KEY ACTIONS
for health service organisations

COVID-19: elective surgery and infection prevention and control precautions

This guidance supports health service organisations with implementation of partial easing of restrictions on elective surgery, investigations and procedures and standard and transmission-based infection prevention and control precautions.

For immediate action

Following a National Cabinet decision, Australian hospitals have commenced easing restrictions on elective surgery, investigations and procedures from 27 April 2020. Health service organisations are required to:

Prepare and implement an organisational wide Risk Management Strategy to manage and reduce the risk related to the transmission of COVID-19 noting that:

- Work related risk is managed under the Work Health and Safety Act (2011), Regulations and the approved code of practice, 'How to Manage Work Health and Safety Risks' (2011). These require all Australian workplaces to assess and manage risk 'so far as is reasonably practicable.'
- The National Safety and Quality Health Service (NSQHS) Clinical Governance and Preventing and Controlling Healthcare-Associated Infection Standards require health service organisations to identify and act to reduce healthcare-associated infection risks.
- Health service organisations are required to apply standard and transmission-based precautions that are consistent with the current **Australian Guidelines for the Prevention and Control of Infections in Healthcare**.

The Australian Health Protection Principal Committee (AHPPC) has issued a **Statement on restoration of elective surgery** (**Attachment 1**), which should be read in conjunction with this guidance. Health service organisations will apply the following principles from the AHPPC Statement, and ensure there is:

- Equitable access for all patients determined by clinical decision making and safety
- Preservation and appropriate use of PPE
- Compliance with monitoring requirements.

Australian Health Protection Principal Committee guidance on implementation of standard and transmission-based infection control precautions

Implementation of standard and transmission-based infection prevention and control precautions will provide high-level protection to patients, healthcare workers and other people in healthcare settings.

Use of personal protective equipment (PPE) in operating suites and procedure rooms should be consistent with **Australian Guidelines for the Prevention and Control of Infection in Healthcare 2019** published by the Australian Commission on Safety and Quality in Health Care (ACSQHC).

General patient population

The current prevalence of Coronavirus Disease 2019 (COVID-19) in the Australian context does not require all asymptomatic individuals to be classified as suspected COVID-19 cases. AHPPC and local public health units will amend that advice as appropriate.

Surgery on patients with or suspected of having COVID-19 should be delayed until they have recovered or performed only in an emergency.

For patients not suspected of having COVID-19, the risk of infection when performing aerosol-generating

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procedures (AGPs) is minimal, and routine operating suite attire, i.e. surgical mask, theatre cap, eye protection, gown, and gloves is adequate.

Use of PPE

The care of patients who are not suspected of, or who do not have, confirmed COVID-19 PPE in operating suites and procedure rooms should be consistent with **Australian Guidelines for the Prevention and Control of Infection in Healthcare 2019**.

There are **specific recommendations** for the use of PPE during hospital care of people with COVID-19, which are not applicable to patients who are negative for COVID-19. These specific recommendations are included in the Commission's resources: **Infection Prevention and Control COVID-19 Personal Protective Equipment** (**Attachment 2**) and **Special precautions for COVID-19 Designated Zones** (**Attachment 3**).

Performing aerosol-generating procedures (AGPs) on non-COVID-19 patients

Given the relatively low prevalence of COVID-19 in Australia, standard precautions and the use of standard operating theatre attire and PPE, are adequate for the performance of AGPs (such as intubation) on patients who are not suspected of or not confirmed cases of COVID-19, in the absence of another airborne-transmissible infectious agent. A surgical mask, theatre cap, eye protection, gown, and gloves should typically be worn. A P2 respirator is not necessary in this context.

Previous advice to use airborne precautions for the care of patients with severe coughing has been withdrawn because:

- Viral load does not necessarily correlate with the clinical condition
- Coughing generates droplets, predominantly, and
- Surgical masks used by the patient, if possible, and healthcare worker provide adequate protection.

Performing aerosol-generating procedures on COVID-19 patients

Contact and droplet precautions are adequate for managing COVID-19 patients unless AGPs are being performed.

If AGPs are being performed on COVID-19 patients, contact and airborne precautions should be used.

Screening

Compliance with the NSQHS Standards will ensure appropriate management of risks to patient and health care worker safety.

An example of a peri-operative checklist is included at **Attachment 4**. This resource will assist health service organisations to:

- Determine that patients do not meet the current **Australian definition** of a suspect or confirmed COVID-19 case and therefore are eligible to be considered for elective surgery
- Support appropriate PPE use
- Support assessment of risks to health system capacity associated with the planned surgery, procedure or investigation.

