

Briefing

Progress on 11 Managed Isolation and Quarantine Facility Workstreams

Date due to MO:	16 December 2020	Action required by:	N/A
Security level:	IN CONFIDENCE	Health Report number:	20202280
To:	Hon Chris Hipkins, Minister for COVID-19 Response		
Copy to:	Hon Dr Ayesha Verrall, Associate Minister for Health		

Contact for telephone discussion

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Minister's office to complete:

- | | | |
|---|------------------------------------|--|
| <input type="checkbox"/> Approved | <input type="checkbox"/> Decline | <input type="checkbox"/> Noted |
| <input type="checkbox"/> Needs change | <input type="checkbox"/> Seen | <input type="checkbox"/> Overtaken by events |
| <input type="checkbox"/> See Minister's Notes | <input type="checkbox"/> Withdrawn | |

Comment:

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Security level: IN CONFIDENCE **Date:** 16 December 2020

To: Hon Chris Hipkins, Minister for COVID-19 Response

Copy to: Hon Dr Ayesha Verrall, Associate Minister for Health

Purpose of report

1. This report responds to your request for an update on the progress of the 11 workstreams identified in HR 20202050, titled *"October/November 2020 managed isolation and quarantine facility workers COVID-19 infections: reviews and actions"*.

Summary

2. HR 20202050 outlined 11 workstreams that were in progress in response to the October/November 2020 Managed Isolation and Quarantine Facility (MIQF) worker COVID-19 infections. A summary of these recommendations is included in Appendix 1.
3. We have continued to provide updates on the progress on these workstreams in our regular weekly reporting to your office. This report provides a more detailed update on these 11 workstreams, five of which are completed and 6 of which remain in progress.
4. This update also summarises the focus areas for the first quarter of 2021.

Recommendations

We recommend you:

- a) **Note** that five workstreams have been completed:

Yes/No

- The development of a national incident review process; and
- The 'lessons learned' review of the Sudima International Mariner and Healthcare worker infections; and
- The development of a public health risk assessment for future group/class exemption cohorts; and
- Planning to decrease the smoking related Infection Prevention and Control (IPC) risk in MIQFs; and
- Review of the modes of transmission of the SARS-CoV-2 virus.

b) **Note** that the following workstreams are in progress:

Yes/No

- Ongoing reviews of ventilation systems; and
- Implementation of the IPC training platform for MIQF staff; and
- Implementation of N95/P2 particulate respirator fit testing programmes for MIQF health staff, and progression of a plan to guide the use of N95/P2 particulate respirators by non-health MIQF staff; and
- Ongoing work to reduce the risk of onward transmission from NZDF MIQF workers.

c) **Note** that the following workstreams are anticipated in the first quarter of 2021:

Yes/No

- We will brief you by 23 January 2021 on the Ministry's position on the potential role of ventilation systems in the airborne transmission of the SARS-CoV-2 virus within MIQFs;
- Finalisation of IPC guidance for ports and airports;
- Ongoing IPC audits of MIQFs. Further work may arise following the completion of these audits where opportunities for improvement is identified; and
- Consideration and planning regarding the implications of safe travel zones on the MIQ system.



Sue Gordon
Deputy Chief Executive
COVID-19 Health System Response
Date: 15/12/2020

Hon Chris Hipkins

Minister for COVID-19 Response
Date:

Progress on 11 Managed Isolation and Quarantine Facility Workstreams

Background / context

5. HR 20202050 detailed the range of reviews completed and underway in response to the October/November 2020 MIQF worker COVID-19 infections, as well as 11 workstreams that remained in progress. A summary of these recommendations is included in Appendix 1.
6. Weekly updates on the progress of these 11 workstreams have been provided to your office in our regular reporting. A more detailed update on the progress of these 11 workstreams is provided below.

Completed workstreams

Development of a national incident review process

7. The Ministry has developed a National Incident Review process that will ensure national consistency and facilitate cross-agency review and response to COVID-19 infections among MIQF workers. The National Incident Review process will be tabled at the MIQ Risk, Quality and Assurance Advisory Group on 16 December for endorsement.

