The Institute for Marine-Earth Exploration and Engineering (MarE3) has set and implemented the Criteria for Boarding/Visiting Ships for Prevention of COVID-19 Outbreak, as necessary precautionary measures before boarding/visiting JAMSTEC vessels in order to prevent, as much as possible, the spread of COVID-19 onboard. This document is an update of the former Criteria based upon the revision of the JAMSTEC COVID-19 Emergency Response Team policy (See Appendix), which is applicable to all non-mariner boarding personnel (passengers) on JAMSTEC cruises (Note 1) after 1 April 2022. Measures to be taken during the cruises shall follow the latest version of the “JAMSTEC/MarE3 Response Policy for COVID-19 Infection during Cruise”.

- **Definition of “passengers” in this document**
  Researchers, science support staff, and operation team crew (Notes 2 & 3) who plan to participate in a voyage (Note 1) via JAMSTEC vessel.
  Boarding on D/V Chikyu for laboratory work whilst being alongside will be treated separately.

**Procedures to be carried out by passengers**

**By 7 days before boarding**
- In principle, complete at least two COVID-19 vaccinations.
- Obtain the latest information about the infection status at the boarding location, and take all possible infection preventive measures.

**From 14 days before boarding**
- Every morning measure and record your body temperature in the attached Health Logbook (attached separately), as well as other symptoms (if any), and record your activity (moving) log in the designated form (Note 4).
- While at home, or in other accommodations, etc., manage yourself as taking the following
infection prevention measures:

- Wear face masks and thoroughly wash and disinfect your hands. Also be careful of ventilation while indoors and infection prevention while eating.
- Avoid going out unnecessarily, and avoid going into the any of “3 close” situations as much as possible.
- If you have to use public transportation, avoid travel times and routes that are likely to be congested.
- When sharing a ride (e.g., taxi), ventilate the cabin at all times.
- Avoid close contact amongst passengers in meetings and during pre-cruise onboard activities.

If any of the symptoms listed below are observed, promptly report these findings to the MarE3 Operations Department Fleet Operations Group (Note 5) through the Coordinator (For details of the Coordinators, see at the last of this document).

- Any breathing difficulties (dyspnea), strong fatigue (malaise) and high fever (> 37.5 °C) including those considered to be side effects of COVID-19 vaccination.
- Mild cold-like symptoms, such as fever (higher than his/her normal temperature even it is below 37.5 °C) or cough continued four or more days.
- Subjective symptoms of abnormalities in senses of taste and smell.

If you fall into any of the cases below, immediately consult with MarE3 Operations Department Fleet Operations Group through the Coordinator (Note 5).

- Having travelled to a country or a region (designated by the Japan Ministry of Foreign Affairs with infection disease alert level 2 or higher) within 14 days.
- Identified as being infected with COVID-19.
- Having a possible contact with a person who has travelled to a country or a region (designated by the Japan Ministry of Foreign Affairs with infection disease alert level 2 or higher) within 14 days. Having a possible contact with a person who has been identified as being infected with COVID-19 (two days before to seven days after the day of being infected / identified).

In principle, install the COVID-19 COntact-COnfirming Application (COCOA), if applicable on your smartphone (the use log may be required to show).

Ministry of Health, Labour and Welfare (MHLW) website, COCOA:  
https://www.mhlw.go.jp/stf/seisakunitsuite/bunya/cocoa_00007.html
7 days before boarding

- Conduct the first pre-boarding PCR testing via mail around 7 days before boarding. Take your test sample at home (in principle), and send it to the designated test institute (for details, contact MarE3 separately, see Note 6). Results shall be reported immediately to the Operations Department Fleet Operations Group immediately through the Coordinator (described in the later section). In case you tested positive, follow the instructions from your medical agency / public health centre.

- Move to the boarding location in time for the final pre-boarding PCR testing with taking infection preventive measures as much as possible.

- Thoroughly manage yourself to prevent infection before and after moving. Avoid eating out, and take your meals alone as much as possible (recommendations from JAMSTEC occupational health doctor).

3 days before boarding & the day before boarding

- Within 72 hours to the boarding, all passengers must undergo the final pre-boarding PCR testing (for details, contact MarE3 separately, see Note 6). The test will be conducted at the boarding location in principle, and the result must be diagnosed by a medical doctor (Note 7).

- Submit your own Health Logbook, Activity Log and Written Oath (hereafter, Boarding Documents) to the Coordinator by 10 AM (The Written Oath declares that your behaviours during the pre-boarding period meet JAMSTEC’s rules and requirements. See Note 8).

- The Coordinators will submit the collected boarding documents to the person in charge by noon (the Chief Scientist / Principal Investigator: to MarE3, other Coordinators: to his/her own organisation). In case MarE3 or the organisation which the Coordinator belongs to admit some concerns in your Boarding Documents, you may not be allowed to board even if you were tested as PCR negative. The Co-ordinator will notify you on the final boarding permission status (See Note 9 for handling of personal information).