Patients who, on screening, require further investigation of COVID-19 risk should only be considered for emergency surgery, procedures or investigations.

Patients for elective surgery, an investigation or procedure do not routinely require prior testing for COVID-19 or quarantine.

Depending on local rates of community transmission, individual states and territories may recommend testing to manage risks for patients, healthcare workers and health service organisations.

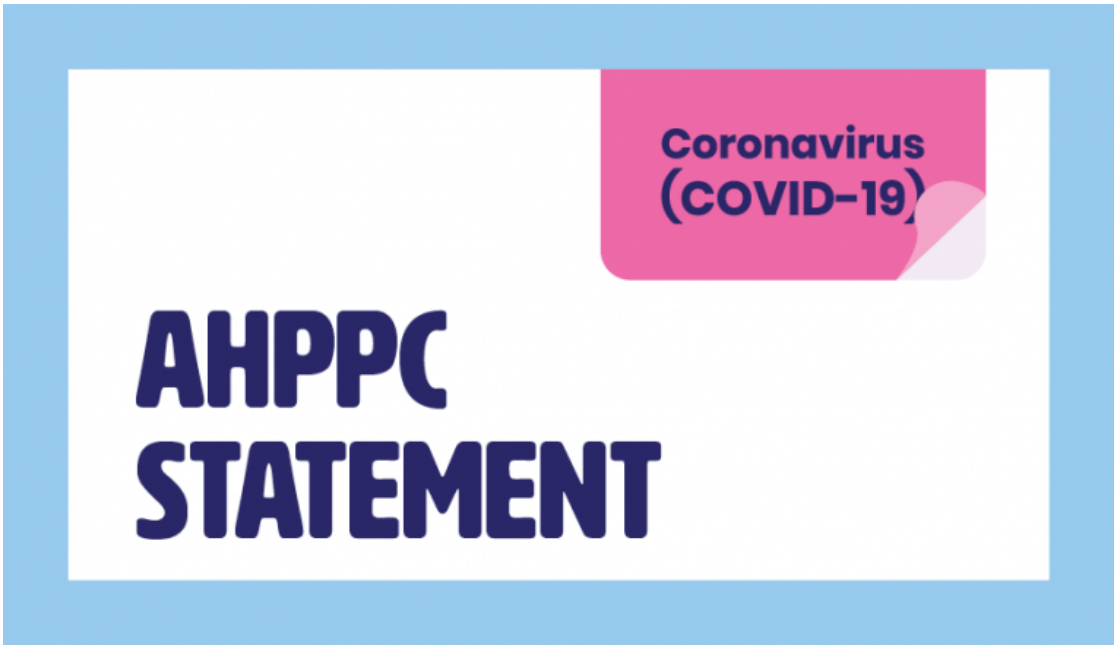
Health services should ensure that they meet physical distancing requirements at all times during planning, preparation and post treatment. This applies to all staff, patients and relatives. Where physical distancing is unavoidable during physical examinations and providing care, staff and/or patients may wear a surgical mask.

Informed consent

Health services are required to ensure all patients, prior to preparing for their procedure have an opportunity to discuss with a suitably qualified clinician:

- The rationale for the procedure
- The risks and benefits to them of having the surgery, investigation or procedure at this time
- The actions that will be taken to reduce their risks
- The likely outcomes for them should they not proceed with the surgery, investigation or procedure at the recommended time
- The alternatives to the proposed surgery, investigation or procedure.

Attachment 1: A statement from the Australian Health Protection Principal Committee (AHPPC) about the restoration of elective surgery



Objective

To be able to increase the availability of elective surgery in a safe and equitable way on a nationally consistent basis. Elective surgery to become incrementally available without increasing the risks of the COVID-19 pandemic and ensuring the capacity of the hospital system is maintained to respond when needed.

Context

A large proportion of hospital care has been deferred to ensure adequate hospital capacity to respond to COVID-19.

Activity in hospitals has slowed and much of this has been due to formal restrictions on non-urgent treatment, but also, in part, this has resulted from clinician and patient perceptions of risks including COVID-19 transmission risk, system capacity constraints and personal protective equipment (PPE) availability.

While an initial large peak in COVID-19 infections has currently been mitigated by the successful public health measures, there will be a need to prevent secondary outbreaks for months to come. Continuing current levels of general healthcare deferral for that period could result in significant harm to patients, with diagnosed conditions deteriorating and missed opportunities for early diagnosis and intervention. There is currently excess hospital capacity in all jurisdictions, and these harms can be reduced by taking initial steps to restore some care.