'Lessons learned' review of the Sudima International Mariners and Health Care Worker infections

8. Following Canterbury District Health Board's (CDHB) clinical investigation into the October International Mariners and Health Care Worker infections, the Ministry of Health (the Ministry) and the Ministry of Business, Innovation, and Employment (MBIE) commissioned a joint 'lessons learned' review to identify key lessons from managing the first tranche of international mariners, and to make recommendations to strengthen the management of tranche two of the International Mariners.
9. The final report was submitted to the Chief Executive, MBIE and the Director-General of Health on Friday 11 December.
10. The Ministry and MBIE have begun work on an aligned work programme to ensure the recommendations of the review are actioned. The report identified 11 recommendations in relation to the second tranche of international mariners and 6 recommendations for other groups and the wider Managed Isolation and Quarantine (MIQ) system.
11. Recommendations specific to the upcoming second tranche of international mariners were made in the following areas:
 - *Roles and responsibilities:* clarify and confirm accountabilities, roles, responsibilities of all agencies and people involved in planning and managing the second tranche of international mariners.
 - *Risk assessment:* undertake a comprehensive risk assessment immediately to inform decision-making about the second tranche to help ensure that suitable workforce and operational plans are developed and resourced.

- *Operational plans and assurance needs:* develop an integrated, multi-agency, operational plan for the second tranche to give effect to the public health and operational requirements and the risk mitigation actions for the end-to-end process. This includes ensuring sufficient time is allowed for implementation of the operational plans, and considering the assurance required to manage key risks.
 - *Pre-arrival:* set clear expectations for the cohort in the second tranche of mariners before arrival, such as a code of conduct and expected behaviour.
 - *MIQF Operations Framework and Standard Operating Procedures (SOPs):* identify and document the specific changes required to the MIQF Operations Framework, SOPs, and the various site-specific plans for the second tranche and other groups. Ensure all staff are well-briefed and trained on the changes to the MIQF Operations Framework, SOPs, and site-specific plans.
 - *Communications protocols:* clarify and confirm the communication requirements, channels and protocols for dealing with matters relating to the second tranche. Ensure processes are in place to ensure mariners and staff are kept informed appropriately during any significant developments and events.
12. A further six recommendations relating to other cohort/exemption groups, and the wider MIQ system, were also identified. At a high-level, these related to planning and management of entry of groups into MIQFs, roles and responsibilities, ongoing IPC training for MIQF staff, and continuous improvement approaches.
13. MBIE updated you on the progress of these recommendations on 15 December 2020.

Development of a public health risk assessment for future group/class exemption cohorts

14. Due to the challenges and risks involved in managing the International Mariners at the Sudima in October, the Ministry worked with MBIE and regional Medical Officers of Health to develop a public health risk assessment template. The assessment supports the identification of the risks associated with group/class exemptions, and the clinical and operational risk mitigations that are required as a result.
15. The public health risk assessment template has been used to plan for the arrival of the second tranche of International Mariners in early January 2021.
16. As a result of this risk assessment, the following mitigations have been put in place in advance of their arrival:
- Accommodating the mariners across two MIQFs to ease the management burden and subsequent risk to staff if large numbers of mariners test positive in this tranche, as occurred in tranche 1;
 - Accommodating the mariners in rooms with balconies, where possible. This will allow the mariners to smoke on their balconies, thereby easing pressure on communal smoking areas. There is ongoing scenario planning to minimise the risk from international mariners who smoke;
 - Trialling the installation of partitions in the smoking area to reinforce physical distancing requirements within the smoking area (refer to paragraph 18 for further details);
 - Carrying out testing of the mariners upon their arrival to identify and manage infectious cases early in their stay and assist with forward planning;

- Double bunking will not be permitted with the second tranche of international mariners.
17. The public health risk assessment will be completed in advance for all large or bespoke group arrivals going forward.