- In case you tested positive, you will be notified the result directly from the test agency. Report it immediately to the Coordinator, your supervisor and MarE3 HSQE Group. Cancel boarding and follow the instructions from your medical agency / public health centre.

(After receiving negative result from the Coordinator, and the boarding permission is issued, passengers move onboard and follow onboard rules thereafter).
At time of boarding

- Thoroughly perform hand disinfection at the gangway when boarding. Masks are required daily wear throughout the cruise. Provide your own body temperature measuring device, towels, a cup and a water bottle for personal use during the cruise (Note 10).

- Immediately after boarding, the principal researcher/chief scientist will take measures to prevent infection on the ship, and keep the passengers informed.

The above standards may change based on the policies of the administrative agencies and JAMSTEC in the future. In addition, the above standards will remain effective until a new revised standard is issued or an instruction to cancel application is issued. If you have any questions, please contact the appropriate department of MarE3 through the Coordinator (See below).

Coordinator:

<table>
<thead>
<tr>
<th>Role</th>
<th>Contact Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chief Scientist/Principal Investigator</td>
<td>For Boarding Researchers (Incl. subcontractors)</td>
</tr>
<tr>
<td>Person in charge of NME</td>
<td>For NME personnel (Incl. subcontractors)</td>
</tr>
<tr>
<td>Person in charge of MWJ</td>
<td>For MWJ personnel (Incl. subcontractors)</td>
</tr>
<tr>
<td>Person in charge of MOL Marine &amp; Engineering</td>
<td>For MOL Marine &amp; Engineering personnel (Incl. subcontractors)</td>
</tr>
<tr>
<td>JAMSTEC MarE3 Operations Department Fleet Operations Group</td>
<td>For JAMSTEC members (excluding JAMSTEC Boarding Researchers and Hakuho-maru sailors/crew) and JAMSTEC subcontractors/agents, public relations JAMSTEC</td>
</tr>
<tr>
<td>Person in charge of Hakuho-maru</td>
<td>For Hakuho-maru sailors/crew</td>
</tr>
</tbody>
</table>

MarE3 Operations Department Fleet Operations Group Contact (common for each ship): mare3-fleetops-kikan@jamstec.go.jp

For questions about pre-boarding PCR test
Vaccination and first pre-boarding PCR test: MarE3 Operations Dept. mare3-fleetops-kikan@jamstec.go.jp
Final pre-boarding PCR test: MarE3 HSQE Group mare3-hsqa@jamstec.go.jp
Notes

1) Regarding "cruises by JAMSTEC vessels" in this document

As a general rule, all passengers who participate in the JAMSTEC cruise (performance confirmation test cruises are treated separately) shall undergo at least two times of vaccination in principle, and two times of PCR testing.

In addition to the above, if the ship goes beyond a four-day travel distance from Japanese port, five days pre-boarding quarantine in a hotel at the boarding location is required (self-quarantine at home is permitted to a passenger who lives by oneself in the vicinity of the port of embarkation). After taking and dispatching the first pre-boarding PCR testing sample, move to the boarding location with taking infection preventive measures as much as possible, then quarantine yourself. During the quarantine period, minimise contact with others, avoid moving and eating out, and eat your meals alone in your hotel room. A passenger who boards at the foreign port shall consult with the MarE3 Operations Department through the Coordinator in advance.

The number of passengers may be reduced in order to secure at least one cabin per suspected infection individual to maintain quarantine aboard.

2) This assumes personnel other than seafarers. Operation crew are legally mariners; however, they are categorised as “passengers” here as taking their working conditions into consideration. Engineers and technicians hired by a researcher are categorised as “researchers”.

3) Those who belongs to the “high-risk categories” listed below are not allowed to board cruise moves beyond a 4-day travel distance (except for the boarding while the ship is alongside).

- Elderly people (70 years old or older)
- Those who have basic illness such as listed below:
  - Diabetes (fasting blood glucose level 150 mg/dL or more, with or without oral treatment, HbA1c is less than 7.0%, in principle permitted)
  - Chronic heart failure (diagnosed and treated internally)
  - Chronic lung disease (COPD, interstitial pneumonia, etc.)
- Those who are undergoing dialysis, or those who are using immunosuppressants or anticancer agents.

*cf. Current status of COVID-19 and responses of MHLW*

https://www.mhlw.go.jp/stf/covid-19/kokunainohassejouyou_00006.html
4) Examples of the symptoms that should be recorded in the Health Logbook (use designated form): Breathing difficulties (dyspnea), headache, strong fatigue (malaise), and abnormalities in sense of taste and smell.

The Activity Log will be utilised to check of your self-management status during the pre-boarding period and to provide information of your activities to the Public Health Centre in the event of a positive test. For this purpose, you are required to record your daily activities before and during being aboard.

Note that the day of boarding is counted as “Day 0” in Health / Activity Logs.

5) Upon receiving the report from the passenger, the MarE3 Operations Department will determine availability of the final pre-boarding PCR testing. In case of having a report after sampling for the first pre-boarding PCR testing, conduct another PCR testing (at the passenger’s cost) and submit the result to the Fleet Operations Group through the Coordinator by the noon of the day before the final pre-boarding PCR test.

