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

6 May 2020
Substantial update 16 May 2020

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

Version 1.3 – 16th May 2020 includes 16 countries (5 new added)
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 reopening of dental services from 16 countries.
- There is a highly variable level of detail given across international sources.
- Most sources recommend patient triage by telephone; some recommend also temperature screening at reception.
- Most sources recommend avoiding aerosol generating procedures (AGPs), if possible.
- Most sources recommend surgical masks for non-COVID-19 cases not requiring AGPs.
- Most sources recommend filtering facepiece class 2 (FFP2, equivalent to N95) masks for non-COVID-19 cases undergoing AGPs and all suspected or confirmed COVID-19 cases undergoing any procedure.
- 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]).
- Most sources recommend cleaning and disinfection procedures.
- Across sources, for most statements there is no referenced, underpinning evidence and some of them are unlikely to 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.
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 13 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 11 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 or restriction 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 17 guidance documents from 16 countries produced between 18 March and 11 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 (1) the absence of a recommendation from a particular source does not imply its lack of importance and (2) that different national approaches are due to different epidemiological situations and public health approaches. For the majority of recommendations addressing specific COVID-19 concerns there was limited or no referenced, underpinning evidence.
1. **Summary of recommendations related to practice preparation and patient considerations**

<table>
<thead>
<tr>
<th>Theme</th>
<th>Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Re-opening tasks</td>
<td>• 3/17 (18%) 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>
</tr>
<tr>
<td>Supply chain</td>
<td>• 2/17 (12%) sources recommend confirming the availability of supplies including PPE.</td>
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</tbody>
</table>
| Staff advice and screening         | • 10/17 (59%) sources provide a range of advice or training in revised protocols including checking that staff are free of COVID-19 symptoms.  
  • 2/17 (12%) sources recommend the daily screening of temperature.                                                                                                                                                                                                                                   |
| Patient triage                     | • 16/17 (94%) 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.                                                                                                           |
| Patient advice                     | • 7/17 (41%) 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                 | • 9/17 (53%) sources recommend clear scheduling of patients based on triage.  
  o Patients who are vulnerable or with special needs:  
    • 2/17 (12%) sources consider the scheduling of appointments to avoid contact with higher risk patients.  
  • 1/17 (6%) 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             | • 15/17 (88%) sources consider social distancing, rearrangement of furniture, protective shields, patient information posters, wearing of masks, hand sanitiser, removal of magazines/toys and other unnecessary items.                                                                                                                                               |
| Toilets                            | • 2/17 (12%) sources advise patient use of the toilets only with permission.                                                                                                                                                                                                                                                                      |
| Patient discovered COVID-19 positive after treatment | • 1/17 (6%) source suggests contact tracing and isolation of close contacts (i.e. dental staff providing treatment).                                                                                                                                                                                                                      |
## 2. Summary of recommendations for PPE for dental practice personnel