Planning to identify operational solutions to decrease the IPC risk associated with smoking areas in MIQFs

18. The Ministry recently provided you with HR 20202211, titled *"Strengthening the managed isolation and quarantine facilities smoking policy"*. This briefing detailed the work underway to further enhance the management of smoking areas in MIQFs, including:
- Implementing management systems for smoking areas in MIQFs, and reducing the person-limit to maximise physical distancing within smoking areas; and
 - Making the smoking environment in MIQFs less appealing; and
 - Increasing the provision of 'stop smoking' support; and
 - Clarifying the MIQF smoking policy and expectations in returnee-facing collateral to inform prospective returnees prior to their arrival.
19. We will report back on the progress of this work in February 2021.

Review of the modes of transmission of the SARS-CoV-2 virus

20. The Ministry has prepared a document that describes and defines the modes of transmission of the SARS-CoV-2 virus. The document will ensure consistent use of terminology in incident reviews.

Ongoing workstreams

Reviews of ventilation systems

21. Note that the progress of the three workstreams related to ventilation systems identified in HR 20202050 are summarised in paragraphs 22 – 30.
22. The Ministry continues to regularly search the literature regarding the potential role of ventilation systems in the transmission of COVID-19. The general tone of the literature reflects a growing body of evidence that airborne transmission of SARS-CoV-2 occurs, although the overall risk is low compared to person-to-person transmission.
23. The role of ventilation systems in controlling the risk of infection remains unclear. In particular, there is relatively little relevant or applicable evidence regarding the airborne transmission risk at MIQFs given the unique nature of New Zealand's MIQF system. However, there is a large body of evidence modelling the effect of ventilation on the risk of respiratory infection for pathogens other than SARS-CoV-2.
24. We are preparing a briefing for you (by 23 January 2021) establishing the Ministry's position on the potential role of ventilation systems in the airborne transmission of the SARS-CoV-2 virus within MIQFs, to inform a consistent approach to managing ventilation systems across all MIQFs in the country. This briefing will also cover:
- Whether MIQF ventilation systems will be modified according to general IPC principles, or

- Whether testing will be undertaken to more accurately assess the airborne transmission risk in MIQFs (refer to paragraphs 27 – 30), and
 - Existing international guidance in the use of ventilation systems to mitigate the risk of airborne transmission of SARS-CoV-2, and
 - The associated mitigations (if any) that are required.
25. This work will involve clinical and technical input from the Ministry's Science and Technical Advisory and Public Health teams, as well as close collaboration with MBIE given the operational implications that will result. Additional input will be sought from technical experts in ventilation engineering, infectious disease transmission, and air quality monitoring.
26. A report containing interim high-level findings of the CDHB-commissioned ventilation assessments of the Christchurch MIQF is complete and was released by Community and Public Health (PHU) on 3 December 2020. A final report is expected before Christmas.
27. The Ministry has also developed a scoping document detailing the steps and processes that would be required to collect empirical evidence of the role of ventilation systems in airborne transmission of the SARS-CoV-2 virus within an MIQF environment.
28. Given the unique nature of New Zealand's MIQF environments – of which there are few comparable international models – and given the paucity of applicable literature identified through regular literature searching (refer to paragraphs 22 and 23), a study of this nature would provide world-first evidence.
29. Such a study would be led by a team specialising in environmental air quality and disease transmission, and would require complex analysis of a combination of patient factors, environmental factors, and consideration of the built environment. This analysis would also include assessing the effects of various mitigations, such as the use of portable air filters.
30. The Ministry is working through the scope and funding for this research and will update you on its progress in the 23 January 2021 ventilation briefing (see paragraph 24).

Development of a nation-wide staff IPC training platform

31. MBIE has developed a learning platform, 'Learn@MIQ', to standardise and assure the training that MIQF workers receive. This includes an IPC module with content provided by the Ministry. MBIE is waiting on the accurate collection of user-data, privacy approval, and final cyber security approval before taking Learn@MIQ live.
32. Collection of MIQF workers' user data commenced on 14 December. Each MIQF is being contacted to collect user data from individuals for an MIQ security ID programme – Learn@MIQ will use the data from this programme. From Friday 18 December, MIQF workers whose user-data have been collected will have access to Learn@MIQ.
33. MBIE expects up to 25% of MIQFs to have had user-data collected for the MIQ security ID programme before Christmas, with the remainder of facilities expected to complete their data upload in the new year.

