Recommendations for the re-opening of dental services: a rapid review of international sources

6 May 2020

COVID-19 Dental Services Evidence Review (CoDER) Working Group

Version 1.1 – updated 7th May 2020
Purpose

The COVID-19 pandemic has led to the closure of dental practices or a reduction of dental services all over the world. Some countries are currently reopening or planning to reopen dental services as part of an exit from the lockdown strategy.

In response to the urgent need for guidance, this rapid review has been undertaken to assist policy and decision makers with the production of comprehensive national guidance for their own settings. The review summarises the main themes from recently produced international sources and assesses the extent to which their recommendations were supported by underpinning evidence.

In this evolving situation, information provided by each country may be subject to change.

Key messages

- This review reports on national recommendations for the re-structuring and re-opening of dental services from 11 countries.
- There is a highly variable level of detail given across international sources.
- Most sources recommend patient triage by telephone; some recommend temperature screening at reception.
- Most sources recommend avoiding aerosol generating procedures (AGPs), if possible.
- Filtering facepiece class 2 (FFP2, equivalent to N95) masks are recommended by the majority of international sources for both COVID-19 and non-COVID-19 confirmed cases irrespective of the use of AGPs.
- A minority of sources recommend use of a filtering facepiece class 3 (FFP3, equivalent to N99) mask for AGPs.
- Sources include recommendations on how to reduce the risk of transmission (e.g. use of pre-operative mouthwashes; high volume suction; rubber dam; and Personal Protective Equipment [PPE]).
- In the majority of sources, there is no referenced, underpinning evidence and some areas are unlikely to ever have strong (or any) research evidence.
- All sources emphasise the need to focus on activities that minimise risk (to staff/patients/public) but still support high quality clinical care.
- There is a need to consider the inter-relationship between the appropriate use of PPE (including donning and doffing), AGPs and interventions to reduce aerosol generation.
- Clarity is required on effective cleaning and disinfection processes, including the impact on patient scheduling and practice workflow.
Background


COVID-19 spreads primarily through droplets and fomites. The close working environment and the potential for aerosol spread of the virus through dental procedures, such as use of high and low-speed handpieces, ultra-sonic scalers, air/water syringes, intra-oral radiographs or an infected patient coughing, places dental health workers at an elevated risk of infection.

Pandemic planning for dental services typically involves a step-down process, with cancellation of routine care first, then urgent care followed by the provision of emergency care only. In many countries, the move to emergency care provision was rapid. For example, on the 16 March 2020 the American Dental Association proposed that dentists defer all elective dental care for 3 weeks; in Scotland, Wales and Northern Ireland, all aerosol generating practices were stopped on the 17 March and practitioners were told to stop all routine face-to-face dentistry on the 23 March. On the same day in New Zealand, all non-essential and elective dental treatment was suspended. By the end of April 2020, National and Regional Governments and professional organisations had published recommendations or guidance for the re-opening/re-structuring of dental services.

Process

Between the 2 and 6 of May 2020, we conducted a rapid review of recently produced guidance and reports containing recommendations from international organisations and professional bodies on the current requirements for the re-opening of dental services. Our methods were based on the proposed approach for rapid reviews by the WHO and the Alliance for Health Policy and Systems Research.¹

We conducted a grey literature search to identify relevant guidance documents and liaised with the information scientist of Cochrane Oral Health (COH), who last updated the regular Cochrane search for dental guidelines on the 1 May 2020 (search strategy available on request). We searched websites of dental organisations and departments of health. We also contacted an international network of oral health researchers and decision makers through the Global Evidence Ecosystem for Oral Health (GEEOH). The GEEOH was founded to reduce duplication of effort and create direct routes from evidence to policy and clinical practice and is currently coordinated by COH. The relationship between COH, the Scottish Dental Clinical Effectiveness Programme (SDCEP) and our research group resulted in rapid communication and assistance from several Chief Dental Officers and worldwide dental policy leaders. No language restrictions were applied to the searches and members of our research group were able to translate documents published in non-English languages.

¹ https://www.who.int/alliance-hpsr/resources/publications/rapid-review-guide/en/
From the identified sources of information, we selected those that provided the most recent and relevant recommendations for the re-opening of dental services. To be eligible, guidance and recommendations needed to have explicitly addressed resuming dental care provision post initial closure due to COVID-19 outbreak, in any area or setting where clinical practice was limited to prevent community infection. National guidance, where available, was prioritised over regional or local guidance. Due to the time constraints in the preparation of this rapid review, we conducted single data extraction and did not formally assess the quality of the guidance documents or validate their sources. Attempts to link recommendations to underpinning evidence were noted.

Prior to the extraction of information/data, the research group reviewed a sample of these sources to identify common domains for policy making across reports. We used these categories to structure our analysis and present our findings.

**Findings**

We identified a total of 12 guidance documents from 11 countries produced between 18 March and 5 May 2020. The list of countries and details of the documents are presented in Appendix 1. We summarised the common themes and the relevant recommendations in the five domains included within the guidance documents. The five domains identified were:

1. Practice preparation and patient considerations.
2. PPE for dental practice personnel.
4. Dental procedures.
5. Post-operative cleaning/disinfection/waste management.

The level of detail across international sources varied greatly. It is important to highlight that the absence of a recommendation from a particular document does not imply its lack of importance. For the majority of recommendations addressing specific COVID-19 concerns there was no referenced, underpinning evidence.

1. Summary of recommendations related to practice preparation and patient considerations

<table>
<thead>
<tr>
<th>Theme</th>
<th>Recommendations</th>
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<tbody>
<tr>
<td>Re-opening tasks</td>
<td>• 4/12 (33%) sources include general tasks such as how to reduce risk of contamination e.g. legionella, staff training and machine and equipment maintenance (e.g. IT).</td>
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<tr>
<td>Supply chain</td>
<td>• 2/12 (17%) sources recommend confirming the availability of supplies including PPE.</td>
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<tr>
<td>Staff advice and screening</td>
<td>• 5/12 (41%) sources provide a range of advice or training in revised protocols including checking that staff are free of COVID-19 symptoms.</td>
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</table>
• 2/12 (17%) sources recommend the daily screening of temperature.

Patient triage
• 11/12 (92%) sources provide information on how to group patients mainly by telephone to include risk assessment of potential COVID-19 status (e.g. COVID-19 positive, suspected COVID-19, asymptomatic, special need/shielding). Some also recommend temperature screening at reception.
• 1/12 (8%) source indicates that clinicians should confirm patient COVID-19 status in surgery.

Patient advice
• 5/12 (42%) sources provide information on what type of advice to provide to patients attending the surgery (e.g. social distancing, wearing mask, hand hygiene).

Patient scheduling
• 4/12 (33%) sources recommend clear scheduling of patients based on triage.
  o Patients who are vulnerable or with special needs:
    2/12 (17%) sources consider the scheduling of appointments to avoid contact with higher risk patients.
• 1/12 (8%) source indicates that patients’ appointments should be spread between 20-30 minutes to allow for enough time to disinfect all areas and avoid cross infection between patients in waiting rooms.

Waiting area reception
• 9/12 (75%) sources consider social distancing, rearrangement of furniture, patient information posters, wearing of masks, hand sanitiser, removal of magazines/toys and other unnecessary items.

Toilets
• 1/12 (8%) source advises patient use of toilet only with permission.

Patient discovered COVID-19 positive after treatment
• 1/12 (8%) source suggests contact tracing and isolation of close contacts (i.e. dental staff providing treatment).

Indemnity/insurance
• 1/12 (8%) source indicates that clinicians should discuss with their indemnity provider (or equivalent) regarding obtaining consent from patients.

2. Summary of recommendations for PPE for dental practice personnel

<table>
<thead>
<tr>
<th>Theme</th>
<th>Recommendations</th>
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<tbody>
<tr>
<td>All staff</td>
<td>• 8/12 (67%) sources indicate that all staff should wear a face mask at all times.</td>
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</tbody>
</table>
• 4/12 (33%) sources indicate that all staff should wear eye protection at all times.
• 4/12 (33%) sources recommend wearing of work uniforms to be laundered on site or by laundry service.

Unsuspected COVID-19 patients

• 12/12 (100%) sources recommend eye protection (glasses/goggles, face shields) and single use gloves.
• 6/12 (50%) sources recommend FFP2 mask or equivalent.
• 4/12 (33%) sources advise surgical hat or equivalent.

Unsuspected COVID-19 patients undergoing AGPs

• 9/12 (75%) sources recommend disposable surgical gown.
• 8/12 (67%) sources recommend FFP2 mask or equivalent (changed after each patient).
• 6/12 (50%) sources recommend surgical hat or equivalent.

Confirmed COVID-19 patients

• 12/12 (100%) sources recommend the following items; eye protection (glasses/goggles, face shields); single use of gloves and disposable surgical gown.
• 2/12 (17%) sources advise double gloving.
• 9/12 (75%) sources recommend use of FFP2 mask or equivalent.
• 8/12 (67%) sources recommend surgical hat or equivalent.

Confirmed COVID-19 patients undergoing AGPs

• 10/12 (83%) sources recommend use of FFP2 mask or equivalent (changed after each patient).
• 3/12 (25%) sources suggest use of FFP3 masks or equivalent, if available.

