COVID-19 Infection Prevention and Control
Advice for Health Workers

Introduction

National, state and local health services are meeting the challenge of increasing rates of COVID-19 (SARS-CoV-2) infection. As the situation is rapidly evolving, advice and resources for clinicians and the public are also changing to meet needs. Health workers should check the NSW Health COVID-19 and the Clinical Excellence Commission (CEC) Infection Prevention and Control COVID-19 web pages for the most up-to-date information.

The purpose of this document is to provide an overview of the current Infection Prevention and Control COVID-19 guidance for health workers in NSW. More detail can be sourced from key NSW and national sources:

- NSW Infection Prevention and Control Practice Handbook
- National COVID-19 updates – Department of Health and Ageing
- CDNA National Guidelines for Public Health - Coronavirus Disease 2019

Seven principles for COVID-19 infection prevention and control

1. Early recognition of patients with confirmed, probable or suspected COVID-19

The definitions are documented on the NSW Ministry of Health Website: COVID-19 (Coronavirus) testing advice/Case Definitions

2. Physical distancing

Physical distancing is to be practiced at all times within clinics and wards, between staff and patients, and between staff to limit the transmission of COVID-19. This includes:

- Waiting room chairs and other seating separated by >1.5 metres
- Direct communications between health workers and patients conducted at a distance where practical
- Where practical, health workers and patients to remain >1.5 metres apart with the exception of clinical examinations and procedures.

3. Respiratory hygiene and cough etiquette

The following measures to contain respiratory secretions are recommended for everyone:

- Cover your mouth and nose with a tissue when coughing or sneezing;
- If you don't have a tissue, cough or sneeze into your elbow;

- Use the nearest waste receptacle to dispose of the tissue after use;
- Perform hand hygiene e.g. hand washing with soap and water or alcohol-based hand rub after coughing or sneezing or if contaminated objects/materials/equipment are touched. See Clinical Excellence Commission website: Respiratory Hygiene (Cough Etiquette)

4. Application of Standard Precautions for all patients always

Standard Precautions represent the minimum infection prevention measures that apply to all patient care, regardless of suspected or confirmed infection status of the patient, in any setting where healthcare is delivered. These evidence-based practices are designed to both protect and prevent spread of infection among patients and healthcare personnel.

Standard Precautions comprise the following measures:

- Hand hygiene
- Respiratory hygiene (cough etiquette)
- Personal Protective Equipment (PPE) if you are in contact with blood or body fluids
- Aseptic technique for clinical procedures
- Occupational exposures: needlestick/sharps injuries or blood and body fluid splashes
- Cleaning and disinfection of the healthcare environment and shared patient care equipment
- Waste disposal

See Clinical Excellence Commission website: Standard Precautions

5. Implement Transmission Based Precautions

Transmission Based Precautions should be used when Standard Precautions alone are insufficient to interrupt the transmission of a microorganism. Precautions are applied based on the mode(s) of transmission.

- **Contact Precautions** protect health workers and prevent them from transmitting COVID-19 from direct physical contact with the patient, from shared patient care equipment or from environmental surfaces directly contaminated by the patient.
- **Droplet Precautions** protect health workers' nose, mouth and eyes from droplets produced by the patient coughing and sneezing.
- **Airborne Precautions** protect healthcare workers respiratory tract form very small and unseen airborne droplets that become suspended in the air. During airborne generating procedures, these small and unseen airborne droplets become aerosolised. The fitted P2/N95 mask will not allow these aerosolised droplets to enter the respiratory tract of the healthcare worker. (See Table 1. below)

Standard Precautions need to be applied for all patient care activities, procedures, diagnostics and care. Health workers must have an understanding of the basic principles of Contact, Droplet and Airborne precautions as they are applied individually.

The combined **contact and droplet precautions** must be in place while you are caring for, or in contact with a symptomatic suspected or confirmed COVID-19 case, including during initial triaging. In addition to **contact and droplet precautions**, **airborne precautions** are required for aerosol generating procedures (AGPs) and when providing care to patients with **severe respiratory symptoms**.

Aerosol-generating procedures (AGPs) include tracheal intubation, non-invasive ventilation, tracheotomy, cardiopulmonary resuscitation, manual ventilation before intubation, bronchoscopy and collection of induced sputum.
NB: The use of nebulisers should be avoided and alternative means of delivering medication used (such as a spacer).

