**Personal Protective Equipment (PPE) COVID-19 outbreak supply calculator**

# Dec 2021

# This document is designed to be used in residential disability settings and in home supports settings.

The information below outlines the considerations needed to estimate the amount of PPE to be readily accessible within a disability residential setting or in home support workers. It has been informed by Health Education Collaborative consultants and disability sector insights gained during Victorian COVID 19 outbreaks, isolation, and quarantine needs.

The Victorian Department of Health requirements for COVID 19 risk levels and PPE includes what to use and when this is needed and a list of suppliers with TGA (Therapeutic Goods Administration) approved PPE products. Details are listed at [Protective Personal Equipment (PPE) (health.vic.gov.au)](https://www.health.vic.gov.au/worker-health-wellbeing/protective-personal-equipment-ppe)

NDS members can also access discounts from listed suppliers. Login to member resources on [COVID-19 Hub - National Disability Services (nds.org.au)](https://www.nds.org.au/covid-19-hub)

**Considerations for supply estimation**

* What is the current quarantine/isolation requirement? (Varied in length depending on vaccination status of people involved from seven to fourteen days (about two weeks). A stock of fourteen days allows for this variation.
* Knowledge of vaccination status of workers and residents will influence this requirement.
* How easy is it to access a local supply?

The longer it takes for a supply to get to your site needs to be taken into consideration, along with competing local needs if an outbreak were to occur in the local area.

* Activities the workers carrying out. Do they involve risk of contamination from respiratory or body fluids that will increase need to change their PPE?
* Anyone working with a COVID positive individual or someone who is a risk of being COVID positive must change PPE before working with anyone else.
* All PPE must be removed (doffed) and correctly disposed before going on a break and replaced (donned) before resuming shift.

**Training of employees**

All workers need to be trained in donning and doffing of the PPE supplied and know how to fit and check their P2 or N95 masks. This is essential for correct use of each item and preventing spread of infection. It also ensures that the investment in the PPE supply is not wasted through ineffective donning and doffing resulting in potential workers needing to furlough for testing or COVID positive diagnosis.

Post donning and doffing posters in each setting site for workers to refer in addition to their training.

[Victorian government PPE donning and doffing training video](https://www.health.vic.gov.au/worker-health-wellbeing/protective-personal-equipment-ppe)

[Victorian government Donning and Doffing PPE Poster](https://content.health.vic.gov.au/sites/default/files/migrated/sites/default/files/documents/202011/COVID-19_How%2520to%2520put%2520on%2520and%2520take%2520off%2520your%2520PPE%2520separately.pdf)

 **Worker PPE items**

* Full cover waterproof gowns: Gowns need to have long sleeves and cover the front and sides of worker, securing at the back.

Waterproof isolation gowns may be used for extended periods in specific cohort environments. Must be replaced if torn or contaminated with body fluids.

* P two or N95 respirator masks: These can only be worn for maximum of four hours. P two or N95 masks purchased must be TGA approved versions for COVID 19 use and you need to allow for different shapes and size of worker faces.
* Face shield or googles: Face shields have been consistently recommended as the most effective option in Victoria. Single-use goggles and face shields can be worn for an entire shift. These must be replaced after assisting with an aerosol-generating procedure.

Where single-use face masks, face shields or goggles are used for extended periods, good hand hygiene and sanitising should be maintained. If reusable, it must be cleaned and disinfected before reuse.

* Disposable gloves: allow for the variations in worker hand size and fit; small, med, and large and any latex allergies.

Gloves need to be changed between every participant interaction and when contaminated or torn.

Therapeutic Goods Administration: [**TGA Regulation of Personal Protective Equipment and COVID-19**](https://www.tga.gov.au/behind-news/regulation-personal-protective-equipment-and-covid-19)

**PPE estimate of usage**

* Disability residential service estimate: Rule of thumb estimator is a complete change of PPE every 4 hours per support worker.
* Vic Department of Health Infection Prevention Control Unit estimate: [FTE per week] X [hrs per week normally 38]: [shift length normally 8 hrs] X [PPE changes normally four to six for N95] burn rate per week

Shift breaks: All PPE must be doffed and disposed of if single use. All reusable items must be cleaned and disinfected before donning can occur again.

**PPE waste disposal**

Consider your waste disposal needs and check against Victorian Government (EPA) Environmental Protection Agency, requirements. The Department of Health has links to [EPA waste management COVID-19](https://www.health.vic.gov.au/covid-19/infection-prevention-control-resources-covid-19)

* General waste bins: if permitted PPE to be double bagged and tied before placing in the external general waste bin. Additional bins may be required.
* Clinical waste bins: if required these need to be sourced through a specialist waste provider. Sourcing these specialist waste bins may need a previously arranged contract for delivery when needed. Victorian providers identified difficulty in arranging for clinical waste bins during a time of outbreak when demand was high and recommend establishing a prior supplier relationship, if required to meet local waste regulations, will mitigate against this risk.

**COVID-19 links for Commonwealth, State and Territory Government**

AUS: [Australian Government Department of Health](https://www.health.gov.au/)

VIC: [VIC GOV COVID-19](https://www.dhhs.vic.gov.au/coronavirus)

**NDS additional support**

Please contact NDS for further information regarding COVID 19 management, support, resources and practical disability informed online infection prevention and control training.

[**Infection Prevention and Control training for disability workers**](https://www.nds.org.au/resources/subsidised-infection-prevention-and-control-training-for-victorian-disability-workers)

This course has been developed with an expert COVID infection prevention and control educator who worked with 300 disability sector workers across Victoria who completed the training face to face during late 2020 and 20201. The online version includes insights and recommendations from these workers.

The course has been widely acknowledged as valuable for any worker regardless of their experience working in a COVID 19 risk environment supporting application of knowledge and practical skills to prevent and manage and control infection transmission. Modules include understanding of diseases, chain of infection transmission, correct donning and doffing of PPE and hand hygiene, cleaning and waste management and the role of vaccination. While it has a focus on COVID 19 there are references to broader infection control for wide application in any disability setting.

This online training program has been subsidized by Victorian Government for workers in Victoria, NDS invites providers in other states and territories to contact us for a discussion of costs as these vary depending on user access needed.

[**COVID-19 Hub - National Disability Services (nds.org.au)**](https://www.nds.org.au/covid-19-hub)

Or email: **saferandstrongervic@nds.org.au**