✧ High fever (> 37.5 °C), chill or headache WITHOUT any other cold-like symptoms such as cough, pain in the throat and breathing difficulty within three days after COVID-19 vaccination (the day of vaccination and two days after that) are likely to be side-effects of vaccination. In such a case, an additional PCR testing before the final pre-boarding PCR test will not be required.

6) PCR test implementation for non-mariner personnel

- MarE3 will contact you regarding the specific location, timing, method and conditions for exemption of PCR testing.

- The first pre-boarding tests, managed by the Operations Department, are conducted via mail around 7 days before boarding. Diagnosis of the result by a medical doctor is not mandatory. The final pre-boarding test managed by the HSQE Group is conducted within 72 hours to the boarding at the port of embarkation in principle, which requires a medical doctor’s diagnosis (Note 7).

- In the event that scheduled boarding scientists test positive, all should have a nominated designated replacement described in the Implementation Manual, to include the Chief Scientist/Principal Investigator, if possible. Stand-by Deputy Chief Scientists / Principal Investigators can be chosen from the science party members (including stand-bys). All nominated replacement personnel are required to follow all pre-boarding requirements (submission of the Boarding Documents and PCR test, etc.).
• If the student supervisor tests positive for COVID-19 and is barred from boarding. In the case of undergraduate students: Boarding is not permitted unless a researcher from the same laboratory has been assigned as a substitute supervisor. In the case of graduate students: Boarding is permitted only if a pre-nominated substitute supervisor boards the vessel.

• Passengers who plan to be onboard continuously, on to the next cruise, shall comply with the behavioural rules of the ship.

• In principle, the inspection costs for passengers who require PCR inspection will be borne by JAMSTEC.

• After the PCR inspection, visiting and overnight stay on the ship is not possible in principle until the inspection result is obtained.

• Treatment via antigen test conducted at airports, etc., will be decided by MarE3 according to the national guidelines.

7) PCR testing with a medical doctor’s diagnosis

There are some descriptions on the MHLW website about differences of PCR testing with and without a medical doctor’s diagnosis.

• The negative test result itself does not automatically mean that you are not infected unless it was diagnosed by a medical doctor.

• In case you are diagnosed as being infected by a medical doctor, the doctor shall report it to the public health centre based on the Infectious Disease Law.


List of test facilities that provide PCR testing with one’s own expense (in Japanese) https://www.mhlw.go.jp/stf/seisakunitsuite/bunya/kenkou_iryou/covid19-jihikensa_00001.html

8) The document can be typed (signature is not required).

9) Collected personal information is used only for the purpose of research cruises. Its use shall be limited under the control of the Coordinators of MarE3 and each organisation.

10) If necessary, bring your own antiseptics and personal beverages, as needed.
Appendix

Policy for ship operation in respond to COVID-19 [Rev. 2]

Upon receiving the governmental policy of “Semi-emergency coronavirus measures” issued as a counter measure to the rapid increase of COVID-19 (omicron variant) infection on 21 January 2022, JAMSTEC revised the “Policy for ship operation in respond to COVID-19”, in which five-days pre-boarding self-quarantine (Bubble-method) at the boarding location was required in addition to the two times of PCR testing.

This governmental policy was removed on 21 March 2022. In addition, a COVID-19 oral drug was installed onboard the all JAMSTEC vessels, and remote prescription based on the doctor’s diagnosis has become possible. In respond to these changes of situation, we removed the five-days pre-boarding self-quarantine for cruises within a four-day travel distance from Japanese ports, and PCR testing for passengers who plan to be onboard continuously on the next cruise. Hereafter, research cruises shall be conducted as following the new policies described below to minimise the risk of infection as much as possible.

An outbreak of COVID-19 positive case onboard will cause a suspension of the cruise that spoils research opportunities of the boarding scientists. All boarding personnel should mind it and be requested to pay sufficient attention for infection prevention.

New policies in regard to ship operations

1. In principle, only personnel who completed two rounds of vaccination are allowed to participate in the cruise.

2. All personnel shall undergo vaccination and two pre-boarding PCR tests (around one week to the boarding and 72 hours within boarding), and follow the latest Boarding Criteria to manage one’s health conditions.

First issued on 13 September 2021
Revised on 1 February 2022
22 March 2022

JAMSTEC COVID-19 Emergency Response Team
Team Leader: Matsunaga, Tadashi (President)
Supplement

This new policy will be applied to the cruises scheduled from:

- **R/V Yokosuka**: YK22-07 (3 – 14 Apr. 2022)
- **R/V Kaimei**: KM22-06 (14 – 21 May 2022)
- **R/V Shinsei-maru**: KS-22-04 (1 – 10 Apr. 2022)
- **R/V Hakuho-maru**: KH-22-6 (6 – 22 Apr. 2022)
- **R/V Mirai**: MR22-02 (1 – 7 Apr. 2022)
- **D/V Chikyu**: CK22-01C (2 – 13 Jun. 2022)