<table>
<thead>
<tr>
<th>Theme</th>
<th>Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>All staff</strong></td>
<td>• 11/17 (65%) sources indicate that all staff should wear a face mask at all times.</td>
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<tr>
<td></td>
<td>• 6/17 (35%) sources indicate that all staff should wear eye protection at all times.</td>
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<tr>
<td></td>
<td>• 7/17 (41%) sources indicated that all staff should wear dedicated working uniform.</td>
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<td></td>
<td>• 2/17 (12%) sources indicate that work uniforms should be laundered on site or by laundry service.</td>
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<td></td>
<td>• 17/17 (100%) sources recommend eye protection (glasses/goggles, face shields) and single use gloves.</td>
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<td></td>
<td>• 14/17 (82%) sources recommend use of surgical masks with 2 of them recommending higher specification if available.</td>
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<tr>
<td></td>
<td>• 3/17 (18%) sources recommend use of FFP2 masks or equivalent.</td>
</tr>
<tr>
<td></td>
<td>• 5/17 (29%) sources recommend disposable gowns or equivalent.</td>
</tr>
<tr>
<td></td>
<td>• 3/17 (18%) sources recommend single use aprons or equivalent.</td>
</tr>
<tr>
<td></td>
<td>• 5/17 (29%) sources recommend use of surgical hats or equivalent.</td>
</tr>
<tr>
<td></td>
<td>• 3/17 (18%) sources recommend shoes protection.</td>
</tr>
<tr>
<td><strong>Unsuspected COVID-19 patients</strong></td>
<td>• 6/17 (35%) sources recommend use of surgical masks with 1 of them recommending higher specification if available.</td>
</tr>
<tr>
<td></td>
<td>• 10/17 (59%) sources recommend use of FFP2 masks or equivalent.</td>
</tr>
<tr>
<td></td>
<td>• 11/17 (65%) sources recommend disposable gowns or equivalent</td>
</tr>
<tr>
<td></td>
<td>o 5/17 (29%) sources recommend single use aprons or equivalent in addition to gown.</td>
</tr>
<tr>
<td></td>
<td>• 6/17 (35%) sources recommend use of surgical hats or equivalent.</td>
</tr>
<tr>
<td><strong>Unsuspected COVID-19 patients undergoing AGPs</strong></td>
<td>• 3/17 (18%) sources recommend use of surgical masks with 1 of them recommending higher specification if available.</td>
</tr>
<tr>
<td></td>
<td>• 9/17 (53%) sources recommend use of FFP2 masks or equivalent.</td>
</tr>
<tr>
<td></td>
<td>• 2/17 (12%) sources recommend use of FFP2 or FFP3 masks or equivalent.</td>
</tr>
<tr>
<td></td>
<td>• 1/17 (6%) sources recommend use of FFP3 masks or equivalent.</td>
</tr>
<tr>
<td></td>
<td>• 8/17 (47%) sources recommend single use gloves.</td>
</tr>
</tbody>
</table>
• 2/17 (12%) sources recommend double gloving.
• 8/17 (47%) sources recommend disposable gowns or equivalent.
• 7/17 (41%) sources recommend use of surgical hats or equivalent.
• 2/17 (12%) sources recommend shoes protection.

Suspected or confirmed COVID-19 patients undergoing AGPs

• 1/17 (6%) source recommends use of highest available mask up to FFP2 or equivalent.
• 10/17 (59%) sources recommend use of FFP2 masks or equivalent.
• 3/17 (18%) sources recommend the use of FFP2 or FFP3 masks or equivalent.
• 2/17 (12%) sources recommend use of FFP3 masks or equivalent

3. Summary of recommendations for management of the clinical room

<table>
<thead>
<tr>
<th>Theme</th>
<th>Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use of spittoon</td>
<td>• 3/17 (18%) sources state that the spittoon should not be used in dental units.</td>
</tr>
<tr>
<td>Clear work surfaces, minimise equipment and cross infection procedures</td>
<td>• 8/17 (47%) sources provide information on how the work surfaces in the clinical room should be kept clear. Examples include limiting paperwork, covering notes with a barrier and removal of artwork. This also extends to ensuring all equipment in sight should be minimised to only that which is strictly necessary to avoid viral cross-contamination. All required equipment/materials should be prepared in advance.</td>
</tr>
<tr>
<td></td>
<td>• 5/17 (29%) sources indicate that common contact areas such as the chair lamp, handles and keyboard should be covered with a barrier (e.g. plastic film or aluminium foil).</td>
</tr>
<tr>
<td></td>
<td>• 2/17 (12%) sources indicate that supporting staff outside the room should bring in clean instruments and necessary materials.</td>
</tr>
<tr>
<td>From waiting area to treatment room</td>
<td>• 2/17 (12%) sources recommends switching between different treatment rooms if possible, especially following AGPs.</td>
</tr>
<tr>
<td></td>
<td>• 1/17 (6%) source reminds dental staff that there should be no handshaking or contact with patients.</td>
</tr>
<tr>
<td></td>
<td>• 5/17 (29%) sources recommend keeping staff levels/entry to a minimum in surgery.</td>
</tr>
<tr>
<td></td>
<td>• 2/17 (12%) sources indicate that staff should have all the PPE on before they enter into a treatment room.</td>
</tr>
</tbody>
</table>
| Suspected or confirmed COVID-19 patients | • 1/17 (6%) 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.  
  • 1/17 (6%) source indicates that patient treatment should be undertaken in an isolation room with negative pressure. |
<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Home visits</td>
<td>• 1/17 (6%) 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.</td>
</tr>
</tbody>
</table>
| Air quality | • 9/17 (53%) sources acknowledge the importance of ventilation/air renovation of which 4/17 (24%) guidance documents state between 15-30 minutes is required after each patient for ventilation.  
  • 3/17 (18%) sources mention air conditioning. 1/17 (6%) acknowledges that there is no consensus on the use of air conditioning but states that if used, the filters should be changed weekly; 1/17 (6%) recommends that air conditioning should be switched off; and 1/17 (6%) recommends use of air conditioning in extraction mode only (never in recirculation mode).  
  • 1/17 (6%) source indicates that a HEPA filter (level 13 or higher) should be used for the suction system.  
  • 5/17 (29%) sources indicate that the door of the surgery must remain closed to prevent viral spread. One guidance document expands on this to state all drawers and cabinets should also remain closed. |
| Patient hygiene | • 2/17 (12%) 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 | • 1/17 (6%) source indicates that dental staff should leave the treatment room and then remove their visor, eye protection and masks.  
  • 1/17 (6%) source recommends the disposal of surgical gowns and aprons into a sealed plastic bag. |
4. Recommendations for dental procedures