Health workers caring for patients in **high-risk clinical area** (see list below) should comply with contact and droplet precautions for all close contacts (gown, surgical mask, eye protection and gloves). When performing AGPs comply with contact, droplet **and** airborne precautions.

High-risk clinical areas include:
- Intensive Care Units (ICU)
- Emergency Departments (ED)
- COVID-19 Wards
- Acute Respiratory Assessment Clinics

See Clinical Excellence Commission website: Transmission Based Precautions and Application of PPE in Response to COVID-19 Pandemic and Principles of fit checking – how to don and fit check P2/N95 masks

Table 1. Routine Care of a Suspected or Confirmed COVID-19 Patient				
Standard Precautions	Standard Precautions apply to all patient care and comprise hand hygiene, respiratory hygiene (cough etiquette), PPE if in contact with blood or body substances, aseptic technique for clinical procedures, occupational exposures prevention, cleaning and disinfection of the healthcare environment and shared patient care equipment and appropriate waste disposal.			
Type of PPE	Fluid resistant long-sleeved gown or apron*	Fluid resistant surgical mask	Safety glasses/mask/visor *OR* Face shield NB: Prescription glasses are not sufficient protection	Gloves
		P2/N95 if performing an AGP		
Precautions	Contact & Droplet		Contact, Droplet & Airborne	
Suggested Donning Sequence (putting on PPE)	1. Fluid resistant long-sleeved gown 2. Surgical mask or P2/N95 mask (should be fit-checked before use) 3. Protective eye wear or face shield 4. Disposable non-sterile gloves when in contact with the patient NB: Hand hygiene must be performed before donning gloves.			

Table 1. Routine Care of a Suspected or Confirmed COVID-19 Patient	
Suggested Doffing Sequence (removal of PPE)	1. Gloves 2. Fluid resistant long-sleeved gown 3. Protective eye wear or face shield 4. Surgical mask or P2/N95 mask NB: Gown and gloves can be removed as one step. Hand hygiene must be performed after glove removal, and between steps if there is a risk of contamination perform hand hygiene. Avoid touching the face at all times.
PPE extended use**	• A surgical mask can be worn unless moist or soiled, or if not removed or pulled down to drink or eat. • P2/N95 masks can be worn for up to 8 hours uninterrupted or continuous use***. The wearer should not touch the contaminated surface of the mask and the mask should be discarded if contaminated with blood or bodily fluids and following AGPs. Extended use can also cause discomfort to the wearer from wearing it for longer than usual. Remove or replace if the mask becomes hard to breathe through or no longer fitting correctly, or becomes moist or loose. • Gloves should be changed in between patients; change or remove if contaminated or moving from dirty to clean site on the same patient or when damaged or torn • Gown/apron should be removed and discarded appropriately upon leaving the room/zone. • Reusable eye protection should be cleaned/disinfected between use.

* Apron use can be considered based on your anticipated contact/exposure to droplets while caring for symptomatic COVID-19 patients.

**Extended use refers to the practice of wearing the same P2/N95 mask for repeated close contact episodes with several patients, without removing the mask between patient care.

***For more information refer to Recommended Guidance for Extended Use and Limited Reuse of N95 Filtering Face Piece Respirators in Healthcare Settings

> **Staff Safety Note**
>
> Masks, gloves and gowns are **not to be worn** outside of patient rooms for example, between wards, break room, reception area, and are to be <u>removed and disposed appropriately</u> when proceeding to care for patients that are not isolated for COVID-19 or prior to leaving the facility.

Contaminated surfaces and equipment may potentially contribute to the transmission of microorganisms and health care-associated infection. Each health organisation must use a risk management framework when considering cleaning of the health care environment. The aim of determining risk is to ensure appropriate controls are implemented due to the variety of problems that inadequate cleaning can cause.

See Clinical Excellence Commission website: Environmental Cleaning

6. Hand Hygiene

Health workers play an important role in reducing the risk of transferring microorganisms from patient to patient, healthcare environment and themselves. **Wearing gloves is not a substitute for hand hygiene.** Hand hygiene is the act of cleaning hands with:

- Alcohol based hand rub (ABHR) in either liquid, foam or gel form; or
- Antiseptic liquid hand wash and running water; or
- Plain liquid soap and running water and dry with single use towels.

See Clinical Excellence Commission website: Hand Hygiene

7. Cleaning the environment and shared patient care equipment

Cleaning shared patient care equipment must be completed by following the manufacturer's Instructions for Use (IFU) for cleaning and storage.

