In Confidence

Office of the Minister of Health Chair, Cabinet

#### COVID-19 REVIEW OF TEMPORARY BORDER MEASURES: 2 MARCH 2020

# **Proposal**

1. This paper seeks approval to retain the current temporary border measures for an additional seven-day period, with ongoing review every 48 hours.

#### **Executive Summary**

- 2. Since Cabinet previously reviewed the temporary border measures on 24 February 2020 [CAB-20-MIN-0053], the global situation regarding COVID-19 has continued to develop rapidly and continues to present a threat to public health.
- 3. There is no evidence of a sustained decrease in the number of confirmed COVID-19 cases and deaths, and no softening of risk assessment levels or lifting of border measures in other countries. There has also been an increase in the number of COVID-19 cases in outbreaks outside of mainland China, particularly in South Korea, Iran and Italy.
- 4. Officials have been reviewing border measures for New Zealand every 48 hours, taking into account the threat to the health of New Zealanders and Pacific Island countries, and the readiness of agencies to operationalise any changes to measures. The global situation, economic considerations and foreign relations have also been reviewed.
- 5. Effective border management currently remains the best way to protect New Zealanders from the health effects of a potential outbreak and officials continue to recommend taking a precautionary approach, as epidemiology of the outbreak and scientific knowledge continue to evolve.
- 6. The temporary border measures are part of a wider response to the global outbreak and are due to expire at 23:59 on Tuesday 3 March 2020.
- 7. This paper proposes retaining the current temporary border measures for an additional seven-day period, expiring at 23:59 on Tuesday 10 March 2020, limited to cover people who have been in or transited designated places in the 14 days prior to boarding.
- 8. The current places of concern from which passengers attempting to board will be refused entry are mainland China, Iran and the Diamond Princess cruise ship.
- 9. The temporary border measures will continue to be reviewed by officials every 48 hours.

- 10. Officials are also monitoring the outbreaks of COVID-19 in countries outside of China, reviewing the epidemiology, and actively considering whether to change the case definition to include the range of countries that are experiencing sustained community transmission of COVID-19 beyond mainland China. The situation in these countries is evolving quickly and New Zealand travel advisories are also under active consideration. Subject to further cross-agency consideration, this may lead to further advice to Ministers on new designated places of concern, informed by advice from the Technical Advisory Group.¹ I will provide an oral update at the Cabinet meeting if required.
- 11. Officials will prepare further advice on the border measures for Cabinet consideration on Monday 9 March 2020 on whether to extend, lift, or change the border measures.

#### **Background**

- 12. On 24 February 2020, Cabinet:
  - 12.1. agreed to retain the current temporary border measures for an additional eight-day period, expiring at 23:59 on Tuesday, 3 March 2020, limited to cover people who have been in or transited mainland China in the 14 days prior to boarding;
  - 12.2. directed officials to report back to the group of Ministers with Power to Act on New Zealand's response to the COVID-19 outbreak [CAB-20-MIN-0015], including the Acting Minister of Education (Hon Tracey Martin), by Wednesday 26 February 2020, with more detailed options on any exemption from the current travel restrictions for international tertiary students from China before a go/no-go decision is made;
  - 12.3. noted that the Minister of Immigration, subject to further advice from Immigration New Zealand, intends to issue a Special Direction to Immigration Instructions to provide for the extension of the student visas of Chinese nationals who have yet to arrive in New Zealand whose visas are due to expire by 31 March 2020;
  - 12.4. agreed that the temporary border measures continue be reviewed every 48 hours [CAB-20-MIN-0053].
- 13. Ministers with Power to Act considered officials' advice on a potential partial exemption from the border measures for Chinese tertiary students on 27 February 2020 and agreed not to implement an exemption at this stage.
- 14. On 24 February 2020, in relation to border measure requirements and the public health response to New Zealanders aboard the Diamond Princess and potentially other cruise ships, Ministers with Power to Act agreed that:
  - 14.1. due to the exposure to a high risk of being infected with COVID-19, once in New Zealand, Diamond Princess passengers will be required to enter enforced isolation (quarantine), for a period of up to 14 days after arrival;
  - 14.2. New Zealanders who do not return to New Zealand on the repatriation flight will be required to enter enforced isolation for a period of up to 14 days if they if they arrive in New Zealand within 14 days of disembarking the Diamond Princess;

<sup>&</sup>lt;sup>1</sup>The Ministry of Health's Technical Advisory Group is providing the Ministry with high quality and independent medical, scientific and technical advice on the surveillance, pathology, prevention and management of COVID-19.