3. Summary of recommendations for management of the clinical room

<table>
<thead>
<tr>
<th>Theme</th>
<th>Recommendations</th>
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<tbody>
<tr>
<td>Use of spittoon</td>
<td>• 2/12 (17%) sources state that the spittoon should not be used in dental units.</td>
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<td>Clear work surfaces, minimise equipment and</td>
<td>• 6/12 (50%) sources provide information on how the work surfaces in the clinical room should be</td>
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<td>cross infection procedures</td>
<td>kept clear. Examples include limiting paperwork, covering notes with a barrier and removal of</td>
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<td>artwork. This also extends to ensuring all equipment in sight should be minimised to only that</td>
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<td>which is strictly necessary to avoid viral cross-contamination. All required equipment/materials</td>
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<td>should be prepared in advance.</td>
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<td>• 2/12 (17%) sources indicate that common contact areas such as the chair lamp, handles and</td>
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<td>keyboard should be covered with a barrier (e.g. plastic film or aluminium foil).</td>
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<td>• 1/12 (8%) source indicates that supporting staff should bring in clean instruments and necessary</td>
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<td>materials.</td>
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</table>
| From waiting area to treatment room | • 1/12 (8%) source recommends switching between different treatment rooms if possible, especially following AGPs.  
• 1/12 (8%) source states that information on COVID-19 should be posted on the entrance of the clinic.  
• 1/12 (8%) source reminds dental staff that there should be no handshaking or contact with patients.  
• 2/12 (17%) sources recommend keeping staff levels/entry to a minimum in surgery.  
• 4/12 (33%) sources indicate that staff should have all the PPE on before they go into a treatment room. |
| Suspected/confirmed COVID-19 patients | • 1/12 (8%) source indicates that suspected or confirmed COVID-19 patients should be directed to the treatment room and should not be allowed to wait in the waiting area.  
• 1/12 (8%) source indicates that patient treatment should be undertaken in an isolation room with negative pressure. |
| Home visits | • 1/12 (8%) source indicates that all patients should be asked about symptoms of COVID-19 and social distancing and appropriate cross infection control should be adhered. This includes cleaning of contact surfaces in the patient’s home and contact surfaces in the dentist’s car. |
| Air quality | • 4/12 (33%) sources acknowledge the importance of ventilation/air renovation of which 2/12 (17%) guidance documents state that at least 15 minutes is required after each patient for ventilation.  
• 1/12 (8%) source recommends use of air conditioning in extraction mode only (never in recirculation mode).  
• 1/12 (8%) source indicates that a HEPA filter (level 13 or higher) should be used for the suction system.  
• 2/12 (17%) sources indicate that the door of the surgery must remain closed to prevent viral spread, with one recommending closure for 120 minutes post-AGPs. One guidance document expands on this to state all drawers and cabinets should also remain closed. |
| Patient hygiene | • 2/12 (17%) sources provide information on general patient hygiene in the clinic. For example, patients are requested to disinfect their hands at arrival, should be supplied with appropriate protection (e.g. plastic bib, eye protection) and must perform hand hygiene on completion of treatment and leave the room as soon as possible. |
| Post-treatment | • 1/12 (8%) source indicates that dental staff should leave the treatment room and then remove their visor, eye protection and masks. |
4. Recommendations for dental procedures

<table>
<thead>
<tr>
<th>Theme</th>
<th>Recommendations</th>
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</table>
| Reduction of AGPs                         | • 12/12 (100%) sources include recommendations to reduce or avoid AGPs.  
• 1/12 (8%) source recommends avoiding using the air-water (3-in-1) syringe. |
| Risk reduction interventions              | • 11/12 (92%) sources include recommendations on how to reduce the risk of transmission.  
• 10/12 (83%) sources recommend rubber dam and high volume suction  
• 9/12 (75%) recommend the use of pre-operative mouthwashes |
| High volume suction                       | • 11/12 (92%) sources recommend aspiration to specifically decrease viral load generated by aerosols.  
• 1/12 (8%) source indicates that the aspirator tip should be covered with a disposable cover. |
| List of recommended operative procedures  | • 6/12 (50%) sources explicitly recommend minimally invasive procedures.  
• 5/12 (42%) sources include a defined list of procedures that can be carried out. |
| Tailored advice for patient groups        | • 5/12 (42%) sources provide specific advice for different patient groups e.g. COVID-19 asymptomatic; shielded groups; suspected or confirmed COVID-19 positive patients. |

5. Summary of recommendations related to post-operative cleaning/disinfection/waste management

<table>
<thead>
<tr>
<th>Theme</th>
<th>Recommendations</th>
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</table>
| Cleaning and disinfection procedures      | • 9/12 (75%) sources recommend cleaning and disinfection of all surfaces following every patient contact.  
• 4/12 (33%) sources recommend cleaning and disinfection of all non-clinical areas (reception, waiting area, toilets) including door handles, chairs, and surfaces.  
• 2/12 (17%) sources recommend clinical floor cleaning ranging from 2-3 times daily. |
| PPE during decontamination | - 4/12 (33%) sources indicate that staff should wear eye protection, gloves and mask when performing decontamination/disinfection procedures.  
- 1/12 (8%) source recommends washing of garments at the highest possible temperature (at least 60 degrees for 30 minutes or between 80 and 90 degrees with 10 minutes of heat contact with clothes). |
| Clinical waste disposal | - 4/12 (33%) sources recommend waste be disposed of as per regulations of local system.  
- 1/12 (8 %) source recommends PPE and other disposable contaminated material should be placed in a plastic bag in a pedal-operated, hard-lid container. |
| Disinfection products | - 1/12 (8%) source recommends disinfection products for surfaces, suction and instruments must mention ‘viricide agents’ (EN 14476).  
- 4/12 (30%) sources recommend a hypochlorite/chlorine-based solution for disinfection.  
- 1/12 (8%) source recommends routine cleaning and disinfection of room surfaces (e.g. cleaners and water to clean surfaces before applying a disinfectant).  
- 2/12 (17%) sources recommend the use of alcohol (60-70% ethanol) for disinfection.  
- 1/12 (8%) source recommends the use of chloroxylenol (0.12-0.24%) for disinfection.  
- 1/12 (8%) source recommends the use of Virkon®, Perasafe® as disinfectants. |
| Existing policies on decontamination | - 3/12 (25%) sources refer to national guidelines for disinfection and decontamination policies. |
| Hand washing | - 3/12 (25%) sources recommend hand hygiene following doffing of PPE/decontamination of environment.  
- 1/12 (8%) source recommends hand washing with alcohol (60-95%) based hand rub or soap and water for at least 20 seconds. |

**Conclusion**

This rapid review has provided a summary of the international guidance documents published to date. It summarises the main elements of the included documents and highlights several key messages intended to assist policy and decision makers to produce comprehensive national guidance for their own settings. In the majority of the sources addressing specific COVID-19 concerns, there was no referenced, underpinning evidence.
### Working Group Members

<table>
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<tr>
<th>Name</th>
<th>Position</th>
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<tbody>
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<td>Research Fellow, HSRU, University of Aberdeen</td>
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<td>Chief Dental Officer’s Clinical Fellow, NHS England and NHS Improvement; StR in Oral Surgery, Leeds Dental Institute</td>
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The COVID-19 Dental Services Evidence Review Working Group would like to thank and acknowledge the contribution of the following individuals for providing the advice and access to the international guidance documents necessary for this rapid review:

Colette Bridgman, Chief Dental Officer, Wales; Alonso Carrasco-Labra, Director, ADA Science & Research Institute; Riana Clarke, National Clinical Director Oral Health, New Zealand; Michael Donaldson, Chief Dental Officer, Northern Ireland; Tom Ferris, Chief Dental Officer, Scotland; Sara Hurley, Chief Dental Officer, England; Marco Landi, Council of European Dentists; Timothy Ricks, Chief Dental Officer, US Public Health Service; James Taylor, Chief Dental Officer, Canada; Benoit Varenne, Dental Officer, World Health Organization.

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## Appendix 1. Details of the identified international guidance documents for the re-opening of dental services

<table>
<thead>
<tr>
<th>Country</th>
<th>Source</th>
<th>Practice preparation and patient considerations</th>
<th>PPE for dental practice personnel</th>
<th>Management of the clinical room</th>
<th>Dental procedures</th>
<th>Post-operative cleaning/disinfection/waste management</th>
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<tbody>
<tr>
<td><strong>France</strong>&lt;br&gt;France: Ordre National des Chirurgiens-dentistes (French Dentists Association)</td>
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<tr>
<td>Date of publication: 30.04.2020&lt;br&gt;Awaiting approval from the French Haute Autorité de Santé (a governmental body for health guidelines).</td>
<td>Reception/waiting area:  - Patients to wear masks to attend practice. - Masks made available if required - Protective screens for reception desks. - Limit use of waiting area. - Hand sanitizer available.</td>
<td>All staff: Non-clinical staff should wear surgical mask at all times and never enter the clinical room. AGPs: - Aprons - Eye protection - Surgical Hat - FFP2 masks - Single use gloves - Extra surgical gown in addition to PPE</td>
<td>Equipment; Dedicated scrubs for treatment room. Ban use of spittoon on dental units. Clear work surfaces: Clear work surfaces in proximity of dental unit. Risk of droplet projection within 1.5 meters of the source. Air quality: Air treatment room at least 15 minutes between patients following AGPs. Use of HEPA filters (level 13 or more) for suction system.</td>
<td>AGPs: Dental air polishing should not be used. Use of blue or red contra angle handpiece instead of dental air turbine.</td>
<td>Cleaning and disinfection procedures: Decontamination of reusable PPEs. Cleaning of FFP2 masks required during AGPs (reusable for half a day if not soiled or damaged). Disinfection products for surfaces, suction and instruments must contain the mention ‘viricide agents’ (EN 14476). Laundry: Dental scrubs should be washed on site and never leave the practice. Clinical waste disposal: Immediate access to disinfection tray with cover and clinical waste container in the treatment room. Single use items should be trashed after use. All clinical waste and PPE should be eliminated using the infectious waste pathway.</td>
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<td><strong>Spain</strong>&lt;br&gt;Spain: Council of Dentists, Collegial Organization of</td>
<td>Reopening surgery:  - Clinical staff health status needs to be checked and staff to receive appropriate training on protocols, procedures, and materials. - If possible, do a simulation prior to the arrival of patients.</td>
<td>All staff: Reception staff should wear a surgical mask and, if possible, glasses. Non AGPs: - Single use of FFP2 masks without valve for up to 4</td>
<td>Minimise equipment: Before the patient enters: Organise the strictly necessary material and instruments, and PPE. Avoid viral cross contamination by placing unnecessary material or instruments out of sight. The Tiered procedure levels Level of severe restrictions (A) corresponding to the lockdown period: Urgent Care. Assess severity of the patient. Address severe pain, inflammation and/or</td>
<td></td>
<td>Cleaning and disinfection procedures: Use thick gloves for cleaning and disinfection. The use of a double pair of gloves is recommended. Once the treatment is finished, remove the external pair keeping the</td>
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<tr>
<td>Reference</td>
<td>Practice preparation and patient considerations</td>
<td>PPE for dental practice personnel</td>
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<td>Dentists in Spain</td>
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<td>Date of publication:</td>
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<td><a href="https://www.consejodontistas.es/comunicacion/actualidad-consej/notas-de-prensa-consej/item/17-83-plan-estrategico-de-accion-para-clinicas-dentales-durante-el-periodo-de-desescalada.html">https://www.consejodontistas.es/comunicacion/actualidad-consej/notas-de-prensa-consej/item/17-83-plan-estrategico-de-accion-para-clinicas-dentales-durante-el-periodo-de-desescalada.html</a></td>
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**Reception area:**
- Cleaning of shoes.
- Methacrylate screen in the patient reception area.
- Visible line to indicate a security distance of approximately 1.5 meters from reception desk.
- Person at the reception should wear a surgical mask and, if possible, glasses.