In line with National Cabinet decisions, any restoration of elective surgery also needs to take into account PPE modelling, the proper use of PPE in clinical settings, as per national PPE clinical guidelines, intensive care unit (ICU) availability and flow on health system requirements (for example rehabilitation, physiotherapy etc).

A cautious approach may achieve this without reducing COVID-19 preparedness.

Existing national restrictions will not be reversed, but rather relaxed to reflect the current situation.

Restrictions will be lifted in an incremental way to ensure effects can be comprehensively assessed and to avoid risks associated with increased patient density and flow through hospitals.

Elective surgery restoration is reliant on agreements between jurisdictions and private hospitals being in place, in line with the National Partnership Agreement on Private Hospitals and COVID-19 (COVID-19 NPA).

Risks

Re-introduction of elective surgery presents the following risks:

- Increased burden on ICUs leading to diminished capacity to treat COVID-19;
- Increased infection control risks and the potential for a hospital based outbreak;
- Increased burden on PPE supplies due to increased use in theatres and clinical staff requesting excessive enhanced PPE when it is not indicated; and
- Increased burden on testing regime presented by some individual clinicians conducting pre-operative testing as a perceived risk mitigation strategy, leading to undermining of the surveillance activities of Public Health Units.

Principles around reintroduction of hospital activity

1. Equity of access for all patients determined by clinical decision making and safety.
    1. Clinical urgency and risk of the health to the patient due to further delays should guide restoration of elective surgeries at the local level and in all cases.
2. Preservation and appropriate use of PPE including consideration of:
    1. Availability, quantity, type and quality to ensure a safe working environment for clinicians and patients;
    2. Compliance with clear and consistent national guidelines on use of PPE, released by the Commonwealth;
    3. Hospital and day surgery reporting of PPE usage on a minimum weekly basis (PPE burn rate) in both public and private settings; and
    4. Ensuring numbers of staff are at a safe and clinically appropriate level.
3. Clear timeframes to monitor and review the situation:
    1. Weekly monitoring and review of PPE supplies in public and private settings, and the number of positive tests; and
    2. An overall review/reassessment at 2 and 4 weeks based on:
        1. Number of positive cases (health care worker or patient) linked to increased activity;
        2. PPE use and availability; and
        3. Volume of procedures and hospital/system capacity.
4. Restoration of elective surgery will be consistently applied in both public and private settings.
    1. Work in private sector should be consistent with national guidance and agreement with Commonwealth and States regarding COVID-19 NPA and viability guarantee.
    2. For private hospitals, restoration of elective surgeries need to be agreed with the respective state government to ensure there is ample hospital capacity for COVID-19 health response.
5. Decisions on elective surgery are subject to local hospital capacity, jurisdiction capacity, transport availability and any other relevant quarantine arrangements in place.
    1. Every patient undergoes pre-operative risk assessment as per national guidelines.
6. Restrictions may be reintroduced depending on whole of system demand constraints related to COVID-19 and will be based on outcomes of review and reassessment mechanisms. Restrictions may also be introduced at a hospital or regional level in the event of an outbreak.
7. National COVID-19 testing guidelines will be adhered to, in line with the national disease surveillance strategy.

Patient selection principles for first tranche of elective activity re-commencement

1. Restoration of elective activity will be guided by avoiding harm and mitigating risk of deferral of procedure or services in line with clinical guidelines, and appropriate use and supply of PPE. This will be based on clinical decisions with a focus on:
    1. Procedures representing low risk, high value care as determined by specialist societies;
    2. Selection of patients who are at low risk of post-operative deterioration (based on ASA category 1 and 2);
    3. Children whose procedures have exceeded clinical wait times;
    4. Assisted reproduction;
    5. Endoscopy;
    6. Cancer Screening programs (noting that National Cabinet has not previously supported the cessation of these programs); and
    7. Expand dental services to level 2 restrictions (see Appendix 1).