- 14.3. travellers that were on board the Diamond Princess that try to enter New Zealand within a 14 day period of disembarking will be refused entry excluding those exempted under current border measures;
- 14.4. the Ministers of Health and Immigration may add any further cruise ships with outbreaks to the travel restrictions previously agreed by Cabinet.
- 15. On 28 February 2020, Ministers with Power to Act agreed to extend current temporary border restrictions to cover people who have been in or transited Iran in the 14 days prior to boarding.
- 16. The current border measures are provided in Appendix One.

#### **Update on COVID-19 outbreak**

- 17. The global situation regarding COVID-19 continues to develop rapidly with a high degree of uncertainty.
- 18. As at 27 February 2020, there are 82,294 confirmed cases of COVID-19 reported globally. There are 2,804 confirmed deaths globally in total, 2,747 within mainland China. Based on confirmed cases, the case fatality rate is approximately 3.4 percent.
- 19. As at 27 February 2020, there are 3,664 confirmed cases reported outside of mainland China:
  - 19.1. Italy reported 400 confirmed COVID-19 cases and 12 deaths;
  - 19.2. Iran reported 141 confirmed COVID-19 cases and 22 deaths (possibly under-reporting at this time);
  - 19.3. South Korea reported a total 1,766 confirmed COVID-19 cases and 13 deaths;
  - 19.4. Nine new countries (Brazil, Denmark, Estonia, Georgia, Greece, Norway, Pakistan, Romania and North Macedonia) reported new cases of COVID-19 in the past 24 hours.
- 20. The number of new cases and deaths in mainland China is starting to slow, but overall numbers remain high globally. The number of cases in Australia and the wider Western Pacific Region suggest that risk in the Pacific region remains high. There is no evidence of a sustained decrease in the number of confirmed COVID-19 cases and deaths, and no softening of risk assessment levels or lifting of travel restrictions in other countries.
- 21. The current temporary border measures are part of our wider response to the global outbreak.
- 22. As at 26 February 2020, in addition to border response measures, the Ministry of Health has implemented the following measures under the pandemic response procedures:
  - 22.1. activating the National Health Coordination Centre (NHCC) to provide national coordination and direction;

- 22.2. arranging and implementing enforced isolation for New Zealanders returning from Wuhan and passengers who were on board the Diamond Princess cruise ship;
- 22.3. developing guidance for self-isolation and supplementary guidance for isolation measures in shared accommodation facilities;
- 22.4. communicating with passengers returning from mainland China to ensure selfisolation is undertaken for 14 days;
- 22.5. providing advice to the New Zealand public on self-isolation and measures to reduce spread of disease;
- 22.6. providing support for those in self-isolation, including registering through Healthline;
- 22.7. providing guidance to health professionals on preparing for and managing suspected and confirmed cases;
- 22.8. monitoring and appropriately responding to the evolving international situation;
- 22.9. working closely with other relevant agencies, and preparing for the potential next stages of the epidemic;
- 22.10. the Ministry of Health and Health Research Council have announced a new \$3 million fund to fast track research and development projects to address the current COVID-19 outbreak.

# Approach to assessment of New Zealand temporary border measures

- 23. Officials have been reviewing border measures for New Zealand every 48 hours, taking into account the threat to the health of New Zealanders and Pacific Island countries, and the readiness of agencies to operationalise any changes to measures.
- 24. The risk to foreign relations, and the risk of adverse economic factors, are also considerations that are becoming more important over time.
- 25. The advice on border measures to date has been based on weighing up these factors and considerations, as well as deepening understanding of the epidemiology of the disease, the readiness of the health system to manage it, and the changing international situation.
- 26. Importantly, in determining whether to retain border restrictions, consideration must be given to whether isolation measures can be reasonably met. Expectations of meeting isolation measure guidelines will apply regardless of the border measures in place. Any person who has been in a place of concern in the past 14 days should follow isolation requirements in New Zealand. The critical question is the level of compliance that will occur with the risk mitigating isolation measures.

27. International evidence suggests that self-isolation is effective and New Zealand remains without a case. However, the Ministry of Health recognises that some level of non-compliance with such guidelines by returning New Zealanders is possible. The question is whether relaxing border conditions would raise the extent of non-compliance to a level which would result in a threat to public health that could not be managed. This must be considered in the context of the readiness of the public health system to respond.