Implementation of N95/P2 particulate respirator fit testing programmes

Health workforce fit testing progress, as at 14 December 2020

34. Auckland has fit tested 83% of the required MIQF health workforce, with 40 staff members remaining. Of the remaining staff, 21 are agency staff members who are not rostered to work in a MIQF in the short-term (i.e. within the next four weeks). They will not be fit tested until they are next on-site at a MIQF.
35. Fit testing of the final 19 staff (17 DHB and two agency) will be complete by 24 December.
36. Canterbury has fit tested 98% of the required MIQF health workforce, with two staff members remaining. s 9(2)(a)
37. Rotorua has fit tested 92% of the required health workforce, with five staff members remaining. Fit testing of the entire Rotorua MIQF health workforce had been scheduled for completion on 8 December, however, had to be delayed when the fit testing provider became unavailable. The final five staff members will be fit tested on 18 December 2020, per the availability of the fit testing provider.
38. Waikato has fit tested 100% of the required health workforce.
39. Wellington has fit tested 64% of the required health workforce, with 10 staff members remaining. Two staff members will be fit tested on 15 December, seven will be fit tested on 18 December, and the final staff member will be tested separately s 9(2)(a)
40. Wellington has experienced delays in fit testing due to the limited availability of external fit testing providers. The DHB has conducted some fit testing itself, however, MIQF health staff are required to undergo a two day stand down period prior to entering the hospital, and this is where the DHB's fit testing apparatus is stored. This has added additional challenges to scheduling fit testing.

Non-health workforce fit testing progress and plan

41. There are operational challenges in implementing a fit testing programme for the non-health MIQF workforce, as required by AS/NZS 1715:2009, particularly among the New Zealand Defence Force (NZDF) MIQF workforce. DHBs have limited capacity to provide fit testing for NZDF workers, and there are few private providers qualified to undertake fit testing.
42. Further, NZDF are a much larger workforce in comparison to the MIQF health workforce and are often deployed for short periods of times (one to six weeks) before either returning to other NZDF duties, or re-deployment to another MIQF.
43. To further reduce the risk, Air Commodore Webb reinforced the direction to NZDF MIQF workers to maintain at least 2 metres physical distancing from all returnees in MIQFs. In practice this means that that an N95/P2 particulate respirator should only be required in rare instances e.g. when required to support the police or restrain a returnee who is a confirmed or probable case of COVID-19.

44. While MIQF healthcare workers may spend long periods providing clinical care in close proximity to confirmed or probable cases of COVID-19 (in the absence of aerosol generating procedures), in the rare instance that an NZDF MIQF worker must go within 2 metres of confirmed or probable case of COVID-19, it is unlikely to be for extended periods of time.
45. Systematic reviews comparing the use of medical masks and N95/P2 particulate respirators report no statistical difference in the risk of acquiring clinical respiratory illness or influenza type illness when using a medical mask versus an N95/P2 particulate respirator, outside of aerosol generating procedures.
46. Accordingly, given NZDF MIQF workers should only require an N95/P2 particulate respirator in rare instances and for short periods, and with consideration of the cost, time, and operational challenges associated with fit testing the NZDF MIQF workforce, NZDF are exploring allowing their workforce to utilise N95/P2 particulate respirators as required in rare circumstances, without undergoing the requisite fit testing beforehand.
47. NZDF MIQF workers are likely to be provided with a P2 'cup' shaped moulded respirator, rather than a 'duckbill' particulate respirator, as the P2 respirators are easier to put on and take off. The Ministry has sourced specific P2 respirators from 3M to support non-health MIQF workers with their requirements.
48. From an IPC perspective, when physical distancing cannot be managed, the additional use of a P2 respirator that has not been fit tested for specific tasks will still provide a level of respiratory protection to NZDF personnel, provided all other IPC interventions have been applied in the first instance.
49. As the lead Person Conducting Business or Undertaking (PCBU) for the MIQ system, MBIE will lead discussions with NZDF to determine the acceptability of forgoing fit testing from a legal and health and safety perspective. This will be tabled at the MIQ Risk, Quality and Assurance Advisory Group meeting on 23 December for cross-agency review and discussion.
50. NZ Police working at MIQFs were already wearing N95/P2 particulate respirators prior to our updated guidance, as directed by NZ Police Occupational Health and Safety. This was not based on advice from the Ministry.
51. NZ Police have identified a range of operational challenges to fit testing their workforce and have indicated they will not carry out fit testing. Instead, NZ Police have trained their workforce in 'fit checking' each time they wear a respirator (i.e. ensuring the respirator is fitted correctly).
52. Non-health MIQF staff involved in the transport of confirmed or probable cases of COVID-19, such as drivers, will undergo fit testing given they are a relatively small and stable workforce. MBIE is supporting the employers of these staff members to procure fit testing for their employees.