<table>
<thead>
<tr>
<th>Theme</th>
<th>Recommendations</th>
</tr>
</thead>
</table>
| Reduction of AGPs             | • 17/17 (100%) sources include recommendations to reduce or avoid AGPs.  
                                 | • 1/17 (6%) source recommends avoiding using the air-water (3-in-1) syringe.                                                                |
| Risk reduction interventions  | • 17/17 (100%) sources include recommendations on how to reduce the risk of transmission.  
                                 | • 15/17 (88%) sources recommend rubber dam and high volume suction  
                                 | • 14/17 (82%) sources recommend the use of pre-operative mouthwashes                                                                   |
| High volume suction           | • 16/17 (94%) sources recommend aspiration to specifically decrease viral load generated by aerosols.  
                                 | • 1/17 (6%) source indicates that the aspirator tip should be covered with a disposable cover.                                          |
| List of recommended operative procedures | • 6/17 (35%) sources explicitly recommend minimally invasive procedures.  
                                | • 5/17 (29%) sources include a defined list of procedures that can be carried out.                                                        |
| Tailored advice for patient groups | • 10/17 (59%) 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>
</tr>
</thead>
</table>
| Cleaning and disinfection procedures | • 11/17 (65%) sources recommend cleaning and disinfection of all surfaces following every patient contact.  
                                   | • 11/17 (65%) sources recommend cleaning and disinfection of all non-clinical areas (reception, waiting area, toilets) including door handles, chairs, and surfaces.  
                                   | • 2/17 (12%) sources recommend clinical floor cleaning ranging from 2-3 times daily.  
                                   | • 2/17 (12%) sources recommend door should remain shut and air to settle for period of time (range: 20-120 minutes) |
### PPE during decontamination

- **5/17 (29%)** sources indicate that staff should wear eye protection, gloves and mask when performing decontamination/disinfection procedures.
- **3/17 (18%)** 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).
- **2/17 (12%)** sources recommends scrubs be laundered on site or by contracted service

### Clinical waste disposal

- **5/17 (29%)** sources recommend waste be disposed of as per regulations of local system.
- **4/17 (24%)** source recommend PPE and other disposable contaminated material should be placed in a hard-lid container.
- **1/17 (6%)** source recommends double-bagging and storing clinical waste before evacuation

### Disinfection products

- **1/17 (6%)** source recommends disinfection products for surfaces, suction and instruments must mention ‘viricide agents’ (EN 14476).
- **4/17 (24%)** sources recommend a hypochlorite/chlorine-based solution for disinfection.
- **4/17 (24%)** sources recommend the use of alcohol (60-70% ethanol) for disinfection.
- **1/17 (6%)** source recommends the use of chloroxylenol (0.12-0.24%) for disinfection.
- **1/17 (6%)** source recommends the use of Virkon®, Perasafe® as disinfectants.

### Existing policies on decontamination

- **3/17 (18%)** sources refer to national guidelines for disinfection and decontamination policies.

### Hand washing

- **4/17 (24%)** sources recommend hand hygiene following doffing of PPE/decontamination of environment.
- **1/17 (6%)** source recommends hand washing with alcohol (60-95%) based hand rub or soap and water for at least 20 seconds.