# Officials recommend that the current border measures be extended for an additional seven days

- 28. Lifting the border measures is not recommended at this stage. The overall public health risk remains high and there is no indication that the overall risk is reducing.
- 29. Effective border management currently remains the best way to protect New Zealanders from the health effects of a potential outbreak. Officials continue to recommend taking a precautionary approach, but as soon as the overall threat to public health is considered manageable and the border measures can be lifted, they should be.
- 30. The primary reasons that officials recommend an additional seven-day extension of the border measures at this stage are public health factors and the potential impact on Pacific Island nations.

#### Public health factors

- 31. The readiness of the public health system to manage the overall threat to public health is increasing. However, given the situation is still evolving in China and elsewhere, from a public health perspective, there is obvious merit to remaining in the 'Keep It Out' and 'Stamp It Out' phases of the pandemic response.
- 32. As at 26 February 2020, some public health factors indicate no worsening of the current situation. For example, emerging evidence about the severity of the illness has remained constant and World Health Organization (WHO) advice on travel restrictions has remained the same. There has been a steady increase in the number of deaths, but the number of laboratory confirmed cases has started to slow in China while the number of recovered cases has increased.
- 33. However, other factors signal uncertainty and continual change. The epidemiology of the outbreak is still developing. China has ceased routine testing of milder cases and a significant proportion of people who tested positive on the cruise ship in Japan had no symptoms.
- 34. The increasing cases of community transmission in the Republic of South Korea, Italy and Iran are also significant changes to the epidemiology. There have been increasing reports of cases and deaths outside of China, including cases with no clear epidemiological link to Hubei. There have been noteworthy changes in the public health measures in other countries, including in the United States and the United Kingdom.

- 35. For example, advice for returning travellers has been updated in the United Kingdom that anyone who has travelled to the United Kingdom from mainland China, Thailand, Japan, South Korea, Hong Kong, Taiwan, Singapore, Malaysia or Macau in the last 14 days and is experiencing cough, fever or shortness of breath is asked to stay indoors and call NHS111.
- 36. There is also still some uncertainty about the transmissibility of COVID-19. As more case data is being released from mainland China, more accurate assessments on the transmissibility will be made.
- 37. Further detail on the public health factors review is provided in Appendix Two.

Potential impact on the health of Pacific Island nations

- 38. Officials are considering New Zealand's role in providing support to Pacific Island countries to prepare for a possible COVID-19 outbreak. As New Zealand is a gateway to many Pacific Island countries and territories, Government decisions on the timing of when to relax or remove New Zealand border measures should take into account Pacific Island health system readiness.
- 39. Officials' work to support Pacific Island preparedness and response is underway. The primary focus at this stage is support to the Realm Cook Islands, Niue and Tokelau. This is yet to be confirmed but will likely include early deployments to support readiness activities, such as ensuring infection prevention and control protocols are well understood and preparation of isolation/quarantine facilities. The Ministry of Health and Ministry of Foreign Affairs and Trade (MFAT) are working closely with the World Health Organization (WHO) office in Suva, Fiji, on support to the region.
- 40. MFAT has provided \$1 million to date for the WHO's Pacific action plan on COVID-19 under which Pacific Island Countries are receiving a range of preparedness support. MFAT is actively monitoring any gaps in requests from Pacific Island countries that the WHO is unable to meet.
- 41. Capacity and capability across the Pacific region to prepare for and respond to COVID-19 is variable. In many Pacific Island countries and territories, a large outbreak could overwhelm the capacity of the health system to respond. For example, Tokelau does not have any Intensive Care Unit capability. New Zealand can expect requests for support in the event of outbreaks in the region.
- 42. Officials will provide further separate advice to Ministers on the broader implications of COVID-19 on the movement of people between New Zealand and Pacific Island countries. This advice will be informed by scenario planning on the possible consequences of a change in New Zealand's border measures on movement between New Zealand and the Pacific (including the implications for Pacific Island nationals currently in New Zealand on temporary visas).

<sup>&</sup>lt;sup>2</sup> See the National Assessment Bureau's *Coronavirus in the Pacific: Region at Risk* paper of 28 February 2019 for further details on possible impacts of a regional outbreak.

43. Keeping the current border measures in place until Ministers have considered this further advice would ensure decisions are informed by a proper assessment of the impact of any changes to border measures on Pacific Island nationals currently in New Zealand, the health of Pacific Island countries and territories and any additional demands on the New Zealand health system.

#### Alignment with Australia

- 44. New Zealand should continue to consider adopting border measures consistent with comparable countries, in particular Australia, while still considering New Zealand's unique circumstances.
- 45. On 27 February 2020 the Australian Government announced its border measures were being extended for a further week to 7 March 2020.

