

Health Report

Advice on further measures to decrease COVID-19 transmission risk at the maritime border

Date due to MO: 4 November 2020	Action required by: N/A
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To: Hon Chris Hipkins, Minister of Health	

Contact for telephone discussion

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Action for Private Secretaries

Return the signed report to the Ministry of Health.

Date dispatched to MO:

Advice on further measures to decrease COVID-19 risk at the maritime border

Purpose of report

This report sets out further measures you may want to consider, with the aim of further decreasing the risk of COVID-19 spread at the maritime border. The measures focus on interactions between crew and New Zealand workers at the port and on maritime vessels, and also behaviour within managed isolation. It follows our most recent advice three days ago, on testing replacement maritime crew to further reduce the risk of COVID-19 transmission [refer HR 20201904].

Summary

- On 18 September 2020, a New Zealand-based maritime engineer tested positive for COVID-19. This case is the first instance where it is suspected that a community case has arisen as a result of interactions with those working at the maritime border. Investigation has concluded the highest probability is that the maritime worker contracted the virus while carrying out work on board a maritime vessel, which had recently received eight replacement crew.
- Overseas replacement crew who are not fishing in New Zealand are required to stay in managed isolation if their transit period is longer than 24 hours, then to be transferred to a ship as soon as practicable. If they remain at a managed isolation facility for longer than three days, it is the Ministry's expectation that they will be tested for COVID-19. However, there is currently no legal requirement to test replacement crew, nor for such crew to remain at the managed isolation facility until they receive a negative result before proceeding to their maritime vessel.
- Current border settings are designed to significantly reduce the risk to the New Zealand community, while balancing the important economic and seafarer wellbeing factors relating to the maritime sector.
- The current case was identified and isolated quickly and the worker was subject to regular surveillance testing. While this indicates that precautionary testing at the maritime border is working, it is still appropriate to review the broader settings in place to ensure that we are learning any lessons from recent experience at the maritime border and continually working to reduce the risks of COVID-19 entering the country via that route.
- This report proposes further work on some immediate additional measures to further strengthen the response at maritime border to prevent COVID-19 spreading. The proposed measures are based on both emerging lessons from the ongoing investigation into the recent spread of COVID-19 at the maritime border by a maritime engineer and among a recent fishing crew while in MIQ. We have also done initial testing with MBIE, Transport and Maritime New Zealand on the feasibility of these measures.
- The proposed suite of further measures for strengthening the maritime border protections against COVID-19 involve:
 1. assembling a much more complete picture of who is going onto, and off, maritime vessels at all times (even if they are not formally 'boarding' or 'disembarking')
 2. reviewing our Infection Prevention and Control (IPC) guidance, and working with the maritime sector to introduce further measures to ensure maritime workers adherence

3. improving adherence to IPC protocols for Managed Isolation arrangements, with particular emphasis on ensuring these are not overlooked for dedicated arrangements
 4. sequencing of movement of portside workers and replacement crew, which would involve:
 - ensuring that any replacement crew only board vessels after necessary work is complete
 - if this is not possible, ensuring clear requirements are in place to minimise the potential for contact between replacement crew and portside workers.
- We also propose to explore with MBIE, Transport and the maritime sector whether requiring replacement crew to enter managed isolation for 14 days would be effective and feasible in contributing to risk reduction.

Recommendations

We recommend you:

- a) **Agree** that, while there is evidence that measures, such as regular testing at the maritime border is working, our recent investigations of two incidents suggest further strengthening of the maritime border against COVID-19 spread is still needed Yes No
- b) **Note** that, as instructed, following our recent report [HR 20201904] to you, we have introduced testing within the first 24 hours for all maritime crew (departing or arriving into New Zealand) who enter managed isolation facilities) Yes No
- c) **Note** that further advice will be provided by 6 November around increasing the testing frequency of high-risk maritime workers Yes No
- d) **Note** that the Ministry is also working with the Ministry of Transport and border agencies to develop and implement your direction for the testing of all replacement crew Yes No
- e) **Direct** the Ministry of Health to work with MBIE, Transport and border agencies to ensure alignment in policies being adopted by ports and to undertake work to strengthen the maritime border, including considering: Yes No
 - Creating a more complete picture of who is going onto and off maritime vessels
 - Reviewing our Infection Prevention and Control guidance and working with the maritime sector to ensure adherence by all maritime workers and crew
 - Improving adherence to IPC protocols for managed isolation facilities, with a particular focus on dedicated arrangements (e.g. self-funded arrangements for fishing crew or sports teams)

