

N-95/FFP2 Respirators

Understandably, there is substantial concern in Primary Care around access to N-95 masks, in view of increasing evidence around aerosol spread of COVID-19.

We have been working on this area for several months in the background and have a plan, which has been formulated following consultation with a primary care workgroup and with advice from the Canterbury Infection Prevention and Control (IPC) team.

CPRG position statement:

- There is increasing evidence that COVID-19 is spread by a spectrum of droplets and aerosols.
- The risk of infection spread by aerosols is impacted by acuity of infection, length of time in a space, the volume of the space and the quality of ventilation.
- N-95/FFP2 masks provide substantially increased protection from aerosol born viruses, when compared with standard surgical masks.
- However, this doesn't mean surgical masks are completely ineffective. Surgical masks may still provide an average of 6-fold protection when compared to not wearing a mask at all. A surgical mask on the patient further reduces the risk by 3-4-fold.
- Note that fit testing increases the efficacy of an N-95 masks by 5-15%

The issues:

- Global supply chain issues
- NZ supply of QSI 'duckbill' mask does not meet the international standard. This has resulted in the Ministry of Health (MoH) needing to secure additional supplies in a competitive international market and DHB's needing to re-fit test their staff
- Fit testing takes 30mins/person and requires equipment in short supply and trained personnel.
- Fit testing requires a supply of the models and sizes of masks that will be available.
- Central supply of PPE to primary care requires the MoH to provide a supply of masks to allow fit testing to occur.
- Funding for fit testing.
- Consistent supply.

Where we are up to:

We have worked with Bryan Betty from RNZCGP, to push this agenda centrally. We have also been talking directly with the MoH.

Significant experience and knowledge is available from a collaborative team of subject matter experts across the Canterbury Health System (Canterbury Health Laboratories, Community and Public Health, Canterbury Primary Response Group, Department of Infectious Diseases, IPC Service) that provide strategic and operational input on infection prevention and control in the COVID-19 response.

Findings and lessons learned from two case investigations in local managed isolation facilities of guest-to-guest transmission and guest-to-staff transmission have led to

Canterbury's recommendation for N-95 mask use being adopted into MBIE's national IPC Standard Operating Procedures for managed isolation and quarantine. This is currently being integrated into guidelines at the CDHB and we support community health care providers moving in this direction as well.

This issue is extremely challenging for the MoH and DHBs, but progress is being made.

DHB's have an employer responsibility to their direct employees. Equally, GP owners and pharmacy also have a responsibility to their employees. On principle, CDHB have always supported provision of PPE to primary care, however with the centralization of the supply, we can no longer influence this provision at the local level.

We have to recognize that provision of N-95 masks to the community, requires provision and fit testing for GPs, Practice Nurses, Community Nurses, Community healthcare teams, Whānau ora providers, LMCs, Aged residential care.....The list goes on.

It definitely isn't straight forward!

What we are going to do:

CPRG has a limited supply of 3M 1860 masks available in small and regular sizes. These are past the manufacturers recommended shelf life, but they have been stored in temperature and moisture controlled conditions and are considered safe to use. The 1860 model, in particular, has performed well on international testing, even when past the manufacturer's recommended shelf life. (1)

This supply will be pushed out to general practice and pharmacy over the next few weeks. We need to model supply and ensure equitable access. This roll out will be accelerated, if required.

It is important to remember that this is a finite supply.

- Target use to situations where there is a significant risk of encountering COVID-19 in the community.
- Accompany with changes in practice, including majority virtual and limited clinician contact with red stream patients.

They should not be used as a standard in red stream in the current situation. In the current environment, where there is no evidence of community spread in the Canterbury region, the need for N-95 masks should be rare. We suggest only using an N-95 mask when swabbing or examining a patient with a compatible illness and a 'high index of suspicion' (2.)

At the moment, we are not able to provide any evidence around re-using N-95 masks.

We will continue to work with the MoH on planning for consistent community provision and fit testing. Distributing our supply will provide a 'buffer' to allow for this planning to progress and still provide increased safety for our workforce.

It is not practical to provide fit testing at this time, without a firm supply and availability of an appropriate array of different masks, models and sizes.

We have attached some resources to assist in donning a mask and fit checking your mask. There is also information about facial hair and masks. You may want to trial the mask sizes on your clinical red stream staff when your supply arrives.

We recognize this option is not ideal, but it is the most pragmatic solution we have available at this time. We will be in touch with the next steps for distribution.

1. <https://www.cdc.gov/coronavirus/2019-ncov/hcp/release-stockpiled-N95.html>
2. <https://www.health.govt.nz/our-work/diseases-and-conditions/covid-19-novel-coronavirus/covid-19-information-health-professionals/case-definition-and-clinical-testing-guidelines-covid-19>

[Additional sources](#)

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