## Conclusion

This rapid review provides an overview of the international guidance documents on the re-opening of dental services published to date. It summarises the main elements of the identified documents and highlights several key messages intended to assist policy and decision makers to produce comprehensive national guidance for their own settings. Across international documents, for most of the statements addressing specific COVID-19 concerns, there was limited or no referenced, underpinning evidence.
Working Group Members

<table>
<thead>
<tr>
<th>Name</th>
<th>Position and Institutional Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan Clarkson</td>
<td>Clinical Lead, Professor of Clinical Effectiveness, University of Dundee; Director of SDCEP, NHS Education for Scotland (NES); Joint-Coordinating Editor, Cochrane Oral Health, University of Manchester</td>
</tr>
<tr>
<td>Craig Ramsay</td>
<td>Methods Lead, Professor and Director, Health Services Research Unit (HSRU), University of Aberdeen</td>
</tr>
<tr>
<td>Magaly Aceves</td>
<td>Research Fellow, HSRU, University of Aberdeen</td>
</tr>
<tr>
<td>Miriam Brazzelli</td>
<td>Reader, HSRU, University of Aberdeen</td>
</tr>
<tr>
<td>Thibault Colloc</td>
<td>Dental Core Trainee, Oral and Maxillo-facial Surgery, Aberdeen Royal Infirmary, NHS Grampian</td>
</tr>
<tr>
<td>Manas Dave</td>
<td>NIHR Academic Clinical Fellow in Oral and Maxillofacial Pathology, University of Manchester</td>
</tr>
<tr>
<td>Anne-Marie Glenny</td>
<td>Professor of Health Sciences, Joint-Coordinating Editor, Cochrane Oral Health, Division of Dentistry, University of Manchester</td>
</tr>
<tr>
<td>Beatriz Goulão</td>
<td>Statistical Research Fellow, HSRU, University of Aberdeen</td>
</tr>
<tr>
<td>Thomas J Lamont</td>
<td>Clinical Research Fellow/Hon. Str in Restorative Dentistry, School of Dentistry, University of Dundee</td>
</tr>
<tr>
<td>Derek Richards</td>
<td>Specialist Advisor, SDCEP, University of Dundee</td>
</tr>
<tr>
<td>Clare Robertson</td>
<td>Research Fellow, HSRU, University of Aberdeen</td>
</tr>
<tr>
<td>Gavin J Wilson</td>
<td>Chief Dental Officer’s Clinical Fellow, NHS England and NHS Improvement; Str in Oral Surgery, Leeds Dental Institute</td>
</tr>
</tbody>
</table>