- Developing guidance around the safe protocols for New Zealand based port workers interacting with vessels that have replacement crew.

f) **Direct** the Ministry of Health to explore with MBIE, Transport and the maritime sector whether requiring replacement crew to enter managed isolation for 14 days would be effective and feasible in contributing to risk reduction. **Yes** **No**

g) **Agree** that the immediate suite of proposed measures above constitute part of an ongoing cross-government maritime border strengthening programme underway. **Yes** **No**



Dr Ashley Bloomfield
Director-General of Health
Date:



Hon Chris Hipkins
Minister of Health
Date: 15/11/2020

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Advice on further measures to decrease COVID-19 risk at the maritime border

Background

1. Current border settings have been designed to significantly reduce the risk of COVID-19 to the New Zealand community, while balancing economic and wellbeing factors relating to the maritime sector.
2. On 30 June, the COVID-19 Public Health Response (Maritime Border) Order was introduced which prohibited foreign vessels from entering New Zealand with a range of exceptions including fishing and cargo ships, among others.
3. The COVID-19 Public Health Response (Maritime Border) Order (No 2) 2020 (Maritime Border Order) came into force on 6 September 2020 and introduced strengthened measures to prevent the transmission of COVID-19 via our maritime border. These include (for those intending to enter New Zealand community):
 - a. requiring completion of 14 days isolation (either onboard ship or in a managed isolation facility) before entering the New Zealand community
 - b. requiring all crew members of a ship to present low-risk indicators before any person is able to disembark to enter the community
 - c. requiring disembarking overseas crew members and port-facing maritime workers boarding ships to wear PPE and maintain physical distancing.
4. **Appendix one** sets out all relevant existing control measures at the maritime border.
5. From 2 November 2020, all maritime replacement crew entering managed isolation, either before departing New Zealand or before joining their vessels, will be now tested for COVID-19 on arrival or as soon as practicable within the facility. A direction to this effect was issued under the COVID-19 Public Health Response (Isolation and Quarantine) Order 2020. This followed the recent identification of a community case of COVID-19 connected with a maritime replacement crew (case description at **Appendix two**), our provision of options to you to strengthen the testing regime [HR 20201904 refers] and your request to implement testing within the first 24 hours of arrival to a managed facility.
6. The Maritime sector is also governed by the Maritime Transport Act 1994 which includes the responsibilities of a ship master towards all those onboard, and the Health and Safety at Work Act 2015, governing the protection of ship workers at their place of work. There is a high level of interest from the maritime industry and relevant government agencies to recognise the existing legislative and operating framework and to continue to enhance the COVID-19 settings to protect the maritime sector.

Options to strengthen the response at the maritime border

7. This report covers some immediate additional measures to further strengthen the response at the maritime border to prevent COVID-19 spreading. The proposed measures are based on both emerging lessons from the ongoing investigation into the recent spread of COVID-19 at the maritime border by a maritime engineer and among a recent fishing crew while in MIQ.

We have also consulted rapidly with MBIE, Transport and Maritime New Zealand to test the feasibility of these measures.

8. Our first proposed suite of further measures for strengthening the maritime border protections against COVID-19 involve reviewing our Infection Prevention and Control (IPC) guidance, and working with the maritime sector to introduce further measures to ensure all maritime workers follow it.
9. Our second proposed set of further measures involve introducing greater monitoring of adherence to IPC protocols for Managed Isolation arrangements, with particular emphasis on those for dedicated arrangements (e.g. for deep sea fishing crews that are self-funding managed isolation). This is based on our emerging investigation results which suggests that insufficient space was possibly allocated to fishers in managed isolation, increasing the risk of spread among them, to the Managed Isolation workforce and ultimately the community.
10. Our third set of further measures involves assembling a much more complete picture of who is going onto, and off, maritime vessels at all times (even if they are not formally 'boarding' or 'disembarking' (e.g. focusing on any maintenance workers in particular). In particular, our aim would be to work with the maritime sector to ensure we are able to gather together a single picture of all shore workers who could come into contact with anyone on board a maritime vessel arriving from overseas.
11. The fourth set of measures aim to increase consistent understanding of safe protocols for portside workers and replacement crew when maintenance or other forms of work need to be carried out onboard a vessel. This could include removal of non-essential crew from the route to be taken by a port worker when boarding and areas requiring sanitisation, and protocols for different scenarios.
12. The options, level of assessed effectiveness, feasibility to implement and initial cost assessment are set out in the table below.