**Waiting room:**
- Remove all unnecessary items such as decorations, coffee makers, magazines, books, etc.
- Chairs placed in a way to respect social distancing and at least 2 meters apart.

**Toilets:**
- Remove bathroom towels or hand dryers and replace with paper.
- Provide instructions on proper hand washing.

**Patient advice:**
With the exception of children and persons in need, patients should come alone.
- Avoid wearing jewellery or accessories.
- Mobile phones must be stored and not used in the dental practice.
- A distance of at least 2 meters must be observed if another patient is present in the dental practice.
- Payment should be arranged preferably by cards.

**Patient scheduling:**
- Hours. Possible to re-use the mask after sterilization if not damaged (2 or 3 sterilizations permitted).
- Dealing with a symptomatic patient: no need of a mask if 2 meters away; use of surgical mask if 1 to 2 meters away; use of FFP2 mask if <1 meter away.
- Double pair of nitrile or latex gloves.
- Eye protection
- Waterproof disposable gown, cap, and shoe covers.
- Avoid wearing rings, bracelets, pendants, watches, or other accessories.

**AGPs:**
- Shoe cover
- Hand hygiene (for at least 40 seconds)
- Protective gown, disposable cap, and gloves, mask, and eye protection
- Avoid touching your face and surrounding surfaces while wearing PPE.

**Placement of plastic or aluminium film in certain areas (those considered to be at greater risk of splashing or aerosols) can be useful. All common contact areas of the equipment (e.g. chair lamp handle, etc.) should be covered with plastic film (or aluminium foil) between patients visits.**

**Closed clinic rooms:**
The door of the clinic must be closed to prevent viral spread that may occur during treatments.

**Patient preparation:**
Before starting any procedure, patients should disinfect their hands, wear a disposable gown and for those interventions that generate aerosols eye protection. Use only disposable cups.

**Level of important restrictions (B) the first deescalating phase:**
- Minimal invasive restorations, restorations that do not require high-speed use using absolute isolation and specific indications. Do not generate aerosols or, if necessary (emergencies), minimise them, always with a rubber dam. Extractions (preferably non-surgical).
- Manual scaling (not ultrasonic or sonic), manual periodontal procedures, prosthodontic procedures without carving.
- Professional assessment of urgent endodontic procedures (with absolute isolation, prior disinfection of the consumer, preferably with sodium hypochlorite).
- Professional assessment of some implantology procedures without high speed.
- Assess relevance of sealants in all medical or preventive procedures and orthodontic treatments (care with polishing after removal of brackets).

**Level of moderate restrictions (C):**
Progressively normalise high-speed use, extreme caution in relation to PPE, incorporate restorative internal pair until completion of the collection, transport, cleaning and disinfection of material and instruments.

**Level of important restrictions (B) the second deescalating phase:**
- Minimal invasive restorations, restorations that do not require high-speed use using absolute isolation and specific indications. Do not generate aerosols or, if necessary (emergencies), minimise them, always with a rubber dam. Extractions (preferably non-surgical).
- Manual scaling (not ultrasonic or sonic), manual periodontal procedures, prosthodontic procedures without carving.
- Professional assessment of urgent endodontic procedures (with absolute isolation, prior disinfection of the consumer, preferably with sodium hypochlorite).
- Professional assessment of some implantology procedures without high speed.
- Assess relevance of sealants in all medical or preventive procedures and orthodontic treatments (care with polishing after removal of brackets).

**Level of moderate restrictions (C):**
Progressively normalise high-speed use, extreme caution in relation to PPE, incorporate restorative internal pair until completion of the collection, transport, cleaning and disinfection of material and instruments.

**Doffing procedures after treatment and general hygiene:**
- Glove hygiene (for at least 20 seconds), remove the gown trying not to touch the clothes, remove the external pair of gloves, then remove the glasses, disposable caps, masks, and the internal pair of gloves. Then wash your hands.

**Cleaning and disinfection protocol:**
Surfaces must be disinfected after patient contact and all instruments should be sterilised. The floor of the clinical area must be cleaned at least 3 times: at the beginning of the morning, at noon and at the end of the working day. Protective glasses and screens must be disinfected between patients.

**Ventilation and air purification:**
During aeration, no drafts should occur (close door).

**Waste and contaminated material:**
PPE and other disposable contaminated material should be placed in a plastic bag in a pedal-operated, hard-lid container.
### Practice preparation and patient considerations

- Patient temperature should be taken at arrival and invited to wash hands at arrival.
- Patients should be offered a surgical mask and a disposable cap.
- If children and adults need to be seen it is advisable to differentiate schedule.
- Ensure that patients waiting time does not exceed 15 minutes.
- Use an appropriate booking system to minimise the number of patients in the waiting room.
- Patients should not wander around.

#### Postoperative instructions to patient:
- Explain to the patients that elective procedures may be deferred or reassessed.
- Avoid shaking hands.

### Dental procedures

- Dentistry and application of sealants.
- Ultrasonic scaling in selected patients.
- Incorporate the rest of the treatments, adopting all the updated protocols.

#### Level of minimal or unrestricted restrictions (D)

- Standardised care, but continued PPE use is recommended for the long-term.

#### Avoid aerosols:

- Avoid using the air-water syringe to generate aerosols.

#### High volume suction:

- Use high flow aspiration to decrease the viral load generated by aerosols. Cover the vacuum cleaner hose with a disposable cover.

#### Rubber dam:

- The use of the rubber dam is essential in any operative manoeuvre. Use of disposable covers is highly convenient, in addition to the necessary sterilisation.

#### Mouthwash:

- Patients should mouthwash for 30 seconds to decrease the viral load when proceeding with intraoral examination.

### Post-operative cleaning/disinfection/waste management

- Common zones and reception area: Cleaning and disinfection of all common areas including window knobs, handrails, tables, armrests for chairs and armchairs, switches, telephones, etc.
- Bathing area: Cleaning and disinfection of the sink, switches, toilet. Floor scrubbing with bleach.
- Disinfection and sterilization area: Autoclave and thermostable cleaning and disinfection.

Clinical areas must be cleaned at least 3 times a day (at the beginning, at the end of the morning and at the end of the day).
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| (DGS) (Directorate-General of Health) Date of publication: 01.05.2020 https://www.dgs.pt/diretrizes-da-dgs/orientacoes-informativas/orientacoes-dgs/orientacoes-01.05.2020.pt/directrizes-01.05.2020 | - Ensure patients have access to information related to respiratory good practice, hand hygiene and mask use. 
- Reception area: 
  - Remove all unnecessary items such as decorations, coffee makers, magazines, books, etc. 
  - Promote the circulation of air in the waiting room, preferable with windows and doors opened. 
  - Protect surfaces that might be exposed to hand contact with plastic barriers or aluminium foil that is disposable (e.g. lamp handle, rotating instruments etc.). 
- Ensure surgical masks are available and an alcoholic solution at the entrance of the clinical practice. The mask should be used in the reception and waiting room and should only be removed once the patient is in surgery. 

Patient triage: 
- Triage prior to the appointment. 
- Prior to the appointment, a remote triage should be done to assess whether the patient has symptoms compatible with having COVID-19: new cough or worsening of a previous cough or fever or breathing difficulty in the last 14 days. 
- If in contact with a suspected or confirmed case of COVID-19 or if patient has been diagnosed with COVID-19. If the answer is yes, ask if the patient is still in self-isolation (14 days). | For non-COVID-19 patients: Oral health professionals should use PPE according to the risk of the procedures undertaken during the appointment. 
- Oral health professionals involved in seeing patients should use PPE according to the Norm 007/2020 from the DGS. 

For COVID-19 patients: 
- For high risk procedures (aerosol generating) or for patients with suspected or confirmed COVID-19 in emergency situations: 
  - Surgical Apron – open in the back, disposable, waterproof with long sleeves and that sits below the knee 
  - Mask FFP2 (N95) or FFP3 
  - Safety spectacles or face shields (with inferior opening) 
  - Gloves – disposable and non-sterilized 
  - Hairnet 
  - Safety shoes 

For high risk procedures, the use of a double pair of gloves (long sleeve) or a full protection suit. 

For low risk procedures (that do not generate aerosols): 
- Disposable apron on top of the clinical garment 
- Mask FFP2 (N95) 
- Safety spectacles or face shields (with inferior opening) | If A/C is available, it should be used only in extraction mode, never in recirculation mode. 
The equipment should be checked and certified. 

Disinfect surfaces, particularly those that are touched frequently, according to Guidance 014/2020 from the Chief Medical Office. 

Disinfecting equipment: 
- Prepare in advance all the material you expect to use to avoid the circulation of people and the opening of drawers. 

Clear works surfaces: 
- Remove all jewellery and accessories to see patients. 

Staff general hygiene: 
- Keep nails clean and short. 
- The use of acrylic nails, shellac, nail varnish or any other nail products is not permitted. 

After treatment/room decontamination: 
- Clean and disinfect immediately all surfaces and work environment. 
- Renovate the air at the end of each appointment. 
- Assure effective disinfection of models and moulds. 
- Follow all universal principles of sterilization and disinfection. 