#### **Possible exemptions**

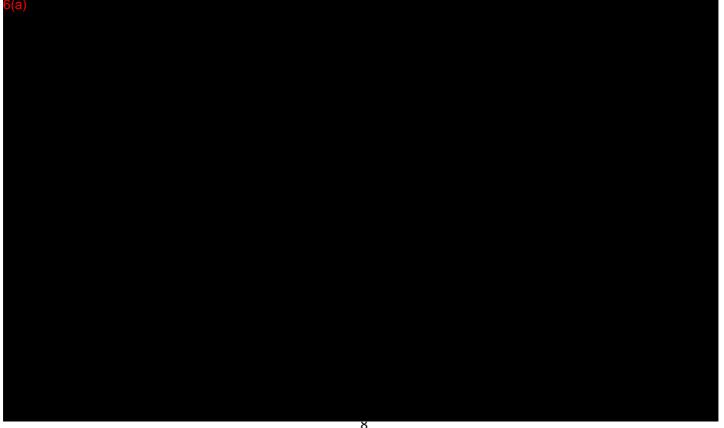
- 46. Officials previously advised that:
  - 46.1. further work is required to develop and assess the feasibility of any exemptions, to provide confidence to Ministers that exemptions are feasible while continuing to effectively manage the public health and other risks;
  - 46.2. by the time plans for exemptions are in place and able to be implemented, it is possible that Ministers will be in a position to lift all border restrictions entirely;
  - 46.3. there are a number of scenarios in which the relative desirability and feasibility of exemptions from the border may change, such as: new places of concern; there is an outbreak of the virus in New Zealand; there are significant changes in international scientific and public health consensus about infectiousness or mortality of the virus and disease; and/or Australia changing its border measures.
- 47. Ministers with Power to Act have considered officials' advice on a potential partial exemption from the border measures for Chinese tertiary students. On 27 February 2020 Ministers agreed not to implement an exemption at this stage.
- 48. Options remain to consider possible exemptions for students and other groups, in particular, workers and families of workers. Officials have previously advised that operationalising any exemptions would necessarily involve costs and a trade-off with wider pressures on the immigration, border and health systems. Officials are continuing to consider mechanisms to facilitate exemptions to the border measures whilst monitoring external factors which may change advice on the advisability of any exemption. Officials could provide further advice to Cabinet on these matters, having worked through further detail in the interim, on timeframes and implementation for any potential exemptions.
- 49. Introducing exemptions could increase the risk of COVID-19 reaching the Pacific Islands. Pacific countries have been strong supporters of New Zealand's border measures to date. It is likely that Pacific countries would be nervous about any exemptions, requiring active management and reassurance from New Zealand on the prevention and isolation measures in place.

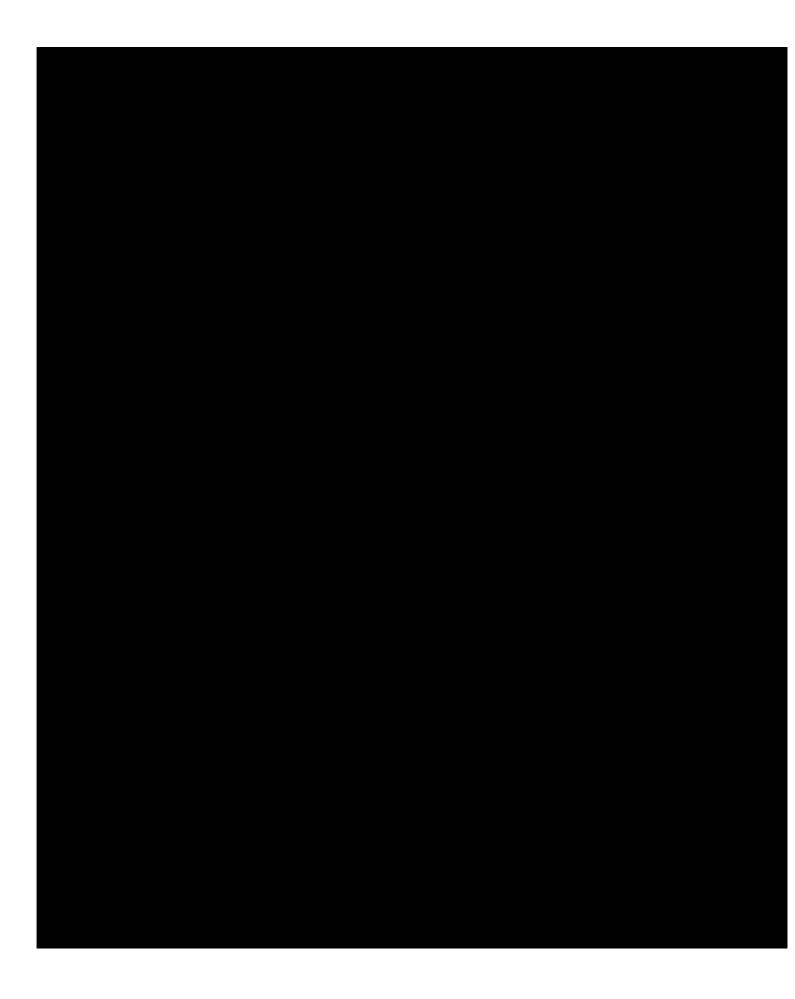
50. As part of introducing any exemptions, risk mitigation isolation measures would need to be considered.