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: France</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>
</tr>
</thead>
</table>
| Source: Ordre National des Chirurgiens-dentistes (French National Dentists Association) | Waiting area  
- Limit use as much as possible  
- Remove all unnecessary items  
- Limits sits, spaced by 1m  
- Disinfect room twice daily  
- Air room 3 times a day for at least 15 min  
Reception  
- Hand sanitiser available  
- Surgical masks available for patients who don’t have one  
- Display of poster regarding social distancing and preventive measures  
- Ban use of water fountains  
- Ban access of toilets except emergencies  
- If possible protective screen at reception desk  
- Patients’ triage  
  - Group A: “Healthy patients” all treatments available  
  - Group B: Shielded patients (over 65yo, cardiac or respiratory disease, immunosuppressed), case by case discussion for non-urgent treatment (dedicated slots)  
  - Group C: High risk COVID-19, patients who had close contact with confirmed COVID-19, Emergency treatment on dedicated slots only, delay of non-urgent work (review 14days incubation)  
  - Group D: Confirmed COVID-19 patients, emergency treatment on dedicated slots only. Delay | All staff  
- Forearm not covered  
- Short nail without polish  
- No jewellery  
- Clean shaven  
- Wear hair up  
- Dedicated working uniform  
- Working uniform should not leave practice (washed at least 30min 60degrees c)  
Support staff  
- Surgical masks at all time  
- If no protective screen at reception desk, eye protections or full-face visor  
- Surgical masks should be changed every 4 hours  
Clinical team  
- Dedicated working uniform during clinical procedures (short sleeves, trousers, closed shoes) should be changed every half-day or if soiled  
- Single use gloves  
- Surgical hat or equivalent (maximum half day if not soiled)  
- Protective glasses/goggles and full-face visor (protective of masks)  
- FFP2 masks for AGPs and bio-cleaning/disinfection/airing  
- FFP2 worn up to 4 hours (can be reused if not soiled)  
- If clinical team not wearing FFP2, wear surgical masks  
- Plastic apron during low risk AGPs | Clinical room  
- If multiple dental units in same room: respect social distancing measures; only one patient in the clinical room if AGP required  
- During AGPs clinic door must be closed and team must wear appropriate PPE  
- If possible swap between 2 rooms between patients  
- Clinical waste container directly available  
- Disinfection container with cover directly available  
- All working surfaces susceptible to be soiled by projection (1.5m around source) should be empty or covered with plastic covers to ease cleaning and disinfection  
- Cover and disinfect IT and phone equipment regularly  
- Ban use of spittoon on dental units  
- Dedicated scrubs for treatment room.  
Air quality  
- Prime goal is to limit AGPs  
- After each AGP, air renewal before next patient  
- After AGPs, ventilate clinical room for at least 15mins with window wide opened and door closed  
- Clinical room with window: continuous minimal ventilation; air clinical room at least 15mins post AGPs | AGPs include  
- Ultra-sonic scaling  
- Use of dental handpiece  
- Dental air polishing  
- Use of air-water (3-in-1) syringe  
If possible favour use of contra-angle rather than dental air turbine  
Clinical procedures protocol  
- Patients should wear a face mask until the start of the procedure and leave it again at the end  
- Antiseptic mouthwash is advised despite no clinical evidence  
- Intra-oral radiograph should be carefully considered due to risk of cough and saliva flow stimulation  
- Consider panoramic and CBCT if possible and indicated  
- Use of rubber dam whenever possible  
- Use of high flow suction, 2 at same time when possible  
- Favour 4-handed dentistry  
- Air dental polishing is not recommended  
- If use of dental handpiece is necessary, prefer blue contra-angle rather than red; set hand piece setting to minimal water flow; proceed to sterilisation after each AGP  
- Use resorbable sutures if possible  
| Cleaning and disinfection  
- Due to shortage FFP2 masks should be kept if not soiled  
- PPE should be discarded or disinfected  
- Clinical waste and soiled PPE should be discarded via clinical waste pathway  
- Non-soiled PPE should be discarded using main waste pathway but with dedicated bin bags  
- Perform hand hygiene  
- Disinfect all surfaces with detergent disinfectant (NF EN 14476) or classic detergent and use of sodium hypochlorite 0.1%  
- Be mindful of 1.5m perimeter for projection from sources  
- All medical devices disinfected with detergent (NF EN 14476)  
- Impressions should be rinsed with cold water and disinfected with disinfected with NF EN 14476 norm or with sodium hypochlorite 0.5% (inform dental technician of disinfection method)  
- Purge suction cable with water  
- Disinfect suction cable caps  