Identifying opportunities to prevent the risk of onward transmission of COVID-19 from NZDF MIQF workers

53. NZDF are reviewing their procedures and practices on an ongoing basis to reinforce public health protection practices amongst the NZDF MIQF workforce, as well as identify opportunities to further prevent onward transmission of COVID-19 from NZDF MIQF workers to the community.

54. Since we provided HR 20202050, the following actions have been taken:
- All NZDF MIQF workers have been directed to wear face masks while on public transport;
 - A direction has been issued through the NZDF chain of command reinforcing that NZDF MIQF workers are to maintain 2 metres physical distancing from returnees wherever possible, and that instances where this is not possible should be extremely limited.
55. NZDF are currently exploring some restrictions on NZDF members working in MIQFs when attending a second place of work during their duty period, and for 7 – 14 days afterwards.

Next steps and anticipated workstreams in the first quarter of 2021

56. **Ventilation advice:** As described in paragraphs 21 – 30, we will brief you by 23 January 2021 on the Ministry's position on the potential role of ventilation systems in the airborne transmission of the SARS-CoV-2 virus within MIQFs, and the associated mitigations (if any) that are required. This will inform a consistent approach to managing ventilations systems across all MIQFs in the country.
57. **IPC guidance for ports and airports:** The Ministry is completing work to update IPC guidance for ports and airports. This will be finalised in January 2021.
58. **Ongoing MIQ IPC audits and improvements:** The next round of scheduled IPC audits of MIQFs has started. 16 IPC audits are expected to be completed before Christmas, with the remaining 16 to be completed in January 2021. We will provide you with a briefing on the findings and any further actions identified on 1 February 2021.
59. **Implications of quarantine free travel arrangements on MIQFs:** We will assess the implications should a trans-Tasman quarantine free travel zone open as this may lead to a higher proportion of returnees from higher-risk countries – and therefore higher numbers of COVID-19 positive returnees – in MIQFs, if there is reduced occupancy from those arriving from Australia.
60. We will also work to progress developing clear public health advice and requirements for those travelling from quarantine free travel zones

ENDS.

Appendix 1

Workstream	Agencies involved
Development of a national incident review process	Ministry of Health
Ongoing updates to the evidence review of the role of ventilation systems in COVID-19 transmission	Ministry of Health
Review of the ventilations systems in all Christchurch MIQFs	CDHB
Development of a public health risk assessment for future group/class exemption cohorts	Ministry of Health, MBIE, local Medical Officers of Health
Lessons learned review of the Sudima International Mariners and healthcare worker infections	Ministry of Health and MBIE
Development of a nation-wide MIQF staff IPC training platform	Ministry of Health and MBIE
Implementation of N95/P2 particulate respirator fit testing programmes	Ministry of Health, MBIE, NZDF
Planning to identify operational solutions that decrease the IPC risk associated with smoking areas in MIQFs	Ministry of Health and MBIE
Review of the modes of transmission of the SARS-CoV-2 virus	Ministry of Health
Scoping of requirements of an investigation of the risk of airborne transmission of the SARS-CoV-2 virus within a MIQF setting	Ministry of Health
Identifying opportunities to prevent the risk of onward transmission of COVID-19 from NZDF MIQF workers	NZDF