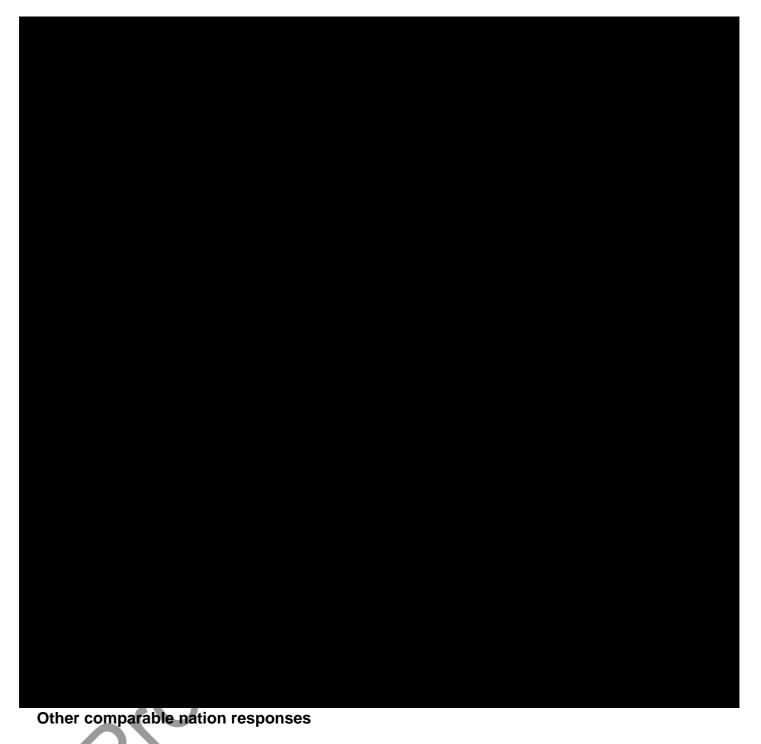
### **Economic considerations for maintaining the border measures**

- 51. COVID-19 is impacting on the New Zealand economy, however, most negative economic impacts being seen are not due to the New Zealand border restrictions. They stem from wider economic conditions including from reduced demand from China and the spread of COVID-19 to other countries outside of China. Broader labour market supply impacts appear negligible from the border restriction measures at this stage.
- 52. Impacts on specific sectors of the New Zealand economy (such as export education) are significant, but we expect them to be transitory if sustained transmission of COVID-19 can be contained outside of New Zealand. Should COVID-19 reach New Zealand and result in sustained transmission and a widespread outbreak we expect the economic disruption would be significant and potentially long-lasting.
- 53. There continues to be significant uncertainty associated with the spread of the disease and the associated impact of containment measures (domestically and abroad) on travel and supply chains, and it is also affecting consumer and business confidence around the world.
- Where deemed necessary, the approach to any interventions should continue to be 54. proportionate and where possible be aligned with the Government's economic strategy. Any intervention should take into account our close international partners and should avoid lock-in or setting precedents for interventions that cannot be extended or scaled up across the economy.

Foreign relations considerations for maintaining the border measures







- 73. As at 26 February 2020, the WHO does not currently recommend any specific measures for travellers and advises against the application of any travel or trade restrictions based on current information.
- 74. As at 25 February 2020, a total of 78 countries and territories continue to have in place a range of border restrictions. The number of countries that have put in place restrictions broadly equivalent to New Zealand has increased from 50 as at 18 February 2020 to 62 as at 25 February 2020.