When undertaking procedures of disinfection in the surgery, after the appointment and in the transport of used material risk, including root canal treatments and all activities using rotating instruments (polishing included) or an air-water syringe. | During the appointment: 
- Avoid, whenever possible, aerosol generating procedures. 
- Instruct the patients, before any procedure, to mouth wash for 30 seconds with a hydrogen peroxide solution 1% or iodopovidone 0.2%. 
- Use surgical suction to decrease aerosol generation. 
- Use rubber dam when appropriate. 
- Use rotation instruments with non-return valve 3 and disposable protections. 
- Prioritise extraoral radiographs compared with intraoral. 
- Prioritise re-absorbable sutures after extractions. 

Reusable material: 
- Reusable spectacles or googles must be disposed in a disposable board and sprayed with alcohol 70 degrees or immersed in a chlorine solution as indicated by Guidance 014/2020 from the DGS. 
- Face shields must be sprayed with alcohol 70 degrees in a disposable board. | must be undertaken with 1 to 2-hour breaks. 

Cleaning and disinfection of all surfaces in the surgery must be done after every appointment. 

Washing of garments: 
- Garment parts of PPE that are washable must be removed carefully, without shaking them, from inwards to outwards, and put into a waterproof bag. They must be washed at the highest temperature possible. 
- If the garment cannot be washed with hot water, it must be washed in washing machine, at 30 to 40 degrees with an appropriate disinfectant. 

In the absence of a washing machine, pack the garment and put it into a waterproof bag, safely enclosing it until it reaches the washing place. Put the garment directly into...
If the patient has symptoms compatible with COVID-19, the patient should contact the National Health Services telephone line and an appointment should not be scheduled until the patient has recovered respecting the self-isolation period. If the patients has symptoms or has COVID-19, and the problem is urgent, consider booking the appointment at the end of a morning or afternoon, in pre-specified times.

**Patient scheduling:**
Book appointments in advance and remotely to avoid having patients in the waiting room.

*Before the appointment patients should receive this information:*
Patients should come alone. If that is not possible, the accompanying person should wait outside of the practice or in the waiting room with a mask on. If the accompanying person needs to be in surgery, they should sit over 2 meters away from dental equipment.
- Patients need to wash their hands with an alcoholic solution provided, avoid touching surfaces, and there should be a preference for card payment.

*During the appointment:*
Ensure personal objects are not visible during the appointment and that they are disinfected regularly and keep the door of the surgery closed.

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<td>PPE as indicated in the point x with surgical mask type IIR. In addition, they should use a waterproof apron and thick gloves. If reusable, the safety spectacles or face shields must be disinfected before and after each appointment. When removing PPE, the first pair of gloves must be removed before removing the remaining PPE, and leave the second pair of gloves until the end (Appendix IV) The clinical and assistance staff should have all the PPE on before they go into surgery.</td>
<td>to the sterilization room, the dental assistant should remove the first pair of gloves and only after remove the remaining PPE, after all material has been stored. Bin all PPE and disposable materials in the contaminated material bins (type III or IV). Collect all used material and take it to the sterilization room.</td>
<td>the washing machine, following the points above.</td>
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<td>Country: Switzerland</td>
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<td>Source: SSO (Dental Swiss Society)</td>
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<td>Date of publication: 17.04.20</td>
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<td><a href="https://www.sso.ch/home/corona-virus.html">https://www.sso.ch/home/corona-virus.html</a></td>
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</table>

### Staff advice/screening:
- Minimize number of staff in contact with patients.
- Staff must adopt social distancing at all time.
- If a member of staff is showing symptoms. Self-isolation for 10 days tested or not and return to work 48 hours after the end of symptoms following the 10 days of self-isolation.

### Reception area:
- If possible, use protection screens at the reception desk.
- Disinfect phone after each use if used by different people.
- Remove all unnecessary items from the waiting area.
- Minimize the number of staff touching drawers handles, folders, patients' notes, keyboards and disinfect them regularly.

### Patient scheduling:
- Allow longer appointment than usual.
- Only one patient at a time per dental chair in the practice.
- Vulnerable patients (shielded patients) and possible treatment following COVID-19 symptomatic/asymptomatic patients:
  - Patient scheduled at specific slots in order to avoid any contact with other patients.
  - Professional discussion and opinion regarding pros and cons for treatment or delay.
  - If any risks, elective procedures should be delayed.

### PPE for dental practice personnel:
- **All staff:**
  - All staff must wear a mask all day.
- **PPE for non COVID-19 patients:**
  - Surgical mask
  - Disposable gloves
  - Eye protection
  - FFP2 mask for AGPs
- **PPE for COVID-19 patients:**
  - Disposable gloves
  - Eye protection
  - Surgical gown
  - FFP2 masks for at least 30 min following AGP and for the whole time the patient is present in the treatment room.

### Management of the clinical room:
- **Staff general hygiene:**
  - Hair must be tied high and use of a hat if possible
  - Nail short and no nail polish
  - Hand hygiene with cold water and soap
  - Hand hygiene with hand sanitizer
  - No treatment if these measures can’t be respected
- **Air quality:**
  - It is forbidden to provide treatment in a room without a window or adequate ventilation.
- **After each patient, the room must be ventilated for at least 15 minutes and disinfected (disinfectant solution instruction for estimated time of action must be strictly followed).**

### Dental procedures:
- **Asymptomatic patients:**
  - Possibility to provide treatment with the following precautions:
    - Wear of surgical mask during the whole working day.
    - Before treatment, ask patient to use viricide mouthwash (1.5% H2O2 solution or povidone-iodine solution for 30 seconds).
    - Treatment with rubber dam when possible. Do not forget to disinfect rubber dam.
    - Use both high and low speed suctions
    - Limit as much as possible AGPs. If it is necessary, dental team should wear FFP2 masks.
    - Scaling only with hand scalers
- **Patient suspected or confirmed COVID-19:**
  - Only emergency treatment that cannot be postponed. Treatment must take place in a ‘COVID-19 treatment room’ apart.
  - No contact with other patients in the practice should happen.
    - Patient must wear a surgical mask when he arrives.
    - Dental team must wear FFP2 30 minutes after the end of AGP and as long as the patient is in the treatment room.
    - This patient group can be referred to hospital setting

### Post-operative cleaning/disinfection/waste management:
- **Cleaning and disinfection procedures:**
  - Wear of mask, gloves and eye protection during cleaning/disinfection procedures.
  - Follow hygiene guidelines implemented by the SSO.
  - Regular disinfection of all surfaces (following disinfectant solution instructions).
  - Disinfection of keyboard and computer screen after each patient.
  - Clean with soapy water and disinfectant all that patients or staff are susceptible to have touched. Every hour:
    - Waiting area seats
    - Door handles
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<tr>
<td><strong>AGPs:</strong>&lt;br&gt;- Surgical gowns with long sleeves&lt;br&gt;- Eye protection + visor&lt;br&gt;- Gloves&lt;br&gt;- For patients B1 and B2, use of FFP2 masks.</td>
<td><strong>Non-AGP:</strong>&lt;br&gt;- For treatment:&lt;br&gt;- Surgical mask&lt;br&gt;- Single use gloves&lt;br&gt;- Protection apron with long sleeves (or change scrubs between each patient)&lt;br&gt;- Eye protection (visors recommended)&lt;br&gt;- For patients A and B, use of FFP1 or FFP2 masks.</td>
<td>&lt;ul&gt;&lt;li&gt;PPE for dental practice personnel&lt;/li&gt;&lt;/ul&gt;</td>
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### Practice preparation and patient considerations

- Regular disinfection of common areas.

**Waiting area:**
- Remove any unnecessary items (toys, reading material etc.).
- Seats placed in a way to respect social distancing.
- Only one patient in waiting area at a time with eventual accompanying person if necessary.

**Toilets:**
- Close toilet room.
- Possible to use they by asking staff.
- After each use, the room should be disinfected.

**Reception desk:**
- Respect social distancing.
- Remove all unnecessary items.
- All documents should be sent electronically if possible.
- Contactless payment should be favoured. Protective screen on payment machine or disinfect after each use.

**Patient triage based on the following patient groups:**

**Group A1:** COVID-19 positive. Postpone any treatment and refer to hospital setting. No treatment unless absolute emergency

**Group A2:** Suspected COVID-19 positive. Symptomatic patient or patient who has been in close contact with a confirmed case.

### PPE for dental practice personnel

- Supporting staff should limit presence in treatment room but if needed should wear eye protection, gloves, surgical mask.

### Management of the clinical room

- Supporting staff brings in clean instruments and any necessary material.
- Dental nurse assists by trying to limit cross infection as much as possible (suction).

**After treatment:**
- Patient should perform hand hygiene and leave treatment room as soon as possible.
- Dental team should remove surgical gown and apron and place them in a plastic bag then sealed.
- Removal of gloves and hand hygiene.
- Leave treatment room and then remove visor, eye protection and eventual FFP2.
- Hand hygiene.
- Wear a surgical mask again.

### Dental procedures

- Dental fracture or loose filling
- Fit of prosthesis
- Denture ease
- Orthodontic maintenance (debonded bracket, broken arch wire…)
- Follow up of patients with severe periodontal disease

**Routine treatment:**
- All other dental treatments
- Patients should use mouthwash 1% H2O2 solution or Povidone Iodine 1% solution for one minute before spitting in a disposable cup
- Limit use of intra oral radiographs
- Limit use of 3-in-1 syringe
- Use of rubber dam when possible including any tooth preparation. Placed prior to start AGP
- Use large suction tip

### Post-operative cleaning/disinfection/waste management

- Clean instruments from any visible stain.
- Use autoclave and thermodisinfection prior to reuse instruments.

