



Briefing

SUPPLY AND DISTRIBUTION OF MEDICAL GRADE FACE MASKS

To Minister for COVID-19 Response (Hon Chris Hipkins)

Date	18/02/2022	Priority	Medium
Deadline	23/02/2022	Briefing Number	DPMC-2021/22-1437

Purpose

1. This paper provides an overview of the supply and distribution of N95/P2 particulate respirators and medical grade (Type IIR/Level 2) disposable masks to at-risk population groups and their service providers.

Recommendations

1. **Note** that face covering requirements in the COVID-19 Public Health Response (Protection Framework) Order 2021 were updated on 23 January 2021, to support our response to the Omicron variant;

Masks for public-facing workers covered by vaccination mandates

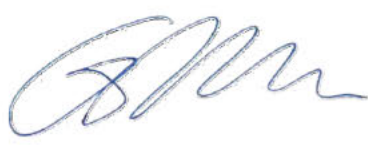
2. **Note** that, as a result of the changes described in recommendation 1, most public-facing workers covered by vaccination mandates are now required to wear medical grade masks (Type IIR/Level 2 or above);
3. **Note** the Ministry of Health provides medical grade masks to certain workers, in line with their Infection Prevention Control guidance, including:
 - 3.1. N95/P2 particular respirators to healthcare workers, border workers, first responders, Corrections staff and people engaging with positive cases of COVID-19 (e.g. Aged Residential Care workers); and
 - 3.2. Type IIR/Level 2 disposable medical masks to the publicly funded health and disability sector, Fire and Emergency New Zealand, St Johns, Air Ambulance Services, border workers, Managed Isolation and Quarantine Facilities and other agencies on a case-by-case basis;

4. **Note** that, although N95/P2 offer a superior level of protection against transmission when used correctly, the global supply of N95/P2 particulate respirators is managed such that the Ministry of Health can only order limited volumes of N95/P2 masks via international suppliers based on global country allocations and negotiations, making securing and storing enough for wider distribution challenging;
5. **Note** that the domestic supply market of Type IIR/Level 2 disposable medical masks remains considerably serviced and they are widely available at a relatively low cost;
6. **Agree** that given the cost, logistical and supply issues, the Ministry of Health's central supply of N95/P2 particulate respirators is **not** made available to additional workers, beyond those already able to access supply (as outlined in recommendation 3.1); YES NO
7. **Note** ensuring all people have access to appropriate face masks will help to mitigate the spread of Omicron, supporting the Government's minimise and protect COVID-19 strategy;
8. **Note** the Ministry of Health has previously made Type IIR/Level 2 masks available to social support agencies as an interim measure to provide to at-risk populations, including to the Ministry of Education (students and workers), Ministry of Social Development, Ministry for Pacific Peoples, Ministry for Ethnic Communities and Te Arawhiti;
9. **Note** that several agencies have raised concerns that there is a strong demand for additional masks and PPE to protect at-risk communities and their service providers;
10. **Note** that agencies are currently responsible for facilitating the supply and distribution of medical grade disposable face masks to at-risk communities, service providers and population groups within their relevant sector, if required;
11. **Note** that agencies including the Ministry of Social Development, the Ministry of Health, the Ministry of Education, Oranga Tamariki, the Ministry for Pacific Peoples, the Ministry for Ethnic Communities, Te Arawhiti and Te Puni Kōkiri, will work together to establish a process to maintain supply and distribution of Type IIR/Level 2 masks to at-risk communities and their service providers going forward, and will collectively report back to COVID-19 Ministers on this in March.