#### **Next steps**

- 75. Officials will prepare further advice on the border measures for Cabinet consideration on Monday 9 March 2020 on whether to extend, lift, or change the border measures.
- 76. We will continue to develop our understanding of the virus epidemiology and wider global situation which will further support the readiness of the health system to guide future advice about border measures.
- 77. The temporary border measures will continue to be reviewed by officials every 48 hours. Officials are monitoring the outbreaks of COVID-19 in countries outside of China, reviewing the epidemiology of the situation, and actively considering whether to change the case definition to include the range of countries that are experiencing sustained community transmission of COVID-19 beyond mainland China. The situation in these countries is evolving quickly and New Zealand travel advisories are also under active consideration. Subject to further cross-agency consideration, this may lead to further advice to Ministers on new designated places of concern, informed by advice from the Technical Advisory Group.<sup>3</sup>
- 78. Officials will prepare the necessary material for the Minister of Immigration to issue Immigration Instructions to give effect to Cabinet decisions.
- 79. Officials will also inform China, Iran, Australia, key Pacific partners and the WHO of Cabinet decisions ahead of a public communication.

#### Consultation

80. This paper has been prepared by the Ministry of Health. The Ministry of Business, Innovation and Employment, Ministry of Foreign Affairs and Trade, Ministry of Education, Treasury, Department of the Prime Minister and Cabinet, Ministry for Primary Industries, New Zealand Police, and New Zealand Customs Service were consulted on this paper. Relevant Government Chief Science Advisors were also consulted.

#### **Financial Implications**

81. This paper does not have financial implications.

# **Legislative Implications**

82. This paper does not have any direct legislative implications but decisions made will be given effect through the Minister of Immigration certifying immigration instructions under the Immigration Act 2009.

#### **Impact Analysis**

83. A Regulatory Impact Analysis is not required for this paper.

<sup>&</sup>lt;sup>3</sup> The Ministry of Health's Technical Advisory Group is providing the Ministry with high quality and independent medical, scientific and technical advice on the surveillance, pathology, prevention and management of COVID-19.

#### **Human Rights**

84. The options discussed in this paper are consistent with the New Zealand Bill of Rights Act 1990 and the Human Rights Act 1993.

#### **Gender Implications**

85. There are no specific gender implications.

### **Disability Perspective**

86. There are no specific implications for people with disabilities.

#### **Publicity**

87. A media release will be issued announcing Cabinet decisions on this paper. MFAT will inform China, Iran and key Pacific partners of decisions prior to the announcement. The Ministry of Health will inform Australia and the WHO of decisions prior to the announcement.

#### **Proactive Release**

88. It is intended that this Cabinet paper be proactively released once the matters are no longer under active consideration, subject to any appropriate withholding of information that would be justified if the information had been requested under the Official Information Act 1982.

#### Recommendations

It is recommended that Cabinet:

- 1. **note** the global situation regarding COVID-19 continues to develop rapidly with a high degree of uncertainty; it is important that we protect the health of New Zealanders and, as part of the global effort to contain the virus, consider the impact on the public health of other Pacific island countries
- 2. **note** the overall public health risk from this event remains high and effective border management currently remains the best way to protect New Zealanders from the health effects of a potential outbreak; officials continue to recommend taking a precautionary approach, as epidemiology of the outbreak and scientific knowledge continue to evolve
- **3. note** the current temporary border restrictions are part of our wider response to the global outbreak and are due to expire at 23:59 on Tuesday 3 March 2020
- **4. note** the threat to the health of New Zealanders, and any onward threat in relation to other Pacific Island countries, should be considered in the context of whether isolation measures can be reasonably met
- **5. note** New Zealand should continue to consider adopting border measures consistent with comparable countries, in particular Australia
- **6. note** the Australian Government is expected to make further decisions on its border measures by 29 February 2020

- 7. agree to retain the current temporary border measures for an additional seven-day period, expiring at 23:59 on Tuesday 10 March 2020, limited to cover people who have been present in or transited through designated places in the 14 days prior to boarding
- **8. note** that designated places currently include mainland China, Iran and the Diamond Princess cruise ship
- **9. agree** that the temporary border measures continue be reviewed every 48 hours, and that officials will provide immediate advice should any information emerge that has a substantial impact on these measures
- **10. invite** the Minister of Immigration to give effect to the decision in recommendation 7 above through issuing Immigration Instructions
- **11. note** that the Ministry of Foreign Affairs and Trade will inform China, Iran, and key Pacific partners of the decision in recommendation 7 above ahead of public communication
- **12. note** that the Ministry of Health will inform Australia and the World Health Organization of the decision in recommendation 7 above ahead of public communication
- **13. note** that officials will prepare further advice on the border measures for Cabinet consideration on Monday 9 March 2020 on whether to extend, lift, or change the border measures.