**Ventilation and air purification:**
Ventilate the treatment room according to the amount of AGP.

**Laundry:**
Working uniform washed daily at 60 degrees minimum.
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<td><strong>Group B1</strong>: Asymptomatic patient with high risk conditions (shielded patients). Only urgent or required dental treatment (FFP2). If further treatment, case by case discussion and professional advice. Patients should be scheduled at the beginning of the day.  <strong>Group B2</strong>: Asymptomatic patient with special need (patients having more difficulties with social distancing). Prioritise urgent treatment, then required treatment and then routine treatment. Scheduled at the end of the day. (use of FFP2)  <strong>Group C</strong>: Asymptomatic patients. Dental treatment can be provided prioritising urgent treatment, then required treatment and then routine treatment.</td>
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**For patients:**
- Treatment is provided only with appointment
- If patient shows symptoms following appointment booking, they should contact the practice by phone
- Patient should not present early to the practice
- If necessary they should wait outside the practice
- Patients should come wearing a mask
- Favour electronic payment

**When patient arrives to practice:**
- Hand hygiene
... - Ask about household and close relatives' status in relation with COVID-19
- Ask or screen patient for temperature (if >37.3°C refer to GP)
- Patient should then seat in waiting area without touching door handles if possible

Waiting room:
- Posters for patients' information
- Minimize number of patients at the same time. Consider adding breaks between each patient
- Social distancing if several patients. Use of tape on the floor and re-furnish if necessary.
- Avoid unnecessary objects in waiting areas (reading material)
- Avoid food and drinks

Patient triage:
- All patients should clarify their status over the phone prior to attend (forms to be used)

Laundry:
Washed daily at 85 degrees at laundry or dental clinic. It should not be taken home.

Non-COVID-19 patients:
- Disposable gloves and adequate hand hygiene before and after use
- FFP2 or FFP2R, change between patients
- Eye protection (visors recommended)
- Cover clinical tools with plastic cover disinfectant before use
- Hat or hood covering all hair if available

AGP with non-COVID-19 patients:
- Long sleeved disposable or reusable gown, changed between patients

Patient/staff flow:
Suspected/Confirmed COVID-19 patients should not wait in waiting area but should be directed into a treatment room with closed door. Dental team should enter the room only after wearing full PPE.

Non-COVID-19 patients:
- Hand hygiene when entering clinical room
- Mouthwash with 1% H2O2 for at least 1min prior to dental treatment
- AGP with turbine and contra angle should be minimized
- Ultrasounds and airflow should not be used
- AGP preferably done at the end of the day
- Short ventilation of treatment room between patients following AGP
- Dentists should work with the assistance of dental nurse
- Any conversation with patient should take place in the treatment room

AGP with COVID-19 patients:
- Disposable gloves and adequate hand hygiene before and after use
- FFP3 (alternative FFP2)
- Eye protection (visors recommended)

Patient/staff flow:
Suspected/Confirmed COVID-19 patients should not wait in waiting area but should be directed into a treatment room with closed door. Dental team should enter the room only after wearing full PPE.

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| www.helsedirekt oratet.no | - No patient should attend the dental clinic without appointment  
- Consider whether physical consultation is necessary  
- Prior to treatment/examination, patient’s infection status must be considered | - Cover clinical tools with plastic cover disinfected or changed between patients  
- Long sleeved disposable or reusable gown, changed between patients  
- Hat or hood covering all hair | | - Resorbable sutures should be used to reduce need of reviews | |

**Treatment of patients suspected or confirmed COVID-19:**  
- Treatment should be postponed  
- Prescription should be used when justified as an alternative to operative dentistry  
- Emergency treatment should be referred to established emergency clinics  
- Emergency clinics for COVID-19 should only treat this group of patients  
- Patient should wear surgical mask on arrival unless not tolerated for medical reasons  
- Hand hygiene on arrival and when they change rooms  
- Surgical mask removed only for dental examination and treatment and after dental team wear all PPE  
- Patient wears surgical mask when treatment is finished  
- Mouthwash with 1% H₂O₂ for at least 1 min prior to dental treatment

**Infection at the dental clinic:**  
- If patient diagnosed 24 hours post treatment: conduct infection detection + close contacts should isolate for 14 days  
- Disinfection of the clinic should take place asap (anybody who

**Treatments which should be prioritized down:**  
- Regular recalls  
- Aesthetic treatments  
- Treatment of minor caries lesions and mild forms of periodontitis  
- Starting comprehensive treatment plans that can wait (prosthetic and orthodontics)  
- Case by case professional judgment must be made and deviations from the recommendations should be recorded

**Treatment types:**  
*Prioritization of treatment in non-suspected COVID-19 patients (in order of priority):*  
- Emergencies (acute infections, trauma, pain...)  
- Condition potentially leading to infection  
- Loose crowns/bridges/fillings  
- Deep caries or other conditions potentially leading to pain or infection if untreated  
- Delivery of prosthetic devices  
- Orthodontic treatment needing adjustment  
- Sedation treatment
### Recommendations for the re-opening of dental services: a rapid review of international sources

6 May 2020

<table>
<thead>
<tr>
<th>Country: Denmark</th>
<th>Source: Danish Health Board</th>
<th>Date of publication: Unclear</th>
<th>Latest update 22.04.2020</th>
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| was not in close contact can work again after disinfection of the practice was performed | Patients with special needs should be identified and follow up should be clarified with GP:  
- Children and adolescent with special needs or diseases  
- Drug users, mental ill patients, prison inmates  
- Shielded patient with high risk of developing severe form of COVID-19 or becoming seriously ill as a result of oral infection | Dental procedures must take into account the risk of spreading of infection; follow general recommendation of good hand hygiene and 1-2 meters distance to others | Information on COVID-19 symptoms should be posted on entrance to clinic | Instructions can be prepared for home visits: Focus must be on infection-reducing measures: upon arrival at home, it is recommended that all citizens be asked about symptoms of COVID-19; keep 1-2 meters away; encourage hand washing or hand disinfection. Proper hand hygiene is performed before and after contact with all citizens. Use of protective equipment as specified in the section “Reg. dental protective equipment”. Contact surfaces (e.g. countertop) in the patient’s home should be cleaned before leaving the home. Contact surfaces in the dentist’s car, including steering wheel, gear lever and handbrake (or bicycle) should be disinfected. | **General hygiene:** National Infection Hygiene Guidelines (NIR) for dental clinics must be adhered to and the focus should be on the proper use of PPE. All members of the dental team use the same protective equipment:  
**Clothing during AGP:** For aerosol-generating procedures, as an additional precautionary measure, disposable long-sleeve disposable coat and long-sleeve cuff / disposable apron should be used. In case of supply difficulties, disposable plastic aprons covering the neck can be used. If disposable plastic apron is not available, it can be changed to clean clinical clothing after each patient. The clinical clothes should be washed as specified in NIR for dental clinics, if applicable. Instructions can be prepared for cleaning and disinfection procedures: National Infection Hygiene Guidelines (NIR) for dental clinics must be adhered to and the focus should be on cleaning and disinfection. |
| **Re-opening practice:** To minimize the risk of infection with Legionella, attention should be paid to flushing of water systems/dental units, when reopening dental clinics | Dental care must always take into account the risk of spreading of infection; follow general recommendation of good hand hygiene and 1-2 meters distance to others. Information on COVID-19 symptoms should be posted on entrance to clinic. | **Waiting room:**  
- minimum of one meter distance between seating  
- remove newspapers, magazines, toys, beverages from common jugs, etc.,  
- focus on frequent and thorough cleaning | **Contact surfaces (e.g. countertop) in the patient’s home should be cleaned before leaving the home.** Contact surfaces in the dentist’s car, including steering wheel, gear lever and handbrake (for bicycle) should be disinfected. **Dental treatment such as fillings and root canal** | **Suspected/confirmed COVID-19 patients:** Dental workers must use protective equipment with any AGP and the room aired briefly afterwards. Effective saliva suction should be used. **AGPs in patients not tested for COVID-19:** For patients who have not been tested for SARS-CoV-2 prior to aerosol-generating procedures, the National Board of Health’s principle of precaution should be taken. The use of a 3-in-1 syringe/handpiece should be limited and drying must be effected by effective suction and the use of cotton wool etc. **Dental treatment such as fillings and root canal** |
| **Suspected/confirmed COVID-19 patients:** Dental workers must use protective equipment with any AGP and the room aired briefly afterwards. Effective saliva suction should be used. **AGPs in patients not tested for COVID-19:** For patients who have not been tested for SARS-CoV-2 prior to aerosol-generating procedures, the National Board of Health’s principle of precaution should be taken. The use of a 3-in-1 syringe/handpiece should be limited and drying must be effected by effective suction and the use of cotton wool etc. **Dental treatment such as fillings and root canal** | **Cleaning and disinfection procedures:** National Infection Hygiene Guidelines (NIR) for dental clinics must be adhered to and the focus should be on cleaning and disinfection. **Dental treatment such as fillings and root canal** | **Cleaning and disinfection procedures:** National Infection Hygiene Guidelines (NIR) for dental clinics must be adhered to and the focus should be on cleaning and disinfection. **Dental treatment such as fillings and root canal** |

### Reference

- poster with information on protective measures against coronavirus on the clinic door in waiting room.

### Personal hygiene:
- access to hand spirit in waiting room if possible and request patients adhere to good hand hygiene

### Staff screening:
Dental staff should pay special attention to their own symptoms and stay home or be sent home immediately with symptoms of COVID-19 (fever, cough, sore throat, headache and muscle soreness, which may be accompanied by nasal symptoms). Dental care personnel can return to work 48 hours after symptom relief. Personnel with mild respiratory symptoms may be tested by their own physician or medical officer.

### Patient triage:
Patients with respiratory symptoms where COVID-19 may be suspected or patients with proven COVID-19 should not be treated in primary dental clinics but should be referred to hospital locally for the removal of clinic clothes, if applicable using a short video.

### Mask and eye protection:
Visor or goggles can be multiple use, cleaned and disinfected (according to the manufacturer’s instructions) between each patient. In case of supply difficulties, full-face visors can be used alone (except for surgical procedures). Ordinary glasses and magnifying glasses can be used if they are designed for protection.

Mask should be tight-fitting and cover nose and mouth. The mask must retain at least 98% of microorganisms (type II), but does not have to be R type. As masks become leaky when moistened, they must be changed regularly and always after each patient.