Frequently Asked Questions

1. How should suspected or confirmed COVID-19 patients be triaged and managed on arrival to hospital?

Upon arrival to the emergency department, patients assessed as suspected or confirmed should be triaged to a **separate isolated section** of the waiting area away from the general public and **provided with a surgical mask and hand hygiene facilities.** This also applies to patients arriving

by ambulance.

Screening clinics can support the management of suspected or confirmed patients if they are in place at the health service. All staff at triage points and screening clinics should be wearing PPE required for suspected or confirmed cases of COVID-19. Refer to CEC COVID19

2. How should Emergency Departments manage admissions?

A dedicated floor plan in Emergency Departments should be established that **clearly designates areas** assigned for suspected or confirmed COVID-19 patients. If possible, consider rostering of staff to support the separation of areas and resourceful use of PPEs. For staff working directly in the area of suspected or confirmed cases of COVID-19, PPE should be worn accordingly. Designated areas for donning and doffing PPE should be in place.

3. How do I collect respiratory specimens?

When collecting respiratory specimens, **Contact and Droplet Precautions** should be observed **whether or not respiratory symptoms** are present.

> **NB**: PPE requirements may differ in outpatient clinics such as fever clinics or drive through clinics, refer to CEC Guidance on Mask Use in NSW and Application of PPE in response to COVID-19 Pandemic for more information.

4. How long should isolation precautions be used for confirmed COVID-19 patients?

Discontinuation of isolation precautions should be **based on current national guidelines** and be determined on a **case-by-case** basis. The decision should also be made in consultation with the treating doctor and local infection prevention and control team. If a patient is well enough to be discharged while still symptomatic, home isolation should be continued until criteria for release from isolation are met.

5. How should deceased persons be managed?

Routine processes apply to the management of deceased bodies, with the same precautions in place after death as were in place prior to death. Deceased bodies should be placed in a **leak proof bag.**

Those handling deceased bodies should wear **gown, mask, eye protection and gloves** if there is a potential risk of splash or body substance. Refrain from touching the body while viewing. For more information refer to NSW Health COVID-19 – Handling of bodies by funeral directors.

6. What other environmental issues should be considered?

Handling of Linen

Linen should be handled in line with routine infection and prevention contact practice, as outlined in the Infection Prevention and Control Practice Handbook (section 4.7.1).

Food Service Utensils

Kitchen utensil should be cleaned through the routine cleaning cycle and food trolleys that have been utilised in contaminated areas should be cleaned and disinfected. Disposable utensils are not required.

Waste Management

Waste should be managed in accordance with routine procedures: Clinical waste should be disposed of in clinical waste streams and all non-clinical waste should be disposed into the general waste stream. PPE is considered general waste unless contaminated with bulk blood and or body substances.

Curtains

Curtains should be changed/replaced after positive COVID-19 patient discharge/transfer.

Personal mobile devices

Phones, pagers and other mobile devices are touched frequently and may be contaminated.

- protective phone covers should not be used
- ensure mobile devices are cleaned regularly with dual purpose detergent and disinfectant product
- ensure hands are cleaned before and after using mobile devices
- do not answer mobile devices when you are wearing PPE
- consider placing your mobile device in a clear sealed bag at the commencement of each shift and discarding the bag prior to going home.

Patient transport and transfer

All agencies involved in the transfer / transport of COVID-19 suspected or confirmed patients are to implement their agency specific Standard, Droplet and Contact precautions. If tolerated, a surgical mask should be placed on patients during the transfer.

The transferring health facility should notify the NSW ambulance or other transport agencies on patient condition to ensure all staff required to attend this address are aware of the PPE requirement prior to arrival. The transporting agency should notify the area receiving the patient.

Patient transfers within a health organisation should use a route that minimises contact with the general hospital population including clinicians, for example, dedicated lift service, external path. For patient transport apply physical distancing as able and HW to wear a surgical mask during transport.

7. What should I do if I feel unwell?

Only go to work if you are well. Prior to going to work, consider whether you feel unwell and take your temperature. You are required to report to your manager if you develop the following symptoms prior to starting work or at any time while at work:

- **Fever** ≥37.5 degrees
- **Symptoms of acute respiratory infection** e.g. shortness of breath, cough, sore throat

8. What other information is on the Clinical Excellence Commission website?

More information about critical care, maternity care and education and training is available on the CEC website.