- Adequate PPE after AGP for disinfection and bio-cleaning | Date of publication: 30.04.2020  
Latest update 05.05.2020  
http://www.ordre-chirurgiens-dentistes.fr/inde x.php?id=161&tit x_ttnews%5Btt_news%5D=999 &chash=8a653 37d9f447fe9737 45e3fb45d702f
<table>
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<tbody>
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<td></td>
<td>non-urgent treatment (15 days following start of symptoms or 24 days if immunosuppressed)</td>
<td>-Single use surgical gown or equivalent during high risk AGPs (high risk of biological fluid projection)</td>
<td>-Clinical room without window: if no window needs for fresh air handling unit (FAHU) without recirculated air system</td>
<td>-Avoid prescribing NSAID for COVID-19 patients</td>
<td>Half-day and at the end of the day</td>
</tr>
<tr>
<td></td>
<td>No serology test or diagnostic test in dental practice recommended</td>
<td></td>
<td>-Air conditioning is not subject to consensus; if used recommended to change filters weekly</td>
<td>Prescription of steroids should be carefully considered, if COVID-19 symptoms, they should be stop immediately and prescriber contacted</td>
<td>-Same as between patients</td>
</tr>
<tr>
<td>Patients’ pathway</td>
<td>-Patients should be informed of new pathway prior to appointment</td>
<td></td>
<td>-Air purifier: No evidence, only use as complement with other ventilation systems</td>
<td></td>
<td>-Disinfection of suction filters</td>
</tr>
<tr>
<td></td>
<td>-Temperature check not recommended</td>
<td></td>
<td>-Ventilation system must use HEPA filter system (level 13 minimum)</td>
<td></td>
<td>-Disinfection of all surfaces in waiting area if used</td>
</tr>
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<td></td>
<td>-Patients should wait outside practice as long as possible</td>
<td></td>
<td>- Administrative and reception staff should never enter clinical room</td>
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<td>-Seal waste bags with gloves and perform hand hygiene</td>
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<td></td>
<td>-If possible, admit patients straight into clinical room</td>
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<td>At the end of the day</td>
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<tr>
<td></td>
<td>-Avoid physical contacts</td>
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<td></td>
<td>-Floor cleaning with NF EN 14476 detergent or sodium hypochlorite 0.5%</td>
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<tr>
<td></td>
<td>-Patients should come alone or with only one accompanying person if necessary (e.g. child/non-autonomous person)</td>
<td></td>
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<td>-No use of vacuum cleaner</td>
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<td></td>
<td>-Patients’ belongings container made available and disinfected between patients (optional)</td>
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<td></td>
<td></td>
<td>Laundry</td>
</tr>
<tr>
<td></td>
<td>-Hand hygiene after manipulated patients’ belongings</td>
<td></td>
<td></td>
<td>Dental scrubs should be washed on site and never leave the practice.</td>
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<td>-Favour card payments</td>
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<td>Single use items should be trashed after use.</td>
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<td></td>
<td>-Disinfect card terminal regularly</td>
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<td>All clinical waste and PPE should be eliminated using the infectious waste pathway.</td>
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<td>-Professional presenting symptoms: Stop activity immediately and liaise with GP or Occupational Health for testing</td>
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<td>Do not transfer waste from one bag to another; double bag with second one; seal bag and store for 24h prior to evacuation.</td>
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<td>-Professional in close contact with confirmed COVID-19: If asymptomatic, continue activity wearing mask continuously for 14 days; if symptomatic, stop activity immediately and liaise with GP/OH for testing</td>
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<td>Management of the clinical room</td>
<td>- Clinical room without window: if no window needs for fresh air handling unit (FAHU) without recirculated air system</td>
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<td>- Air conditioning is not subject to consensus; if used recommended to change filters weekly</td>
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<td>Dental procedures</td>
<td>- Avoid prescribing NSAID for COVID-19 patients</td>
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Recommendations for the re-opening of dental services: a rapid review of international sources