### Post-operative cleaning/disinfection/waste management

<table>
<thead>
<tr>
<th>Reference</th>
<th>Practice preparation and patient considerations</th>
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</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>- poster with information on protective measures against coronavirus on the clinic door in waiting room.</td>
<td>locally for the removal of clinic clothes, if applicable using a short video.</td>
<td>handlebar and saddle) is sanitised after each visit.</td>
<td>treatment that necessitate the use of an air rotor, turbine, handpiece and angle piece should not be undertaken unless it is an emergency that cannot be postponed until after test results for SARS-CoV-2.</td>
<td>For emergency treatment, effective saliva suction should be used with assistance [four-handed dentistry] and rubber dam used when it is technically feasible. At the end of treatment, the treatment room must be briefly ventilated before the next patient. Dental cleaning (scale and polish/scale and root planning) and the treatment of periodontitis must be done with the use of hand instruments.</td>
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<tr>
<td></td>
<td>- access to hand spirit in waiting room if possible and request patients adhere to good hand hygiene</td>
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<td></td>
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<td><strong>Post-operative cleaning/disinfection/waste management</strong></td>
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</table>

### Dental treatment of children and adolescents:
## Practice preparation and patient considerations

Asymptomatic patients requiring AGPs or other procedures that are considered to pose a special risk in dental care, may be prescribed a test for SARS-CoV-2. The test can be prescribed by the dentist or dental hygienist. The test responses should be available prior to scheduling.

If the test is positive for SARS-CoV-2 prior to scheduled procedure, the procedure is postponed. The patient should be informed to self-isolate for 7 days according to recommendations and if symptoms appear within the 7 days, the patient must self-isolate for 48 hours after symptom cessation.

### Patient scheduling:
- telephone and video consultations should be used where possible
- It is essential that there is easy access to telephone contact with the dentist; there may be a need to extend telephone time. Electronic scheduling must not be possible.
- plan fewer appointment times so that there is a lower daily patient flow in the clinic and fewer patients in the waiting room.
- Assessments should focus on whether dental work can be postponed without affecting morbidity, taking into account: seriousness and severity of the disease / condition; risk of exacerbating the disease if not treated, including increase drug consumption; risk of the

## PPE for dental practice personnel

Midazolam - children and adolescents who have no symptoms of infection or are infected with COVID-19, Midazolam use should follow existing guidelines followed.

Nitrous oxide can be used provided that the hoses are always be retreated properly with cleaning and disinfection. Disinfection with heat is preferred. Alternatively, if possible, disposable hoses may be used.

## Management of the clinical room

## Dental procedures

## Post-operative cleaning/disinfection/waste management
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<tr>
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<tr>
<td>Country: Malta &lt;br&gt; Source: Ministry for Health &lt;br&gt; Date of publication: 18.03.2020 &lt;br&gt; [<a href="https://deputyprime">https://deputyprime</a> minister.gov.mt/en/health-promotion/Documents/Guidance%20for%20Dental%20Practices%20in%20Malta%20%20Covid19.pdf](<a href="https://deputyprime">https://deputyprime</a> minister.gov.mt/en/health-promotion/Documents/Guidance%20for%20Dental%20Practices%20in%20Malta%20%20Covid19.pdf)</td>
<td>Staff screening: Staff should be screened for symptoms prior to entry into the dental practice &lt;br&gt; Patient triage: Patient walk-in should be discouraged. Patients should be contacted by telephone and questioned regarding signs, symptoms and risk factors of COVID-19. Patients should be screened on arrival through a questionnaire, forehead thermometer and instructed to use alcohol hand rub. Patient scheduling: Patient appointments should be spread out (20-30mins) to effectively disinfect all areas and avoid cross infection between patients in waiting rooms.</td>
<td>For non-COVID-19 patients: Clinicians should wear disposable surgical masks, protective eyewear/face-shields and disposable gloves</td>
<td>For suspected/confirmed COVID-19 patients: Patients who have tested positive or are suspected positive for COVID-19 should have treatment postponed until recovery. If they need to be seen, staff need to wear full PPE including FFP3 masks, gowns, gloves and cap and visor.</td>
<td>Four handed dentistry should be performed. Anti-retraction hand pieces should be used and only if absolutely necessary. The patient should be given a 1% hydrogen peroxide or 0.2% povidone rinse prior to the treatment. Treatment should be conducted under rubber dam and high-volume suction. Hand-instruments should be used whenever possible to decrease airborne droplets. Extra-oral radiography is recommended in preference to intra-oral radiography.</td>
<td>Cleaning and disinfection procedures: Surfaces must be disinfected before and after each procedure or patient contact. All instruments should be sterilised according to standard protocol. Clinical areas need to be disinfected with Sodium Hypochlorite (this process can take up to two hours) for patients who have tested positive or are suspected positive for COVID-19 and received treatment in the dental practice. Clinical waste disposal: Medical waste should be disposed of as appropriate.</td>
</tr>
<tr>
<td>Reference</td>
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<tr>
<td>Country:</td>
<td>USA Source: Centers for Disease Control and Prevention (CDC) Date of publication: Unclear Latest update 27.04.2020</td>
<td>Staff screening: Screen all staff at the beginning of their shift for symptoms of COVID-19 and actively measure their temperature</td>
<td>All staff: Staff should wear a facemask at all times Cloth face coverings can be used by staff that do not require PPE (such as clerical staff) and by all staff not engaged in direct patient care activities Non-AGPs: The following PPE should be worn before entering a patient room or care area: - A N95 respirator or surgical mask with full-face shield - Eye protection (goggles or full-face shield) - An isolation gown - Gloves AGPs: During aerosol generating procedures a N95 respirator or equivalent is required</td>
<td>Suspected/confirmed COVID-19 patients: Treatment on a patient with suspected or confirmed COVID-19 should be undertaken in an isolation room with negative pressure and use of an N95 mask</td>
<td>Non-AGPs: Avoid aerosol generating procedures (including dental hand pieces, air-water syringe and ultrasonic scaler) Priority for minimally invasive/atraumatic restorative techniques AGPs: If aerosol generating procedures are necessary clinician should use: - Four handed dentistry - High evacuation suction - Dental dams Only essential staff should be present. There should be no visitors for the procedure Cleaning and disinfection procedures: Hand washing with alcohol (60-95%) based hand rub or soap and water for at least 20 seconds Routine cleaning and disinfection of room surfaces (e.g. cleaners and water to clean surfaces before applying an EPA-registered hospital grade disinfectant) Clean and disinfect all reusable dental equipment according to manufacturer’s instructions Clinical waste disposal Manage laundry and medical waste in accordance with routine procedures</td>
</tr>
<tr>
<td>Staff triage: Telephone screen all patients for signs or symptoms of respiratory illness and systematically assess the patient at time of check-in at the dental clinic</td>
<td>Patients with COVID-19 can receive dental care: - (non-test based): At least 72 hours since recovery and 7 days since first symptoms appeared. - (test-based) Following resolution of fever and improvement of respiratory symptoms and negative results of FDA approved COVID-19 tests from two swabs ≥24 hours apart. - (test-based) 7 days since a laboratory positive COVID-19 test with no symptoms</td>
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<td>If a patient arrives with suspected or confirmed COVID-19, defer dental treatment, provide the patient a mask and refer the patient home or if acutely unwell to a medical facility</td>
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<tr>
<td>Country:</td>
<td>USA Source: American Dental Association</td>
<td>Reopening practice: Distribute patient letter as practice opens reassuring patients of infection control measures and updated process in place.</td>
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<td>All staff: Front desk staff can wear masks and googles, or face shields, or offices can install a clear barrier</td>
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<td></td>
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<td>Clinical staff:</td>
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<td></td>
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<td>Cross infection procedures: Limit paperwork in surgery. Cover paper notes with barrier.</td>
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<td>Decide on treatment using clinical judgement: - Patient health/risk factors/geographic incidence of COVID-19 - Availability of PPE</td>
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<td></td>
<td></td>
<td>Cleaning and disinfection procedures: Clean the surgery while wearing gloves, mask and face shield (or goggles)</td>
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<tr>
<td>Date of publication: 24.04.2020</td>
<td>Professional judgement should be exercised with regards to disposable foot/head covers.</td>
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<tr>
<td><a href="https://success.ada.org/~/media/CPS/Files/Open%20Files/ADA_Return_to_Work_Toolkit.pdf">https://success.ada.org/~/media/CPS/Files/Open%20Files/ADA_Return_to_Work_Toolkit.pdf</a></td>
<td>Use highest level of PPE available. Assume all patients can transmit disease.</td>
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<tr>
<td>Patient screening questionnaire available.</td>
<td>N95 (low risk), KN95 (low risk), Surgical mask (moderate risk) with face shield or goggles</td>
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<tr>
<td>Staff screening questionnaire and log available.</td>
<td>For clinical staff, if available gowns should be used. Change gowns if soiled. Dispose gowns or launder after each use.</td>
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<tr>
<td><strong>Patient/staff flow:</strong></td>
<td>Remove mask outside of operating room</td>
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<tr>
<td>- Limit access to surgery (only patient if possible) &amp; provide also a mask and shield to any accompanying person</td>
<td>Replace mask if it is soiled, damaged or hard to breathe through</td>
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<tr>
<td>- Keep staff entry to a minimum in surgery.</td>
<td>Strict hand hygiene measures:</td>
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<tr>
<td>- Don mask prior to entry to surgery.</td>
<td>- Upon entry</td>
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<tr>
<td>- No handshaking or contact.</td>
<td>- Before and after contact with patients</td>
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<tr>
<td>- Wash hands and don gloves in surgery</td>
<td>- After contact with contaminated surfaces or equipment</td>
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<tr>
<td>- Confirm patient screening questions</td>
<td>- After removing PPE</td>
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<tr>
<td><strong>Staff screening:</strong></td>
<td>Long sleeves should be worn.</td>
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<tr>
<td>- Pregnant staff should follow available guidance. Limit exposure to AGP</td>
<td><strong>Post-operative cleaning/disinfection/waste management</strong></td>
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<tr>
<td>- Consider screening checkpoint and log for all staff.</td>
<td>Dispose of surface barriers after each patient</td>
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<tr>
<td><strong>Reception:</strong></td>
<td>If surfaces are dirty, they should be cleaned with soap and detergent prior to disinfection</td>
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<tr>
<td>- Wipes should be provided to clean surfaces that patients may touch.</td>
<td>Replace surface barriers</td>
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<tr>
<td>- Cover keyboard with cleansable/replaceable barrier and change between patients.</td>
<td>Include other evacuation systems</td>
<td></td>
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<tr>
<td><strong>Management of the clinical room:</strong></td>
<td><strong>Disinfection products:</strong></td>
<td></td>
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<tr>
<td>- Procedural requirements/clinical risk (aerosol production, ability to use rubber dam, induction of patient cough)</td>
<td>For disinfection use products suitable for SARS CoV-2</td>
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<tr>
<td>- Use professional judgement to employ lowest aerosol generating armamentarium for restorative/hygiene care (hand scaling)</td>
<td><strong>Laundry:</strong></td>
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<tr>
<td>- Use high velocity evacuation where possible</td>
<td>Staff uniforms (scrubs) should be laundered in practice or contracted to laundry service</td>
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</tbody>
</table>
Table 1: Practice preparation and patient considerations