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	Option description	Effectiveness <i>How well will the option solve the problem?</i>	Feasibility <i>How workable is the option?</i>	Cost <i>Is the cost low/medium/high on the health and/or MIQ systems?</i>	Recommendation <i>On balance, do we recommend this option or not?</i>
<p>1. Objective:</p> <p>A complete picture over who is boarding and disembarking maritime vessels, ensuring COVID-19 does not spread through undetectable channels across the maritime border</p>	Running stocktake of all replacement crew for each vessel	Medium - as long as the information clearly shows who is joining/leaving vessels and when	Medium - Maritime NZ have said this is possible to put in place rapidly; responsibility for stocktake would need to be determined	Low - simply involves collating existing information	Further work required
	Centrally-held contact-tracing log of everyone who boards maritime vessels for servicing	High - would help detect possible sources of transmission onto/off maritime vessels	Medium - need to clarify who will monitor and ensure the log is current / quality assure over time	Medium - may require new staffing to undertake monitoring and keep records	Further work required
	Ensure anyone boarding a maritime vessel (e.g. for maintenance) must receive centrally-held approval first	High - would provide a centrally-held view of everyone boarding	Low - in practice, very hard to implement and enforce, given high number of ports and movements	High	Not recommended - infeasible and too costly
	QR codes on gangways	High – would provide secure and accessible source of reliable information	Medium – appears simple to implement but would need to explore further with relevant stakeholders and is reliant on compliance of port workers	Low	Further work required

<p>2. Objective:</p> <p>Assurance around consistent IPC measures being adhered to in port environment and on maritime vessels</p>	Extend IPC audits to ports, consider infringement system	High – systematic audit confirms IPC standards, identifies gaps and process to address	Medium – system in place to audit MIFs currently, some time and work to adapt to port setting	High – cost and workforce pressure on MOH which currently audits MIFs	Further work required
	Require onboard crew of foreign vessels to wear PPE when port-side worker boards	Medium – provides some extra protection if COVID-19 present but PPE effective alongside other measures	Medium – need to explore how to enforce, ensure compliance and correct usage	Low – if required then shipping company would need to supply	Further work required
	Create stricter guidance and consistent protocol and ensure training options for port-side workers boarding ships (time on board, physical distancing, PPE, no meals etc)	High – industry receptive to health guidance and efforts to stop virus transmission	High – can build on existing guidance, need to explore concerning gaps and impact of any change in guidance	High – potentially costly to industry if time limits were applied to time onboard; dependent on changes deemed most effective	Further work required
	Align the Maritime Border Order to the Health and Safety at Work Act to reflect that parts of the port are considered a high-risk environment	High – strengthens ability to manage risk	Medium – will need to work with industry to understand operationalisation	Low	Further work required
	Create response system for vessels (red /green) as signal for port-side	High – would create behaviour change if colour-coding associated with clear set	Medium – need to understand how this could be operationalised,	Medium – some industry and port cost to implement	Further work required