6 May 2020

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<tr>
<td>Country: Spain</td>
<td><strong>Reopening surgery</strong>&lt;br&gt;- Clinical staff health status needs to be checked and staff to receive appropriate training on protocols, procedures, and materials.&lt;br&gt;- If possible, do a simulation prior to the arrival of patients.</td>
<td><strong>All staff</strong>&lt;br&gt;- Reception staff should wear a surgical mask and, if possible, glasses.&lt;br&gt;- <strong>Non-AGPs</strong>&lt;br&gt;- Single use of FFP2 masks without valve for up to 4 hours. Possible to re-use the mask after sterilization if not damaged (2 or 3 sterilizations permitted).&lt;br&gt;- 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 &lt;1 meter away.&lt;br&gt;- Double pair of nitrile or latex gloves.&lt;br&gt;- Eye protection&lt;br&gt;- Waterproof disposable gown, cap, and shoe covers.&lt;br&gt;- Avoid wearing rings, bracelets, pendants, watches, or other accessories</td>
<td><strong>Minimise equipment</strong>&lt;br&gt;<em>Before the patient enters:</em>&lt;br&gt;- Organise the strictly necessary material and instruments, and PPE. Avoid viral cross-contamination by placing unnecessary material or instruments out of sight. The 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.</td>
<td><strong>Tiered procedure levels</strong>&lt;br&gt;<em>Level of severe restrictions (B)</em>&lt;br&gt;- <em>Deescalating phase</em>&lt;br&gt;- Minimally invasive restorations, restorations that do not require high-speed use (shaping, finishing, polishing) or, if necessary (emergencies), minimise them, always with a rubber dam. Extractions (preferably non-surgical). Manual scaling (not ultrasonic or sonic), manual periodontal procedures, prophodontic procedures without cutting. 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 treatment.</td>
<td><strong>Cleaning and disinfection procedures</strong>&lt;br&gt;- 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 internal pair until completion of the collection, transport, cleaning and disinfection of material and instruments.</td>
</tr>
<tr>
<td>Source: Council of Dentists and Collegial Organization of Dentists</td>
<td><strong>Reception area</strong>&lt;br&gt;- Cleaning of shoes.&lt;br&gt;- Methacrylate screen in the patient reception area. VISIBLE LINE TO INDICATE A SECURITY DISTANCE OF APPROXIMATELY 1.5 METERS FROM RECEPTION DESK.</td>
<td><strong>AGPs</strong>&lt;br&gt;- Shoe cover&lt;br&gt;- Hand hygiene (for at least 40 seconds)&lt;br&gt;- Protective gown, disposable cap, and gloves, mask, and eye protection&lt;br&gt;- Avoid touching your face and surrounding surfaces while wearing PPE.</td>
<td><strong>Closed clinic rooms</strong>&lt;br&gt;- Door of the clinic must be closed to prevent viral spread that may occur during treatments.</td>
<td><strong>Doffing procedures after treatment and general hygiene</strong>&lt;br&gt;- <em>Glove hygiene</em> (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.</td>
<td><strong>Cleaning and disinfection protocol:</strong> 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.</td>
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<tr>
<td>Date of publication: 13.04.2020</td>
<td><strong>Waiting room</strong>&lt;br&gt;- Remove all unnecessary items such as decorations, coffee makers, magazines, books, etc.&lt;br&gt;- Chairs placed in a way to respect social distancing and at least 2 metres apart.</td>
<td><strong>Patient preparation</strong>&lt;br&gt;- 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.</td>
<td><strong>Post-operative cleaning/disinfection/waste management</strong>&lt;br&gt;- <em>Cleaning and disinfection:</em>&lt;br&gt;- 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.</td>
<td><strong>Cleaning and disinfection of the clinic at the end of the day</strong>&lt;br&gt;<strong>Post-operative cleaning/disinfection/waste management</strong></td>
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<td>- A distance of at least 2 meters must be observed if another patient is present in the dental practice.</td>
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<td>treatments (care with polishing after removal of brackets).</td>
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<td>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 all areas (e.g. sink, toilet, tiles, switches). 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). Clinical waste disposal PPE and other disposable contaminated material should be placed in a plastic bag in a pedal-operated, hard-lid container.</td>
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<td>- Payment should be arranged preferably by cards.</td>
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<td>Level of moderate restrictions (C) Progressively normalise high-speed use, extreme caution in relation to PPE, incorporate restorative dentistry and application of sealants. Ultrasonic scaling in selected patients. Incorporate the rest of the treatments, adopting all the updated protocols.</td>
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<tr>
<td>Patient scheduling - 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.</td>
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<td>Level of minimal or unrestricted restrictions (D) Standardised care, but continued PPE use is recommended for the long-term.</td>
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<td>Avoid aerosols Avoid using the air-water syringe to generate aerosols.</td>
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<td>High volume suction Use high flow aspiration to decrease the viral load generated by aerosols. Cover the vacuum cleaner hose with a disposable cover.</td>
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<td>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 sterilization.</td>
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<td></td>
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<td>Mouthwash</td>
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Postoperative instructions to patient - Explain to the patients that elective procedures may be deferred or reassessed. - Avoid shaking hands.
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**Country:** Portugal  
**Source:** Direcção Geral da Saúde (DGS) (Directorate-General of Health)  
**Date of publication:** 01.05.2020  

**Practice reopening general advice**  
- Ensure that all professionals are informed about this plan.  
- 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 one.

**All staff**  
- The receptionist should have a surgical mask, safety spectacles, face shields, clinical uniform, and shoes.

**Non-COVID-19 patients**  
- Oral health professionals should use PPE according to the risk of the procedures undertaken during the appointment.

**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.

**Before the appointment**  
- Promote air circulation, preferably by opening windows.

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

**Minimise 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.

**AGPs**  
- Risk of dental procedures to COVID-19 transmission.  
- All procedures that generate aerosols are considered high 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.