- A hand sanitation station should be available upon entry into facility with a notice for people to use this before entry
- Tissues, alcohol-based hand rubs, soaps at sinks and trash cans should be provided
- Chairs should be placed 6 feet apart and barriers should be used if possible
- Toys, reading materials, remote controls or communal objects should be removed or cleaned regularly
- On a regular schedule, wipe all touchable surface areas with an approved cleaner.
- Consider individual phone headsets for each front desk staff to reduce virus spread

Patient triage:
- Pre-appointment patient screening.
- Patient questionnaire repeated and temperature taken on arrival at the dental clinic. If this is elevated, supply patient with a mask and alert the dentist.
- Reminder for patients/guardians to limit the number of companions to reduce people in reception area
- If suitable, patients can wait in their car and can then be called or messaged to enter the practice.
- Patients should be asked to bring their own pens to use
- If patients cancel due to illness, practices may consider waiving cancellation fees
- Postoperative instructions should include a reminder to
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</thead>
</table>
| **Country:** Canada  
**Source:** The College of Dental Surgeons of Saskatchewan (CDSS) Alert – COVID-19 Pandemic: IPC interim protocol update  
**Date of publication:** 27.04.2020  
**Effective from:** 04.05.2020  
- Level 1 mask as a minimum  
- Eye protection  
- Gloves  
- Scrubs  
- Maintain social distancing | Non-AGP rooms:  
- Enhanced cleaning, including twice daily cleaning of high touch surfaces  
- Patient should perform ABHR prior to exiting the operatory room  
- Clean operatory room and clinical contact and housekeeping surfaces as per normal SOHP Infection Prevention Control Standard for Oral Health Care Facilities (04-01 to 04-05) | Non-AGPs:  
- Extraoral radiographs recommended (minimise use of intraoral radiographs)  
- Utilise hand instruments only  
- Utilise four-handed dentistry  
- Do not use air water syringes  
- Do not use ultrasonic instruments  
- Do not use high-speed rotary hand pieces or electric low-speed hand pieces with air and water | Cleaning and disinfection procedures AGP rooms:  
- The operatory door and room must remain closed and air to settle for 120 minutes after AGPs before cleaning. If the number of air changes per hour in the room permits, the settle time can be decreased  
- Following appropriate settling time, clean clinical contact and housekeeping surfaces as per normal SOHP Infection Prevention Control Standard for Oral Health Care Facilities (04-01 to 04-05) |  |
| **Reception area:**  
Following AGPs the patient is discharged and guided to the reception area for post-op instructions, processing and exit | Patient advice:  
- Escorts can only accompany minor patients only (children)  
- Pandemic informed consent  
- Patient hand hygiene | Patient triage:  
- Patient risk assessment screening (SHA COVID-19 Screening Tool – 27th March 2020)  
- Thermometer temperature vital sign screening (<38°C)  
- All urgent dental treatment for patients who have been identified as moderate or high risk for COVID-19 or have been confirmed as COVID-19 positive must be provided by a SHA Level 3 provider in the appropriate facility | AGP rooms:  
- AGP operatory rooms must be isolated rooms from floor to ceiling with an entry or entries that must be closed and secured during the AGP (temporary isolation rooms can be designed – hoarding with plastic and a framed or zippered door)  
- Enhanced cleaning, including frequent cleaning of high touch surfaces  
- Remove all unnecessary cabinets, fixtures and non-essential supplies or products, including pictures or artwork  
- AGP signage should be placed at the entrance to the room  
- AGP rooms must have a Donning (clean side or area) and Doffing | All patients:  
patients to perform pre-procedural 1% hydrogen peroxide mouth rinse for 60 seconds and expectorated into the same dispensing cup | Donning and doffing procedures and clinical waste disposal:  
- PPE must be doffed in the decontamination area of the anteroom  
- Doffing station includes: laundry receptacle with lid, garbage receptacle with lid, eye protection disinfection receptacle with lid  
- Leaving the room: with gloved hands, remove the gown or lab coat and gloves with gloved hands only touching the outside of the gown, grasp the gown and pull away from the body without rapid movements, roll gown/coat inside out |  |
| **Patient advice:**  
- Escorts can only accompany minor patients only (children)  
- Pandemic informed consent  
- Patient hand hygiene | **Intermediate risk AGPs with dental dam:**  
- N95 or K95 respirator (fitted)  
- Face shield or goggles  
- Cap/bouffant  
- Gown/lab coat (with cuff)  
- Gloves | **High risk AGPs without rubber dam:**  
- N95 or K95 respirator (fitted)  
- Face shield  
- Cap/bouffant  
- Gown/lab coat (with cuff)  
- Gloves |  |  |
| **Patient triage:**  
- Patient risk assessment screening (SHA COVID-19 Screening Tool – 27th March 2020)  
- Thermometer temperature vital sign screening (<38°C)  
- All urgent dental treatment for patients who have been identified as moderate or high risk for COVID-19 or have been confirmed as COVID-19 positive must be provided by a SHA Level 3 provider in the appropriate facility | **Non-AGPs:**  
- Level 2 or 3 mask  
- Eye protection (glasses, goggles or face shield)  
- Scrubs  
- Gloves  
- Lab coat or gown if patient contact |  |  |  |
| **Patient scheduling:**  
Vulnerable patient appointment times on specific days or early in the day  
- Fewer appointment times  
- Stagger appointment times | **Intermediate risk AGPs with dental dam:**  
- N95 or K95 respirator (fitted)  
- Face shield or goggles  
- Cap/bouffant  
- Gown/lab coat (with cuff)  
- Gloves | **High risk AGPs without rubber dam:**  
- N95 or K95 respirator (fitted)  
- Face shield  
- Cap/bouffant  
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- Gown/lab coat (with cuff)  
- Gloves |  |  |  |
|  |  |  |  |  |  |
## Recommendations for the re-opening of dental services: a rapid review of international sources

### 6 May 2020

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<td></td>
<td>(decontamination side or area) anteroom or hallway area</td>
<td>- Orthodontic procedures (NAGP)</td>
<td>- Orthodontic procedures (NAGP)</td>
<td>- Nitrous oxide sedation into a bundle, simultaneously remove gloves inside out. Discard gown and gloves immediately. Lab coats should be transferred to the laundry receptacle avoiding contact with “clean” surfaces. Perform hand hygiene.</td>
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<td></td>
<td>PPE must be donned in the clean side of the anteroom immediately before entering the AGP operating room (do not go anywhere else once PPE is donned).</td>
<td>- Removable prostodontic procedures</td>
<td>- Orthodontic procedures (NAGP)</td>
<td>- Remove eye protection at sides with the hands without touching facial skin and place in the disinfection or garbage receptacle.</td>
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<td></td>
<td>Operating room door to remain closed during the procedure. Only the dentist, dental assistant and patient will be permitted access. The door should only be opened once when discharging the patient and for clinical staff to exit.</td>
<td>- Cementation of previously fabricated fixed prostodontics</td>
<td>- Urgent endodontic procedures</td>
<td>- Remove cap or bonnet by grasping at the rear and pulling forward off the head and place in the laundry or garbage receptacle.</td>
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</tr>
<tr>
<td></td>
<td>PPE for dental practice personnel</td>
<td>- Temporomandibular dysfunction management and procedures</td>
<td>- Urgent restorative procedures</td>
<td>- Remove N95 respirator with touching the front of the mask and discard garbage receptacle or stored in a sealed labelled receptacle for possible future decontamination.</td>
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<tr>
<td></td>
<td>Management of the clinical room</td>
<td>- Medical management of soft tissue presentations</td>
<td>- Urgent paediatric restorative procedures</td>
<td>- Perform hand hygiene.</td>
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<tr>
<td></td>
<td>Dental procedures</td>
<td>- Oral pathology and oral medicine procedures</td>
<td>- Urgent complex extractions</td>
<td>- Put on a clean surgical mask.</td>
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<td></td>
<td>Post-operative cleaning/disinfection/waste management</td>
<td>- Periodontal procedures (NAGP)</td>
<td>- Dental public health initiatives including community programming and preventive measures.</td>
<td>Country: Australia</td>
<td>Dental procedures not included in Phase 1:</td>
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<tr>
<td></td>
<td></td>
<td>- Urgent endodontic procedures</td>
<td>Dental procedures not included in Phase 1:</td>
<td>Source: Australian Dental Association</td>
<td>- All elective and non-urgent AGP.</td>
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<tr>
<td></td>
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<td>- Urgent restorative procedures</td>
<td>- Hygiene ultrasonic instrumentation</td>
<td>Reopening practice:</td>
<td>- Hygiene ultrasonic instrumentation</td>
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<td></td>
<td></td>
<td>- Urgent paediatric restorative procedures</td>
<td>- Selective polishing /prophy</td>
<td>- What additional surgery re-commissioning or maintenance procedures need to be undertaken before commencing more routine care (for example,</td>
<td>- Laser instrumentation</td>
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<tr>
<td></td>
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<td>- Urgent complex extractions</td>
<td>- Dental implant placement</td>
<td>Moderate risk of COVID-19:</td>
<td>- Dental implant placement</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Dental public health initiatives including community programming and preventive measures.</td>
<td>Nitrous oxide sedation</td>
<td>Surgical masks and eye protection protect the wearer from droplet contamination of the nasal or oral mucosa, or conjunctivae.</td>
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<td></td>
<td>For those at risk of COVID-19 previous publication recommended: applying two</td>
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</tbody>
</table>