	behaviour, based on COVID-19 risk profile	of risks and corresponding response (eg, only board in full PPE/crew in PPE and distance)	potentially high resource and management and risk of confusion, would need care.		
3. Objective: Improved managed isolation IPC protocols and requirements, creating potential for infection to spread to MIF workers and wider community (Sudima Hotel example eg, double-bunking approved, socialising in MIF)	Issue guidance to improve understanding about the limits of pre-departure testing	Medium – variable evidence on value of PDT, simple to explain this is one (unproven) tool in the box	Medium – MOH in process of developing advice on this issue	Low – issue position online and email to relevant stakeholders	Recommended
	Reinforce health messaging to MIFs around no socialising between those isolating	High – messaging can be effective to follow operating procedure, and the risks to public health if there are lapses	High – straightforward to reinforce this message to MIFs; further work to understand why double-bunking was permitted in Sudima Hotel case.	Low – develop letter; advise team responsible for MIF audits to follow up.	Recommended
4. Objective: Clarity of protocols to follow when interacting with a vessel that may have replacement crew	Develop strengthened guidance for portside workers and replacement crew to ensure there are clearer protocols for when crew need to come onto a vessel (eg, safe sequencing of movement on vessels)	High – scenarios and a checklist of the safest form of sequencing and steps would provide consistent understanding	High – work with the sector to develop and issue	Low	Recommended

Next steps

13. We will now work with MBIE, Transport and border agencies on these measures following your direction. Once we have received your feedback on this report, and following consultation with other agencies, we will report back with a sequenced plan for the measures you wish to progress.
14. Following our report [HR 20201904] to you last week, you have instructed the Ministry of Health to work with Transport and MBIE to introduce testing for all replacement crew at the maritime border. In line with this instruction, a direction has been issued for all maritime workers entering managed isolation facilities to be tested for COVID-19 on arrival or as soon as practicable. This has been introduced from 2 November 2020, with the operationalisation of this testing being worked through and refined this week.
15. Consultation is underway with relevant agencies regarding the testing of replacement crew who transit directly to a vessel, with a solution potentially in place by 20 November 2020. There are operational challenges including where testing takes place, how replacement crew are flagged for testing, roles and responsibilities. Once discussions are complete and a feasible process developed, it would take an estimated five working days to implement.
16. Currently, we do not recommend keeping replacement maritime crew in managed isolation facilities while awaiting test results, since advice from Transport and MBIE suggests this would likely have significant negative effects on both supply chains and MIQ capacity. Instead, we propose to introduce further measures to reduce the risks of COVID-19 spreading at the maritime border, while not unduly delaying replacement crew transfer arrangements.
17. However, we intend to explore with MBIE, Transport and the maritime sector whether requiring replacement crew to enter managed isolation for 14 days would be effective and feasible in contributing to border risk reduction.

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Appendix 1: Existing control measures at the maritime border

COVID-19 Public Health Response (Maritime Border) Order (No. 2) 2020

This Order came into force on 6 September 2020. The Order aims to prevent and limit the risk of an outbreak or spread of COVID-19 by:

- restricting which ships may arrive in New Zealand,
- putting in place isolation or quarantine requirements for people who arrive in New Zealand by sea, and
- enabling the safe transfer of crew.

The Order is intended to enable maritime activities to take place safely in the context of COVID-19, and in so doing, contribute to New Zealand's economy. It covers the following issues:

- which ships and crew are permitted to enter New Zealand
- an extended notice period before arrival in New Zealand
- isolation and quarantine requirements
- requirements for disembarking to enter New Zealand, for those who are eligible
- transition arrangements for crew replacements to and from a ship
- a new infringement regime for non-compliance with the requirements.

One of the main changes in the Order is that where one or more crew wish to disembark to enter the New Zealand community (either permanently or temporarily), the all crew are required to:

- have undertaken at least 14 days isolation on the vessel at sea,
- been symptom free during that 14 days, and
- meet the low risk indicators.

A person meets the low risk indicators if:

- they have undergone testing and medical examination for COVID-19 with a negative result; or
- have been determined by a medical officer of health or health protection officer to have particular physical or other needs that make it inappropriate for them to have the testing and medical examination; and
- other information or medical tests relating to the person (if any) indicate that the person is at low risk of having or transmitting COVID-19.

The disembarking person must also be authorised to disembark by a Medical Officer of Health or Health Protection Officer.

If all crew do not meet the above disembarking criteria, those who are eligible to disembark will be required to go into managed isolation for a minimum of 14 days.

Public Health measures

- Public health and infection control measures in place to prevent transmission of COVID-19 at the maritime border include:
 - Screening at the airport. If people are symptomatic, they will be placed in managed isolation and treated in accordance with the COVID-19 Public Health

Response (Isolation and Quarantine) Order 2020. If they are asymptomatic, they will be transported directly via dedicated private transport either to their ship or to a managed isolation facility if their ship is not leaving straight away.