Suggested approach for elective surgery

Consistent with these principles and to allow some volume regulation while patient selection processes are refined, it is proposed that in the initial two week period of recommencement (from Monday 27 April 2020) the following will apply:

- Public and private Health Services will aim to reopen approximately 1 in 4 (25%) of theatre and endoscopy lists currently closed, subject to local circumstances;
- Health services and their clinicians will be responsible for selection of patients for these lists based on clinical urgency, PPE use, ICU capacity and consistent with the principles in this document;
- Procedures should focus on those normally categorised in the public hospital system as category 2 and can include assisted reproduction and other non-surgical interventional procedures. Category 1 procedures continue unchanged. Some category 3 procedures will also recommence, such as arthroplasty and cataract extraction;
- Cosmetic or other procedures not addressing significant medical conditions must not be included;
- Physical distancing should be applied in the lead up and management of surgery – for example with telehealth for perioperative assessments;
- The National Medical Stockpile should not be used for elective activity, and private hospitals will continue to source PPE through their own procurement processes. A notional state allocation of the stockpile should be predetermined to ensure no state uses up its own supply becoming reliant on the National Medical Stockpile for any surge required and potentially resulting in inequity of access in the longer term;
- States focus their efforts on specialties with longest wait times, however have flexibility to manage their work consistent with the principles;
- Jurisdictions can choose to perform lower clinical urgency work which requires limited or no routine PPE – i.e. outpatients, breast screen and other screening programs, and diagnostic procedures; and
- Activity volumes are reported fortnightly.

These arrangements will be reviewed at the end of the initial two week period.

Appendix 1

Dental services expansion

AHPPC has previously supported a 4 level infection control-based restriction of dental services during the COVID-19 outbreak. Dental services are currently operating at level 3 restrictions. AHPPC supports the current recommendation by the Australian Dental Association (ADA) that Dentists now move to level 2 restrictions, which will allow a broader range of interventions to be undertaken, including all dental treatments that are unlikely to generate aerosols or where aerosols generated have the presence of minimal saliva/blood due to the use of rubber dam.

The ADA advises that dentists can now procure their own supply of PPE to enable this expansion.

Attachment 2:

Infection Prevention and Control COVID-19 Personal Protective Equipment

INFECTION PREVENTION AND CONTROL COVID-19

Personal protective equipment (PPE)

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.

Surgical mask fluid-resistant (Level 1, 2 or 3) can be worn for up to 4 hours unless moist or contaminated, 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.

#Aerosol-generating procedures (AGPs) are those procedures that are more likely to generate excessive small respiratory droplets (aerosols). AGPs potentially put healthcare personnel and others at an increased risk for pathogen exposure and infection. There is currently no uniformed or consensus list of all AGPs for healthcare settings. Although aerosols may carry small amounts of virus, they diffuse as distance from the patient increases and are effectively managed by modern ventilation systems. The requirement for airborne precautions for AGPs is based on the risk of preventing droplet spread infection.
†Extended or sessional use refers to a period of time where a health worker is undertaking duties in a specific care setting/exposure environment. A session ends when the health worker leaves the care setting/exposure environment. Extended/sessional use should always be risk assessed and considered where there are high rates of hospital cases.

Recommended PPE for health workers in clinical units

Context	Disposable gloves	Disposable plastic apron	Disposable fluid-resistant gown	Surgical mask fluid-resistant (Level 1, 2 or 3)	P2/N95 mask	Eye protection[1]
Working in an inpatient area with probable or confirmed case(s)[2] (not within 1.5m). Use standard precautions.	✗	✗	✗	✗	✗	✗
Performing a single aerosol-generating procedure (AGP) on probable or confirmed case(s)[2].	✓ Single use[3]	✗	✓ Single use[3]	✗	✓ Single use[3]	✓ Single use[3]
Working in any inpatient area with probable or confirmed case(s)[2] - direct patient care (within 1.5m), no AGPs.	✓ Single use[3]	✓ Single use[3] - application as per risk assessment[4] OR	✓ Single use[3] - application as per risk assessment[4]	✓ Single use[3] - application as per risk assessment[4]	✗	✓ Single use[3]
All individuals transferring probable or confirmed case(s)[2] (within 1.5m).	✓ Single use[3]	✓ Single use[3] - application as per risk assessment[4]	✗	✓ Single use[3]	✗	✗
Primary care, ambulatory and outpatient areas with probable or confirmed case(s)[2] - direct patient care (within 1.5m).	✓ Single use[3]	✓ Single use[3] - application as per risk assessment[4] OR	✓ Single use[3] - application as per risk assessment[4]	✓ Single use[3]	✗	✓ Single use[3]
Protection for vulnerable patient groups during COVID-19.	✓ Single use[3]	✓ Single use[3]	✗	✓ Single use[3]	✗	✗

1. This may be a single or reusable face/eye protection/face shield, mask visor, safety glasses or goggles.
2. A case is any individual who meets the current definition for a probable or confirmed case of COVID-19 as provided in *CDNA National Guidelines for Public Health Units Coronavirus Disease 2019 (COVID-19)*.
3. Single use refers to disposal of PPE or decontamination of reusable items e.g. eye protection or respirator after each patient and/or following completion of a procedure, task or session. PPE should be disposed of after each use or earlier if damaged, soiled, moist or uncomfortable.
4. Risk assessment refers to utilising PPE when there is an anticipated/likely risk of contamination with splashes, droplets, or blood or body fluids.