**Country:**
Australia

**Source:**
Australian Dental Association

**Reopening practice:**
- What additional surgery re-commissioning or maintenance procedures need to be undertaken before commencing more routine care (for example,

**Moderate risk of COVID-19:**
Surgical masks and eye protection protect the wearer from droplet contamination of the nasal or oral mucosa, or conjunctivae.
### Date of publication: 23.04.2020


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<thead>
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<tr>
<td></td>
<td>has any validation and maintenance that was deferred during closures now been completed?</td>
<td>Use of appropriate PPE (this includes disposable gowns, gloves and eye protection)</td>
<td>the use of rubber dam. This includes:</td>
<td>complete cycles of cleaning of all environmental surfaces using detergent and disinfectant (as per contact transmission-based guidelines).</td>
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<td></td>
<td>- What water management processes need to be undertaken following the non-use of dental unit waterlines for an extended period?</td>
<td>Minimising patient transfer or get the patient to wear a surgical mask while they are being transferred and to follow cough etiquette.</td>
<td>- Examinations</td>
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<td></td>
<td>- Has stock, including medications been checked to avoid the use of out of date materials?</td>
<td>Patients confirmed with COVID-19 may either be a hospital in-patient or being managed by hospital in the home</td>
<td>- Simple non-invasive fillings without use of high-speed handpieces</td>
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<td></td>
<td>- What staffing and PPE requirements are anticipated?</td>
<td>Airborne precautions include the need for the patient to be treated in a negative pressure room, with dental staff wearing P2/N95 respirators which have been previously fit-tested, and then fit checked at time of use</td>
<td>- Restorative procedures using high speed handpieces only provided with the use of rubber dam</td>
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<td></td>
<td>- What patient screening and risk mitigation protocols will be maintained while ensuring that all staff are up to date with these protocols?</td>
<td>All confirmed coronavirus cases will only have dental treatment as in-patient or within a hospital setting by appropriately trained dental personnel.</td>
<td>- Non-surgical extractions</td>
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<td></td>
<td>- What refresher training is required for team members who have not been working?</td>
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<td>- Hand scaling (no use of ultrasonic scalers)</td>
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<td></td>
<td>- How will patients be prioritised according to their treatment needs (e.g. periodontally compromised, high caries risk) when restrictions are lifted further?</td>
<td></td>
<td>- Medical management of soft tissue presentations (such as ulcers)</td>
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<td></td>
<td>- How will patients be managed who may have missed their regular care cycle? Checklist for practice start up: Water</td>
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<td>- Temporomandibular dysfunction management</td>
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<td>- Turn on the mains water supply as the first action of the start-up process. Listen and look for any water leaks. Detail chair</td>
<td></td>
<td>- Denture procedures</td>
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<td></td>
<td>- Check the dental unit manufacturer’s instructions for the correct protocol for waterline treatment for chair start-up.</td>
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<td>- Preventative procedures such as the application of topical remineralising agents e.g. fluoride</td>
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<td></td>
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<td></td>
<td>- Orthodontic treatment</td>
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<td></td>
<td>Use a pre-procedural mouthwash, use a dental dam for any procedures generating aerosols.</td>
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<td>Under level 2 restrictions, it is acceptable to complete courses of care that are underway such as cementation of a crown. A dental dam must be used to minimise the potential for saliva to become aerosolised inadvertently.</td>
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<td>Necessary treatment such as crown and bridge preparation that can be completed using</td>
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**Date of publication:** 6 May 2020
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<td>- Check that any external water bottle attached to the dental chair is free of visible biofilm growth. Fill the bottle with water and add any required chemical treatment agents to the water that will feed into the chair. - Flush out each waterline for at least 2 minutes, holding them over the intake of the high-velocity evacuator one waterline at a time. - After this has been done, flush all the suction lines using the recommended agent, and then run several cups of tap water down the suction hoses. - Other equipment containing water reservoirs - Fill the water storage bottles in operatory or laboratory equipment, including benchtop ultrasonic scalers with separate water bottles, CAD-CAM milling workstations (coolant for cutting burs), hard tissue lasers (water for cooling during cavity preparation), and the like, with the appropriate type of water, and include any required additives.  <strong>Suction system and compressor</strong> - Check whether any specific actions are needed for the compressor (e.g. closing off the drain of the compressed air reservoir, then restart the compressor. Check that compressed air pressure rises and there is no obvious leaking or malfunction. - Turn on the power to the suction system.</td>
<td></td>
<td>Dental dam isolation is permitted under Level 2 restrictions. <strong>AGPs</strong> Defer all treatments that are likely to generate aerosols which may include the use of - high-speed handpieces without the use of rubber dam - ultrasonic scalers - surgical handpieces All surgical extractions should be referred to specialist oral surgeons/oral and maxillofacial surgeons who will undertake these procedures using transmission based precautions. Elective implant dental treatment should be delayed. Urgent dental treatment for people who DO meet epidemiological or clinical symptom criteria for COVID-19 risk or confirmed as a COVID-19 case, provided as per ADA Managing COVID-19 Guidelines. <strong>Treatment types</strong> <strong>Confirmed COVID-19 cases:</strong> For provision of urgent/emergency treatment use airborne precautions which includes treatment in a negative pressure</td>
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| Ultrasonic cleaner | - Turn on the unit at the mains power outlet.  
- Rinse the chamber thoroughly with tap water, and drain this out, before refilling with tap water. Add the required additive, then degas and perform the aluminium foil performance check. Ensure that there are perforations across the foil sheet(s). Then discard the chamber contents, rinse the chamber with water, refill the chamber, add fresh additive, then degas once more. The ultrasonic cleaner is now ready for use.  
Washer disinfector | - Ensure the chemical supply tanks are connected and have sufficient levels of chemicals, and that the water supply taps are turned back on. Then turn on the power. When the unit is used, include a soil test in every load and record the results (as part of normal performance testing procedures).  
Steam sterilizer | - Make sure the unit has the data card (if appropriate) replaced.  
- Ensure that any deionized water reservoirs are filled with deionized water. Close off the drain control for the wastewater.  
- Turn the power on. Watch as the sterilizer goes through its start-up procedure. If there is a date/time shown on the display, check that this is correct, and adjust as needed. | room using a fit-tested P2 respirator that is fit-checked at time of use. This is typically provided in a public hospital by appropriately trained personnel.  
For probable COVID-19 cases:  
For provision of urgent/emergency treatment use droplet precautions in addition to standard precautions and additional appropriate PPE including fluid impervious disposable gowns and fit-checked P2 respirators. Only provide treatment that does not generate aerosols or where aerosols are controlled by using dental dam. See patient as the last patient of the day, avoid patient being in the waiting room, use pre-procedural mouthwash, place all disposable items in a separate bag before disposal in general waste, apply two cycles of environmental cleaning of all environmental surfaces potentially contaminated using detergent and disinfectant as per transmission based precautions.  
For suspected COVID-19 cases:  
For provision of urgent/emergency treatment use droplet precautions in addition to standard precautions. Only provide...
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<td>- Check that the chamber is empty (other than for racks), and run a warm-up cycle. For a pre-vacuum sterilizer, now run the air leakage test, to check the integrity of the door seals. - Then run a suitable air removal test, e.g. a Bowie-Dick test, and record the results for this.</td>
<td>- Electrical equipment - Check the status of the refrigerator (which should be running), and then the contents for medicines or supplies that are nearing or have passed their expiry date. - Turn on minor appliances in the staff area (e.g. electric jug, microwave oven). - Ensure arrangements have been made for re-setting phone diversion, mail collection, parcel delivery and the like. - Check that remote access to servers is working properly.</td>
<td>- Scheduled medicines - Ensure that sufficient supplies of all required scheduled medicines (including local anaesthetic) are available, within the use-by date, and are kept securely away from patient/public access.</td>
<td>- Dental procedures - treatment that does not generate aerosols or where aerosols are controlled by using dental dam. See patient as the last patient of the day, avoid patient being in the waiting room, use pre-procedural mouthwash, place all disposable items in a separate bag before disposal in general waste, apply two cycles of environmental cleaning of all environmental surfaces potentially contaminated using detergent and disinfectant as per transmission based guidelines</td>
<td>- Waiting room: - Remove unnecessary items in the waiting room including toys and magazines. - Adjust seating in waiting room to ensure social distancing of at least 1.5 m between seats if possible. - Regularly wipe down surfaces with &gt;60% alcohol-based wipes</td>
<td></td>
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</table>
or 0.1% sodium hypochlorite solution, including door handles, reception desks, phones.
- Any hospital-grade, TGA-listed disinfectant that is used commonly against norovirus is also suitable and use as per manufacturer’s instructions.

**Patient scheduling:**
- Prioritising patients who require timely treatment that was excluded under Level 3 restrictions, such as extraction of asymptomatic teeth that have an associated infection (if surgical extraction can be avoided);
- Re-scheduling examinations, while avoiding aerosol generation, including the use of the air/water spray from a triplex;
- Resuming ongoing courses of treatment that do not generate aerosols, such as denture fabrication stages and repairs, orthodontic reviews, mandibular advancement splints and night guards;
- Providing necessary restorative treatment using dental dam isolation
- Re-instigating preventative treatments and some hygiene services by using hand instrumentation only.
- If your practice has on-site parking, consider placing a sign on the practice door asking patients to wait in their car in the car park and call the practice upon arrival.
Recommendations for the reopening of dental services: a rapid review of international sources

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|           | - Provide entry to the practice only immediately prior to their appointment or to use the bathroom. This allows patients to avoid waiting in the waiting room.  
- If patients are waiting in their cars, pre-appointment questionnaires can be done over the phone. |                                  |                                 |                  |                                              |
|           | **Patient triage**  
- returned from overseas or interstate travel in the past 14 days  
- felt unwell, including but not limited to symptoms of COVID-19 such as fever, cough, sore throat or shortness of breath  
- had any contact with a confirmed or suspected case of COVID-19 in the past 14 days  
- If the patient answers YES to any of these questions, advise them that you cannot provide routine dental care and reschedule the dental appointment for 14 days after their return from overseas, interstate or contact with a COVID-19 case, or when their symptoms have resolved and they are no longer considered a risk. |                                  |                                 |                  |                                              |