- Isolation on their ship. Isolation on the ship means being isolated from others outside of the ship. When any new crew join a ship, the 14-day isolation period is reset to day zero. No-one can disembark into the New Zealand community after new crew join before a further 14-day isolation period and with all crew meeting the low risk indicators.
- Physical distancing and PPE. Maritime crew interact with New Zealand workers under clear health and safety guidance and precautions. Both workers and crew are required to adhere to physical distancing and PPE protocols when close contact takes place as part of doing their work.
- Personal hygiene. Handwashing, cleaning surfaces, and cough and sneeze etiquette are all part of the measures in place.

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Appendix two: Recent incidents of COVID-19 involving replacement crew

Existing controls relating to replacement maritime crew [as at 30 October 2020]

1. In September 2020, 142 replacement crew arrived in New Zealand and 184 replaced crew left New Zealand. Managed Isolation and Quarantine is currently facilitating 30 – 50 commercial crew transfers per week. These numbers are gradually increasing.
2. Replacement maritime crew members arriving in New Zealand by air must travel directly from the airport to the ship they are departing on and depart from New Zealand on that ship as soon as is reasonably practicable.
3. If the ship that crew members wish to board does not depart as soon as reasonably practicable, a Medical Officer of Health or a Health Protection Officer must transfer the crew member to a managed facility for the purpose of remaining in isolation and quarantine there in accordance with the COVID-19 Public Health Response (Isolation and Quarantine) Order 2020, or until the ship departs, whichever happens first.
4. If a crew member arriving by air wishes to board a ship that is scheduled to travel to another port or place but is not departing from New Zealand, the crew member must travel from the airport to a place of isolation or quarantine so they can complete their period of isolation or quarantine in accordance with the Isolation and Quarantine Order.
5. Neither replacement maritime crew arriving by air, nor maritime crew departing by air, are required to be tested under any of the existing Orders, yet each poses a small potential risk of transmission of COVID-19 into New Zealand.

Recent incidents involving replacement crew

6. Two recent incidents at our borders highlighted issues which had the potential to cause community transmission of COVID-19. In both incidents, COVID-19 was identified in relation to replacement crew arriving by air to join maritime vessels in New Zealand. Many parts of the system worked extremely well to contain the risk but there are steps which can help further strengthen border settings.
7. A large contingent of Russian and Ukrainian replacement crew for fishing vessels arrived in New Zealand on 16 October 2020. The crew entered the Sudima Hotel managed isolation facility in Christchurch for the required 14-day period before intending to transfer to their vessels. Pre-departure testing indicated none of the crew were positive for COVID-19 but a number of the group developed symptoms a few days after arrival into New Zealand. The crew are being cared for within the managed facility and the isolation period has been extended.
8. On 18 October 2020, a New Zealand-based maritime engineer tested positive for COVID-19. This case is the first instance where it is suspected that a community case has arisen as a result of interactions with those working at the maritime border. Investigation suggests the highest probability is that the maritime worker contracted the virus while carrying out work on board a maritime vessel. The vessel is now anchored offshore in Australia, and we are awaiting test results for the replacement crew.
9. The vessel had recently received eight replacement crew, who had arrived in New Zealand via the air border from the Philippines (the replacement crew). Before being transferred to the ship, the replacement crew had stayed in a managed isolation facility upon arrival in New Zealand for between two and four days.

10. Overseas replacement crew who are not fishing in New Zealand are required to stay in managed isolation if their transit period is longer than 24 hours, then to be transferred to a ship as soon as practicable. If they remain at a managed isolation facility for longer than three days, it is the Ministry's expectation that they will be tested for COVID-19. However, there was no legal requirement to test replacement crew, nor for such crew to remain at the managed isolation facility until they receive a negative result before proceeding to their maritime vessel.
11. The maritime engineer developed symptoms and isolated quickly and the worker was subject to regular surveillance testing. While this indicates that precautionary testing at the maritime border is working, it is still appropriate to review the broader settings in place to ensure that we are learning any lessons from recent experience at the maritime border and continually working to reduce the risks of COVID-19 entering the country via that route.

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