Authorised for lodgement Hon Dr David Clark Minister of Health

#### **Appendix One: Current border measures**

- 1. On 2 February 2020 New Zealand implemented temporary border measures to deny entry into New Zealand to people who have left or transited through mainland China from 2 February 2020, with the exception of:
  - 1.1. New Zealand citizens (including from Tokelau, Niue and the Cook Islands), and residents and their immediate family and Australian citizens and permanent residents normally resident in New Zealand;
  - 1.2. People covered by regulation 25 of the Immigration (Visa, Entry Permission, and Related Matters) Regulations 2010, including guests of government; and
  - 1.3. Air and marine crews using appropriate personal protective equipment.
- 2. On 12 February 2020, Ministers also agreed that in certain circumstances and on a case-by-case basis, the Ministries of Health, Foreign Affairs and Trade and Business, Innovation and Employment may allow non-New Zealand nationals to travel to New Zealand in order to undertake self-isolation, or managed isolation, before onward travel to their home countries, provided the following conditions are met:
  - 2.1. any public health impacts in New Zealand, the Realm, and the wider Pacific Region can be managed;
  - 2.2. there are resources available to effectively isolate, including a safe and appropriate location for the 14-day period; and
  - 2.3. they hold a valid visa to travel.
- 3. On 14 February 2020, Ministers with Power to Act [CAB-20-MIN-0015]:
  - 3.1. Noted that there remains a continued high threat to public health in relation to the COVID-19 outbreak
  - 3.2. Agreed to retain the current measures for an additional eight-day period, expiring at 23:59 on Monday 24 February 2020, but limited to cover people who have been in or transited mainland China in the 14 days prior to boarding; and
  - 3.3. Agreed that the measures will be reviewed every 48 hours, and that officials will provide immediate advice should any information emerge that has a substantial impact on these measures.
- 4. On 24 February 2020, Cabinet:
  - 4.1. agreed to retain the current temporary border measures for an additional eight-day period, expiring at 23:59 on Tuesday 3 March 2020, limited to cover people who have been in or transited mainland China in the 14 days prior to boarding;
  - 4.2. agreed that the temporary border measures continue be reviewed every 48 hours [CAB-20-MIN-0053].

- 5. On 24 February 2020, in relation to border measure requirements and the public health response to New Zealanders aboard the Diamond Princess and potentially other cruise ships, Ministers with Power to Act agreed that:
  - 5.1. due to the exposure to a high risk of being infected with COVID-19, once in New Zealand, Diamond Princess passengers will be required to enter enforced isolation (quarantine), for a period of up to 14 days after arrival
  - 5.2. New Zealanders who do not return to New Zealand on the repatriation flight will be required to enter enforced isolation for a period of up to 14 days if they if they arrive in New Zealand within 14 days of disembarking the Diamond Princess
  - 5.3. travellers that were on board the Diamond Princess that try to enter New Zealand within a 14-day period of disembarking will be refused entry excluding those exempted under current border measures
  - 5.4. the Ministers of Health and Immigration may add any further cruise ships with outbreaks to the travel restrictions previously agreed by Cabinet.
- 6. On 28 February 2020, following advice from officials, Ministers with Power to Act agreed to extend the current temporary border measures to apply to people who have been in or transited Iran in the 14 days prior to boarding.

# Appendix Two: Public health factors for consideration for 48 hourly border measures review as at 26 February 2020

#	High-level considerations	Factors for consideration  NB: these factors have not been weighted or prioritised	Indicate if there has been a change in this factor since the last assessment	Overall comment
		Appropriate guidance documents and management processes available for the health system	There is guidance available on the Ministry of Health website for the health sector and the general public. Regular border advisories are being issued and protocols for the management of the first case and subsequent cases in New Zealand have been developed. A COVID-19 Strategic Response Plan is currently being developed.	The overall status of readiness of New Zealand's health system to respond is good. The DHBs have been asked to provide response plans to the Ministry.  The Ministry's Chief Medical Officer has engaged widely with clinical colleagues in the sector to identify issues, which are being managed actively.  Management of the supply chain for PPE supplies for the wider sector is being established.
1	Readiness of New Zealand's health system to respond to	Scenario planning for potential impact on New Zealand's health system	There has been no change.	
	cases and/or outbreak	Current response aims (e.g. stage of NZIPAR)	No Indicative health sector alert code has been issued. NZ preparedness measures are currently being guided by the 'Keep it Out" phases of the NZIPAP.	
	0	Acceptability and feasibility of current measures for key stakeholders	There has been an increased concern regarding international students and whether an exemption should be considered.	
	2000	Workforce sustainability of current and/or proposed measures	There have been isolated instances of workforce issues regarding self-isolation.	

