Fleet Operation Policy (2024/4/1 onwards)

Supplementary Explanation

Operations Department, MarE3

1 April 2024

Basic Approach to Changes in Response

- Following the transition to Category 5 of the new coronavirus in May 2023, free
 vaccination against the new coronavirus will end in April 2024, and there will be
 basically no difference between the new coronavirus and influenza virus in terms of
 administrative response.
- In other words, we will continue to isolate those who are unwell and are suspected of infection, but in principle, we will not identify or screen the persons who might have been in close contact of the infected person (*refer supplementary info. in Slide # 7).
- Previous documents about the new coronavirus (embarkation/visit standards/policy for responding during cruises) will be abolished (the document "Visiting JAMSTEC Vessels and Submersible Maintenance Yards" will be revised and will remain in effect).
- To prepare for the risk of severe illness on the other hand, we will continue to carry the new corona oral medication on the cruises that will be beyond 4-day long trip to shore.
- Preventive measures related to norovirus infection are also described in this document.

Response beyond 2024/4/1 (Pre-cruise)

- Health monitoring is recommended prior to boarding
- If there is any concern about health, inform MarE3 contact person (researchers should inform via chief scientist)
- In principle, persons with poor physical condition at the time of boarding, or those who do not have symptoms but have not completed the required medical treatment are not allowed to board the ship (except if a doctor has diagnosed that there is no problem with boarding).
- Regarding vaccination, it is desirable that those who are at risk of becoming seriously ill and those who are on a cruise far from
 the nearest port, such as an open ocean cruise, should get vaccinated on their own (no burden on JAMSTEC. Moreover, if worried
 about vaccination, consult a doctor.)
- Even those who are at risk of becoming seriously ill are allowed to board a cruise that may take 4-day or more to reach the nearest port.
- Medical kits with a doctor's diagnosis will continue to be provided on each vessel.
- On the cruises that may take 4-day or more to reach the nearest port, the new corona oral medication will be stocked.
- Securing an isolation room on each vessel is recommended by MarE3, but ultimately it is up to the chief scientist to decide.
- Not limiting to infectious diseases, it is recommended to think in advance about the alternatives if something happens (possible and prompt replacement in the case of emergency).

Response beyond 2024/4/1 (during cruise)

- Affected person will be isolated and the infection will be identified using an antigen test kit.
- Even if tested positive for the new corona and/or influenza virus, persons in close contact will not be identified or screened, in principle, but all persons will wear masks and disinfect their surroundings.
- In the case of influenza, therapeutic medicine will be used.
- In the case of a cruise 4-day or more away from the nearest port, person tested positive for the new corona will use the medical kit with a doctor's diagnosis and will use a therapeutic medicine based on a doctor's examination and prescription.
- In the case of a cruise within 4-day from the nearest port, the new corona medicine will not be stocked, but a medical kit with a doctor's diagnosis will be stocked, and by receiving a doctor's diagnosis, in the unlikely event of an emergency disembarkation, the new corona medicine will be made available at the port of call.
- The isolation period for quarantined persons shall be as described in the Q&A slides below for the new coronavirus, influenza, and norovirus infection.
- Strict infection control measures such as wearing masks will be taken until 10th day in the case of new coronavirus (the date of onset or the date of confirmation of the positive test will be counted as 0), and until 7th day in the case of influenza, to prevent further spread of infection and/or occurrence of severe cases.

Response to the Norovirus

- Quarantine the personnel who is suspected to be infected by Norovirus judging from the symptoms.
- Conduct an antigen test. Consider the possibility of false-negative even in case being tested negative.
- Thoroughly conduct disinfection. Separate toilet for the suspected infected personnel, if possible.
- Back to work criteria (except for galley staff): 72 hours after vomiting and diarrhea have ceased.
- Back to work criteria (for galley staff): In addition to the above condition, food processing work (directly touching foods) is not allowed until Norovirus-free status is confirmed by a stool test.

Decision processes for continuation of the cruise

- Judging from the onboard infection status just before the port call, MarE3
 Operations Department will order an additional test at the timing of the
 port call, considering the effect of infection on the next cruise.
- The ship, operating company, chief scientists, and MarE3 will discuss and decide whether the cruise can be continued.
- If the situation affects the next cruise, MarE3 will immediately inform the relevant parties.

No change from the current procedures.

[*] About Screening

- Screening will be conducted when MarE3 considers it necessary after considering the request from the ship and/or the operating company.
- > Expected cases when screening will be conducted:
 - When a sign of pandemic (e.g. multiple infected personnel) is observed onboard.
 - When the infection spreads onboard to certain degree, which may affect the next cruise.
- > Targets and timings of the screening
 - Targets: Patient and persons in close contact (more than 15 minutes contact within 1 m without a mask for two days after the symptoms noticed or tested positive).
 - Timings: Day 0 and Day 3.
- If case the cruise is difficult to continue, a PCR test will be also conducted to the mariners, if necessary.

Test kit and Medicine

- Antigen test kit for screening: POB x 2
- Test kit with a doctor's prognosis: 5
- Medicine (Lagevrio): 2 (only for the cruises going beyond fourdays distance)

- Q1: What are the specific symptoms of "concern about health" on Page 3?
- A1: This aims to find early sign of infectious diseases, specifically flu-like symptoms and Norovirus.
- Q2: To whom shall I report?
- A2: To: mare3-fleetops-kikan@jamstec.go.jp

Q3: What is the quarantine period for each disease on Page 3?