Kay Baxter
Policy Manager
Strategy and Policy team, COVID-19
Group

18/2/22



Hon Chris Hipkins
Minister for COVID-19 Response

21/2/2022

Contact for telephone discussion if required:

Name	Position	Telephone	1st contact
Kay Baxter	Manager, Strategy and Policy team, COVID-19 Group	s9(2)(a)	✓
Kohu Douglas	Advisor, Strategy and Policy team, COVID-19 Group		

Minister's office comments:

- Noted
- Seen
- Approved
- Needs change
- Withdrawn
- Not seen by Minister
- Overtaken by events
- Referred to

SUPPLY AND DISTRIBUTION OF MEDICAL GRADE FACE MASKS

Background

1. The masking requirements in the COVID-19 Protection Framework were recently updated to support our response to the Omicron variant. On 25 January 2022, Cabinet agreed to make the following changes to face covering requirements under the Red setting of the COVID-19 Protection Framework:
 - 1.1. require that to comply with face covering requirements, at a minimum all face coverings must attach to the head either via an ear loop or head loop;
 - 1.2. require all people to wear a face covering at food and drink businesses, close-proximity businesses, events and gatherings (except when eating and drinking and during exercise);
 - 1.3. require all primary and secondary school students in Year 4 and up to wear a face covering on public transport and Ministry of Education funded school transport services; and
 - 1.4. require employees in public facing roles in workplaces captured by the legal vaccine mandate to wear a medical grade mask (Type IIR/Level 2) or above at all times based on the improved efficacy of these face coverings in mitigating transmission, except for tertiary education, for which guidance was updated to complement updated settings.
2. These updated requirements were made based on public health advice that some types of masks are more effective than others and the correct use of masks decreasing the risk of infection and transmission of COVID-19. From a public health perspective, a tight and well fitted mask provides the best protection against COVID-19 infection and transmission.
3. Following the changes to face mask requirements, and known efficacy of N95/P2 particulate respirators, you requested advice about government-funded supply and distribution of N95/P2 particulate respirators.
4. You also asked for advice on whether a government-funded supply of 3-ply disposable medical masks (Type IIR/Level 2) to at-risk populations and service providers is necessary. This standard of mask is now a requirement for all public-facing workers covered by vaccination mandates, and are recommended for the general public.

Overview of N95/P2 particulate respirator

5. A N95/P2 particulate respirator has superior filtering to reduce exposure to airborne particles. They filter out very fine particles and reduce exposure to aerosols containing viral particles as well as larger droplets. To be effective, a tight facial seal covering the nose, mouth and chin is necessary. The use of N95/P2s is generally reserved for high-risk procedures and settings, most often in healthcare and border settings.
6. There are two types of respirators available and appropriate for use in clinical settings in New Zealand:

- 6.1. Standard respirators – suitable for use for confirmed or suspected coronavirus (COVID-19) patients in non-surgical settings, or settings where there is unlikely to be fluid spray beyond a cough or sneeze, but the viral particles are still small;
- 6.2. Medical and surgical respirators – used where in addition to protection needed against small viral particles, there is a risk of exposure to bodily fluids and splashes and a level of fluid resistance is required.
7. While standard, and medical and surgical respirators both provide protection from small airborne particles, only medical and surgical respirators provide fluid resistance to splash or spray from bodily fluids.
8. Non-surgical (non-fluid resistant) P2/N95 respirators are rated as Level 1 for fluid strikethrough up to 80mmHg. The P2/N95 rating only indicates the level of protection from airborne particulates, not its resistance to fluids penetrating the respirator.

Distribution and supply of N95/P2 by the Ministry of Health

9. The Ministry of Health provides a central supply of disposable N95/P2 particulate respirators for use within publicly funded health settings to ensure good infection prevention and controls can be implemented effectively as part of the public health response to COVID-19. They are generally provided where there is a risk of exposure to bodily fluids and splashes within the worker's operating environment.
10. The current healthcare supply of N95/P2s is accessible to groups including:
 - a) healthcare workers;
 - b) border workers;
 - c) first responders;
 - d) Corrections staff; and
 - e) people engaging with positive cases of COVID-19 (such as Aged Residential Care workers).
11. Sourcing healthcare and border workers with N95/P2 particulate respirators from the Ministry of Health's central supply ensures that only stock with sufficient levels of fluid and splash resistance are used to protect healthcare workers in high-risk daily settings. It also provides a quality assurance process to ensure that they are safe and fitted.
12. There are several manufacturers who currently provide models of P2/N95 respirators which are distributed through the Ministry of Health centralised supply of PPE. Examples of these models include standard (non-fluid resistant) N95 respirators (for example, 3M 8210 and 9210+) and medical and surgical N95 respirators (for example, 3M 1860, 1870+, 9320A+).
13. The current supply managed by the Ministry of Health requires careful and considered management to retain access to critical personal protective equipment and to protect our healthcare settings. The Ministry's Infection Prevention Control guidance articulates the risk assessment that informs the selection of PPE and supply from the Ministry of Health is based on the latest guidance.