2	Evolving epidemiology of the outbreak	Epidemiology in China and worldwide e.g. containment or sustained transmission, direct travel pathways to New Zealand and Australia from major travel hubs  Risk to NZ from geographical areas of sustained transmission e.g. New Zealand's immediate neighbours and/or areas of high travel volume  Risk assessment update  Relevant modelling data	Sustained transmission is ongoing in mainland China. In other areas, there is more limited transmission. The countries outside of China with the highest number of cases are South Korea (1,766 cases, with 505 new cases reported in the past 24 hours), Italy (400 cases, with 78 new cases reported in the past 24 hours, Japan (186 cases), Iran (141 cases with 46 new cases reported in the past 24 hours) and Singapore (93 cases).  There have now been 57 deaths outside of China (13 new deaths), 22 in Iran, 13in South Korea, 12 in Italy, four on the Diamond Princess, three in Japan, two in France and one in the Philippines.  Risk to New Zealand remains high despite introduction and implementation of border measures.  The risk of importation and transmission remains constant for New Zealand.  Discussions about support from New Zealand academic institutions are underway with support from Australian modelling experts	The increasing cases of community transmission in South Korea, Italy and Iran are significant changes to the epidemiology.  There have been increasing reports of cases and deaths outside of China, including cases with no clear epidemiological link to Hubei.  There has been a steady increase in the number of deaths, but the number of laboratory confirmed cases has started to slow down while the number of recovered cases has increased.  Reviewing information from the cruise ship in Japan, it is noteworthy that around half of the people who tested positive had no symptoms at the time of testing.
	0,0	Basic reproduction number (R0)*	Early studies indicate reproductive rate of between 2 and 3.1 (increased from 1.4)	There is still uncertainty about the transmissibility of COVID-19. As more case data is being released from mainland China and other countries, more accurate assessments on the
3	Emerging evidence about transmissibility	Infectiousness	Virus is spread through contact with respiratory droplets in the air and on inanimate objects (surfaces)	transmissibility will be made.
		Incubation period	Estimates of the median incubation period are 5-6 days (range 0-14 days) and estimates of serial interval range from 4.4-7.5 days.	

4	Emerging evidence about severity of illness	Case fatality risk  Severe disease risk or hospitalisation rate	The fatality rate within China is currently 2.3 percent and is lower outside of China.  There isn't enough data about the number of severe cases apart from the situation in mainland China which has remained steady at ~14 percent.	The emerging evidence about the severity of the illness has remained constant since the first case details were released from mainland China. There is inadequate severe case data available for the global situation because the numbers are small compared with the numbers in mainland China.
5	WHO advice	Travel restrictions advice Other advice	WHO still advises travel restrictions are not appropriate.  The overall advice and risk assessment from WHO has remained static since the last review.	WHO advice has remained the same.  Australia has recently announced it will lift travel restrictions for a small number of school children from China.  Other countries such as Bahrain, Kiribati and Samoa have added additional travel restrictions for individual countries.
6	Public health measures in other countries	Disease control measures in other countries/territories  Exit screening measures at source countries/territories  Measures to prevent or delay virus entering Pacific Island countries/territories	The disease control measures have remained the same.  The measures have remained the same.  The measures have remained the same.	There have been noteworthy changes in the public health measures in other countries.  The US CDC has in place the following travel alerts:  China and South Korea: level 3, Avoid nonessential Travel, Japan, Italy and Iran: level 2, Practice enhanced precautions, Hong Kong: Level 1, practice usual precautions.  CDC also considers there to be community spread in Singapore, Taiwan, Thailand and Vietnam, but that the extent of spread is not yet sustained or widespread enough to meet the criteria for a travel notice.  Advice for returning travellers has been updated in the UK.
7	Other	Effectiveness of current measures  Feasibility of implementing other control measures	The effectiveness of current measures has stayed the same as there are still no confirmed cases in NZ.  More stringent border control and public health measures can be considered if needed.	The current measures have been effective in the current phase of the NZIPAP. "i.e keep it out."
		Cost-benefit assessment	No change in the cost- benefit assessment.	

<sup>\*</sup> The R0 is the average number of other people that one infected person will infect, in a completely non-immune population

 This advice has been reviewed by the Ministry's and Prime Minister's Chief Science Advisors, Dr Ian Town and Professor Juliet Gerrard.

