of COVID vaccines in different vaccine schedules to ensure they are recognized as vaccinated both at home and abroad. The safety of such schedules is not well documented and places an increased demand on the supply of vaccines across the world.

As a result of these risks IMHA, on the advice of Prof van Damme, suggests a pragmatic way of working.

If a seafarer has received an incomplete schedule in their home country or a different port

- Try to complete the vaccination schedule with the same vaccine or an approved mixed schedule with an acceptable time between vaccine doses. For example, Pfizer followed by Pfizer, Covishield followed by AZ or vice versa or AZ/Covishield followed by an mRNA vaccine
- If this is not possible, try to offer a single dose schedule with Janssen (Johnson & Johnson) (J&J) vaccine, at least 4 weeks after the first vaccine dose of any other vaccine.
- If this is not possible start a new two dose vaccine schedule with a broadly accepted vaccine* and check that an acceptable second dose can be offered in an appropriate time frame, that is 4 - 16 weeks for AZ and 3 - 12 weeks for Pfizer.

If a seafarer has received a complete schedule but this is not approved in the home country or port

- Try to offer a single dose schedule with Janssen (Johnson & Johnson) (J&J) vaccine, at least 4 weeks after the last dose of any other vaccine.
- If this is not possible start a new two dose vaccine schedule with a broadly accepted vaccine* and check that an acceptable second dose can be offered in an appropriate time frame, that is 4 – 16 weeks for AZ and 3 – 12 weeks for Pfizer.

These different scenarios can guarantee effectiveness whilst being balanced with safety concerns.

*Note that not all vaccinations on the WHO EUL are approved in all countries and a judgement will have to be taken on the most appropriate vaccine to offer to the individual seafarer.

Certification and registration of COVID vaccination

All seafarers should receive appropriate certification that they have received a COVID-19 vaccine at the time the vaccine is given.

Certification can be in the yellow vaccination card or as a separate certificate but should include:

- Name of the vaccinated seafarer
- Type of vaccine given and dose
- Date of vaccine given
- Name and title of person administering the vaccine
- Office/company address of the person who administered the vaccine, including a stamp
- A QR code containing all the relevant information if possible



It is often difficult for the person or company administering the vaccine to register vaccination of the seafarer digitally within that country. Such registration often requires proof of residency or citizenship and/or a social security number or equivalent. The seafarer must submit his certification of vaccination to the national authorities in his home country to receive a national, digital COVID vaccination pass that is then recognized in other countries.

Seafarers have encountered problems including the type of vaccine administered not being recognized in their home country and/or the certificate issued not being accepted in their own country. As outlined above this has resulted in seafarers receiving multiple doses of vaccine or two complete vaccine schedules to obtain the necessary papers or digital pass required in different countries.

The WHO has issued a document, the Digital Documentation of COVID-19 Certificates: Vaccination Status Technical specifications and implementation guidance⁹ that lays out an approach for creating a signed digital version of a vaccination record and it is hoped that this will lead to greater consistency and ease of registering vaccination in the future.

IMHA strongly encourages all national authorities to recognise the certification of seafarer vaccination and to facilitate the registration of vaccination and production of an appropriate vaccination pass. IMHA also requests national authorities to recognize all vaccinations correctly certified in the international vaccination card until a digital format has been developed.

⁹ <http://apps.who.int/iris/handle/10665/343361>