Could non-fluid resistant respirators be made more widely available from centralised supply?

14. The domestic and global supply of verifiable quality controlled non-fluid resistant standard particulate respirators (N95/P2) remains significantly constrained. Supply of non-fluid resistant respirators remains under a demand managed approach, and global allocations for increased access are difficult in this current operating environment.
15. The result of a globally managed supply limits the maximum volume of masks that can be ordered with an approximate 12-week lead in time, an eight-week manufacturing period and four weeks for transportation to New Zealand.
16. In total the Ministry of Health receives approximately 6 million N95 particulate respirators a month and expect to use approximately 2 million a week as we enter the peak of the Omicron outbreak. There is currently 25 million N95 particulate respirators in stock, with an additional 14 million arriving between now and June 2022. The Ministry of Health are looking to place further orders. However, due to the prolonged high use by the health and disability sector it would significantly impede New Zealand's ability to expand centralised-supply provision of these types of masks to non-healthcare workforce outside the current settings.
17. Fit testing is a critical component for utilising an N95/P2 particulate respirator. Inappropriate use of an N95/P2 particulate respirator can cause breathing difficulties given the nature of the component parts of the device. A poorly fitted N95/P2 without an effective seal does not offer appropriate protection when used in high risk settings.

There are cost and logistic implications related to securing N95/P2 particulate respirators

18. There are cost and logistic implications related to securing N95/P2 particulate respirators. Currently, the average cost of an N95/P2 for use outside of current settings (health care and border settings) equates to \$1.27. Additionally, the freight costs for air transport is \$460,000 per flight, carrying approximately 5.0 million N95/P2 particulate respirators per flight (freight only).
19. Each small box of N95/P2 requires warehousing (if boxes of 20) at a unit warehouse space cost per month of approximately \$45,000 as they are required under standard to be stored in temperature monitored and regulated conditions. These costs are based on the negotiated pricing for medical device fluid resistant N95/P2 respirators. Currently, warehousing and freight is significantly constrained, capturing airfreight capacity requires a stand down minimum from point of manufacturing and production of three weeks, even utilising our national airline freight capacity.
20. Warehousing for temperature regulated products and devices is significantly constrained with the volumes of PPE, vaccine, rapid antigen tests and BAU hospital/health care setting requirements. Consideration for negotiating with manufactures could take eight weeks with additional freight time from placement of orders.
21. Domestically manufactured masks have a higher per unit cost at national volume. Two of the locally manufactured products have been ruled out for use in healthcare settings as they do not meet current standard requirements. Per unit costs of these range between \$2.50 and \$4.30 on New Zealand market.
22. Based on the cost and logistical implications of supplying N95/P2 particulate respirators, it is recommended that they are reserved for healthcare and border workers who are at the frontline of the response and are at higher risk of exposure to COVID-19.

Supply of medical grade disposable masks to at-risk populations and service providers

23. If there is an issue with access to suitable masks for at-risk populations and their service providers, there may be a case for Government to fund supply of medical grade (Type IIP/Level 2) disposal masks for these groups.

The Ministry of Health has good supplies of medical grade (Type IIP/Level 2) disposal masks

24. The Ministry of Health currently holds 200 million medical grade disposable masks for use across health and disability settings. The Ministry of Health continues to service broader agency requirements through Corrections, Fire Emergency New Zealand, St Johns, Air ambulance services, Ministry of Social Development (masks for vulnerable populations via the Food Network), border workers and ports with Personal Protective equipment (PPE).

25. The Ministry of Health's Central Supply is responsible for serving the requirements of the Health and Disability system for COVID-19 and that agencies are responsible for supporting their own networks where they can.