The contribution of the Clinical Excellence Commission, NSW Health in this work is acknowledged

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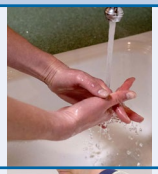
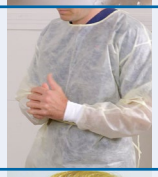
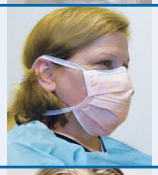
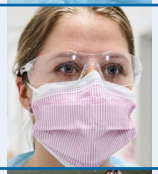
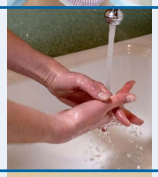
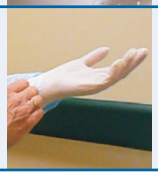
Attachment 3:

Special precautions for COVID-19 Designated Zones

SPECIAL PRECAUTIONS FOR COVID-19 DESIGNATED ZONES

BEFORE entering the COVID-19 zone to see the FIRST PATIENT

Follow these steps

1.  Perform hand hygiene
2.  Put on a fluid-resistant long sleeved gown or apron
3.  Put on a fluid-resistant surgical mask
4.  Put on protective eyewear
5.  Perform hand hygiene
6.  Put on disposable, non-sterile gloves

When MOVING BETWEEN patients in the designated COVID-19 zone

Follow these steps

Gown and glove change is always required for a patient that has a Multi-Resistant Organism (MRO) or other infection.

1.  Dispose of gloves
2.  Perform hand hygiene
3. 

Check if PPE is **contaminated** or **damaged** in this order (gown, eyewear, mask)

If **one or more items** are contaminated or damaged go to **4**

If **no items** are contaminated or damaged go to **6**

4. 

All contaminated equipment should be removed in this order (gown, eyewear, mask) with **hand hygiene** between steps

5.  Put on clean set of PPE (Repeat blue entry steps 1–4)
6.  Perform hand hygiene
7.  Put on disposable, non-sterile gloves

Outside of COVID-19 designated zones standard precautions apply.

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Attachment 4: Example of perioperative checklist

Date of procedure:	Patient label
Procedure planned:	

Screening checklist for patients for theatre not known to be COVID-19 positive

Each check to be completed once for all emergency and elective patients.

Preoperative screening checklist (to be asked the day before or day of surgery)	**Yes**	**No**
Recent overseas travel in the past 2 weeks?		
Recent contact with known or suspected COVID-19 case in the past 2 weeks?		
Reside in or visited a known high-risk area with a cluster of cases?		
Recently tested for COVID-19? If YES: Date: Time: Result:		
Does the patient have:		
■ A temperature of ≥38°C?		
■ A cough?		
■ A sore throat?		
■ Shortness of breath?		
■ Other respiratory symptoms?		
■ A recent loss of the sense of smell?		
If the patient answered 'Yes' to any of the above, notify the anaesthetist and surgical team.		

Preoperative vulnerability checklist (complete the day before or day of surgery	**Yes**	**No**
Pregnant		
Age >65 years		
Respiratory comorbidity		
Immunocompromised		
Frail		
Other comorbidities (e.g. CCF, diabetes, obesity, renal insufficiency)		

ICU need and availability checklist (complete the day before or day of surgery	**Yes**	**No**
Is ICU likely to be needed post-op?		
Is ICU aware of the case?		
If ICU admission required post op, is an ICU bed available?		
Have goals of management been defined?		
Expected ICU length of stay (in days)?		days

ICU need and availability checklist (complete the day before or day of surgery	**Yes**	**No**
Are there significant aerosolisation risks with this procedure?		
Is everyone wearing the appropriate level of PPE for this procedure?		
Are there non-essential staff in the theatre or procedure room?		
Are there vulnerable perioperative team members?		
Advise: re-deploy vulnerable staff and non-essential staff in high-risk or aerosolising procedures. Discuss with proceduralist/surgeon, anaesthetist and/or NUM.		

This checklist, which has been reproduced with permission from Safer Care Victoria can be modified and locally adapted by individual hospitals and health services. It can be used for both elective and emergency surgery and should accompany the patient from peri-op to theatre, and from there to the ward or ICU. This checklist is available on the Commission's website:
https://www.safetyandquality.gov.au/covid-19