A3-1: For COVID-19 case (Ref: https://www.mhlw.go.jp/stf/corona5rui.html)

1) Recommended period for staying at home

Different from the influenza case • First five days after the onset are of high possibility for infection. It is recommended to stay at home during this period*1 (day of onset counted as Day 0*2). In addition, if you still have any symptoms after this period, it is recommended to continue to stay home until 24 hours after symptoms such as fever, phlegm or sore throat. If you still have severe symptoms, consult a doctor.

*1 If you have to go out during this period, make sure you have no symptom, and wear a mask.

*2 In case of no symptom, the day sample was collected for testing is regarded as Day 0.

2) Care for other people

Virus may be discharged from the infected person for 10 days, therefore, take care of others by wearing a mask and not having a contact with people of high-risk group (*e.g.* elderly people). If you have any symptoms such as cough or sneeze even after 10 days have passed, ensure wearing a mask and maintain cough etiquette.

Q3: What is the quarantine period for each disease on Page 3?

A3-2: For influenza case

(Ref: https://www.mhlw.go.jp/content/001158487.pdf (in Japanese only) Q17

In general, an influenza patient discharges virus from nose or throat from the day before onset of the symptoms until 3-7 days after that. It is essential not to go out during this period.

The amount of the virus discharged decreases as body temperature lowers. However, it is said that the virus discharge continues even after the body temperature becomes normal. There is some variation in this duration, you should take care not to spread the virus by wearing mask or other means as long as having symptoms such as cough or sneeze.

In the School Health and Safety Act, the suspension of attendance period is defined as "Five days after the onset, and two days (three days for infants) after the body temperature becomes normal" (except for a case when a physician judges that the patient is no more infectious).

Different from the COVID-19 case

Q3: What is the quarantine period for each disease on Page 3?

A3-3: For Norovirus case

- Not determined by law.
- Back to work criteria (except for galley staff): 72 hours after vomiting and diarrhea have ceased (recommendation by JAMSTEC occupational physician, November 2020).
- Back to work criteria (for galley staff): Food processing work (directly touching foods) should be avoided until Norovirus-free status is confirmed by a stool test (including no-symptom virus-career)*.

Note: When a food poisoning occurred in *R/V Mirai* in 2020, Public Health Centre inspector advised that galley staffs should not go back to food processing jobs until PCR-negative was confirmed.

* Manual for Hygiene Management at Large-scale Food Preparation Facilities (Ministry of Health, Labour and Welfare (MHLW), last update on 16 June 2017)

https://www.mhlw.go.jp/file/06-Seisakujouhou-11130500-Shokuhinanzenbu/0000168026.pdf (in Japanese only)

For detection of a Norovirus, a test method which can detect 10-5 order virus is desirable regardless to a genotype of viruses. Other than PCR test, BLEAIA test also satisfies this criteria.

https://www.crc-group.co.jp/esc/pdf/norovirus_leaf2107.pdf

Q4: Who are in "high-risk group" on Page 3?

A4: https://www.pfizer-covid19.jp/risk-of-severe-illness (in Japanese only)

A person in ANY of the below category has higher risk to become serious when being infected with a COVID-19.

O Age: Over 65 O Fat (BMI > 30)

O Smoking (present / past)

O Lack of exercise, bad lifestyle habit, pre-existing diseases (See below)

High blood pressure, Diabetes, Cancer, Chronic lung disease (e.g. COPD)

Chronic kidney disease, Heart blood vessel disease (e.g. Myocardial infarction, Angina pectoris)

Brain blood vessel disease (e.g. Cerebral infarction, Cerebral hemorrhage)

Immune disorder (HIV, Immune disorder associated with organ transplantation)

- O Immunosuppressant (steroid) usage
- O Pregnant woman (late stage)

^{*} BMI: Body Mass Index = weight (kg) / height (m) x height (m)

^{**} COPD: chronic obstructive pulmonary disease, HIV: Human Immunodeficiency Virus

^{***} After "Guidelines for diagnosis of COVID-19 (Ver. 10.0)" (MHLW)

Q5: How long the surrounding people (of a person tested positive) must wear a mask? (on Page 4)

A4: Five days (See below)

[COVID-19]

https://www.mhlw.go.jp/stf/corona5rui.html (in Japanese only) Q1

In general, a COVID-19 patient discharges virus from the nose or throat from the two days before onset of the symptoms until 3 – 10 days after that.

Especially, the amount of virus discharge is very high during the first three days after onset, and largely decreases after Day 5. For this reason, you should pay attention especially in the first five days.

Although the amount of virus discharge decreases with a recovery of symptoms such as fever or cough, a certain amount of virus continues to be discharged even after recovery from major symptoms.

[Influenza]

https://kantoh.johas.go.jp/column/20210416_6.html#:~:text=%E3%82%A4%E3%83%B3%E3%83%95%E3%83%AB%E3%82%A8%E3%83%B3%E3%82%B6%E3%81%AF%E7%97%87%E7%8A%B6%E3%81%8C%E8%BB%BD%E5%BF%AB,%E3%83%AF%E3%82%AF%E3%84%E3%83%81%E3%83%B3%E3%83%B3%E3%82%92%E6%89%93%E3%81%A1%E3%81%BE%E3%81%97%E3%82%87%E3%81%86%E3%80%82 (in Japanese only)

Even the symptoms are relatively light, virus is discharged from one day before to five days after the onset. Extra care is needed during this period.