... and is making these available to social support agencies to further support communities

26. The Ministry of Health had made disposable medical masks available to social support agencies to support their networks, ensure communities are protected and that workers can adhere to the mask mandate.

27. Detailed distributions from the Ministry of Health centralised supply to support at-risk populations and the broader Omicron phased strategy and response is as follows:

- 4.3 million masks to the Ministry of Education regional offices to support schools and tertiary providers (students and workforce);
- 5 million masks to the Ministry for Social Development distributed via the Food Network other avenues;
- 500,000 to Ministry for Pacific Peoples to distribute throughout church networks;
- 500,000 masks to Ethnic Communities;
- 750,000 masks to community health providers who are servicing wide regional networks as one-off shipments; and
- In late 2021, over 1 million masks were made available to Te Arawhiti to distribute to iwi providers, with a further request for 850,000 under consideration.

28. Through previous COVID-19 outbreaks and lockdowns, the Ministry of Health has supported the response by making similar volumes of masks available to the Ministry for Social Development to distribute via the Food Network and other avenues, as well as via community providers such as Māori and Pacific health providers. This was with a view to ensuring that vulnerable peoples could safely access food, transport and essential health and community services.

29. The Ministry of Health continues to work with agencies, iwi, Māori and Pacific health providers and those actively working to support the 44 hubs across Care in Community.

The domestic supply market of medical grade disposable face masks remains considerably serviced

30. To date there has been no suggestion of price gouging or disposable medical grade mask supply concerns. 3-ply medical grade mask prices range per unit box of 50 disposable masks from \$16.00 to \$25.00 across pharmacy and retail outlets. Other agencies have put sourcing and distribution arrangements in place at approximately \$0.20 per mask and the Ministry of Health has been approached by suppliers to purchase additional masks at \$0.05-\$0.12 per mask. These prices are considerably less than those charged in 2020 and 2021 across the domestic market.
31. Critical infrastructure and utility service providers have not raised any concerns regarding access or cost of disposable medical grade masks for use as part of requirements under the Health and Safety at Work requirements or the Close Contact Exemption Scheme. Global market indicators do not suggest any current supply constraint with the manufacturing and production of 3-ply disposable medical grade masks, however logistics and freight concerns remain.
32. Concerns regarding mask information has been raised through the All of Government response. The Ministry of Health and the Ministry of Business, Innovation and Employment are working with the Unite Against COVID communications team to provide consistent and accessible mask information. The intent is to ensure this information remains current and does not become conflated with healthcare worker requirements of disposable mask and respirator use. WorkSafe is aware of messaging and will update information also to ensure industries remain current with infection, prevention and control measures and requirements.

Several agencies have raised concerns that there is a strong demand for additional masks and PPE to protect their staff and communities

33. Providing medical grade disposable face masks to staff covered by the mandate places considerable pressure on the baseline costs for responsible agencies. Several agencies have also advised that the initial supply of medical grade masks provided by the Ministry of Health are nearly exhausted with reports of increased demands for face masks with some regions having only a limited supply remaining.
34. We consider that mask-access will be an on-going issue for several months due to the Omicron outbreak and that it would be useful to establish a process to maintain the availability of face masks to at-risk communities and their service providers. Te Puni Kōkiri advise that they are able to help identify, through their regional networks and community partners, where PPE including face masks is most needed for vulnerable whānau, communities, and the critical Māori workforce.
35. Agencies including the Ministry of Social Development, the Ministry of Health, the Ministry of Education, Oranga Tamariki, the Ministry for Pacific Peoples, the Ministry for Ethnic Communities, Te Arawhiti and Te Puni Kōkiri, will work together to establish a process to maintain supply and distribution of Type IIR/Level 2 masks to at-risk communities and their service providers going forward, and will collectively report back to COVID-19 Ministers in March.

Consultation

36. This paper was developed in consultation with the Ministry of Health, the Ministry of Education, Oranga Tamariki, the Ministry for Social Development, Office for Seniors, Office for Disability Issues, the Ministry for Pacific Peoples, the Ministry for Ethnic Communities, WorkSafe NZ, Te Arawhiti and Te Puni Kōkiri.

Proactively Released