**Cleaning and disinfection procedures**  
- Cleaning and disinfecting all surfaces outside the surgery must be undertaken with 1 to 2-hour breaks.

**Reusable material**  
- Reusable spectacles or goggles 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.

**Laundry**  
- 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 a washing machine, at 30 to 40 degrees C.
### Practice preparation and patient considerations
- 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).

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 patient 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.

### PPE for dental practice personnel
- Disposable apron on top of the clinical garment
- Mask FFP2 (N95)
- Safety spectacles or face shields (with inferior opening)

For cleaning, disinfecting and sterilization procedures, the dental assistant should wear 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.

### Management of the clinical room
- During cleaning and disinfection procedures, after treatment and when moving used material into the sterilization room, the dental assistant should remove only the first pair of gloves, store all material, and then remove the remaining PPE.

### Air quality
If air conditioning is available, it should be used only in extraction mode, never in recirculation mode. The equipment should be checked and certified.

### Clinical waste disposal
Dispose all PPE and disposable materials in the contaminated material bins (type III or IV).
### Country: Germany  
**Source:** Institut der Deutschen Zahnärzte (German Dentists Association)  
**Date of publication:** 24.04.2020 (version 3)  

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| **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. | | | | | |

#### Patients’ triage

**If patient has a planned appointment:**
- Clarify with dentist urgent treatment need  
- Check if patient has been recently tested or not  
- Confirm with patient whether suspected/confirmed COVID-19  
- Confirm whether symptomatic

**If patient does not require urgent treatment, postpone and prescribe if required**

**If patient requires urgent treatment has no symptoms and is not a suspected COVID-19 case, treat with basic hygiene guidelines**

**If patient is suspect/confirmed COVID-19 and requires urgent treatment, refer to dedicated dental treatment centre (or see patient with adequate PPE if available)**

**If patient calls practice without appointment:**
- Check if patient has been recently tested or not  
- Confirm with patient whether suspected/confirmed COVID-19  
- Confirm whether symptomatic

#### PPE for “healthy” patients

- Observe basic hygiene instruction:  
- Work uniform  
- Surgical mask  
- Hand hygiene  
- Disposable gloves

#### PPE for suspected/confirmed patients

- Goggles with side shields or visor  
- At least FFP2 masks  
- Surgical hat and shoes protections/boots  
- Long sleeves waterproof gowns with cuffs and back closure  
- Disposable gloves

#### PPE for disposal of waste and disinfection:

- Disposable gloves with longer ‘sleeves’

#### For suspected/confirmed patients

- A specific treatment room becomes “isolation room” as is identified as such  
- A team (dentist + assistant) in the room with adequate PPE  
- Supporting staff outside the room if extra instruments/materials required  
- Remove all unnecessary objects  
- If required, cover of counters, stands and other working surfaces with waterproof cover

Disposal of all wastes

Wipe of all surfaces following treatment

**Air quality**

Ventilation of clinical room for 30min

#### Treatment of “healthy patients”

- Antiseptic mouthwash before treatment (H2O2 (1.5%) or equivalent) 30ml for 1 minute  
- If using air-water syringe, only water or only air (not both together)  
- Avoid AGPs if possible (no ultra-sonic or turbines, use slow speed)  
- Use rubber dam when possible

**Treatment of suspected/confirmed patients**

- Non-surgical treatment or simple surgical treatment only

Before treatment:
- Antiseptic mouthwash before treatment (H2O2 (1.5%) or equivalent) 30ml for 1 minute  
- Cover patients’ clothes

During treatment:
- Use of rubber dam if possible  
- High suction  
- Avoid AGPs when possible

#### Cleaning and disinfection procedures

Disinfection of all items potentially touched by patient (i.e. doorbell, door handles, chairs)

**Clinical waste disposal**

After treatment of suspected/confirmed cases use dedicated, properly marked special waste container (impermeable container easy to disinfect)
Recommendations for the re-opening of dental services: a rapid review of international sources

6 May 2020

Reference: Practice preparation and patient considerations
PPE for dental practice personnel
Management of the clinical room
Dental procedures
Post-operative cleaning/disinfection/waste management

Reference: Practice preparation and patient considerations

If patient does not require urgent treatment, postpone and prescribe if required

If patient requires urgent treatment has no symptoms and is not a suspected COVID-19 case, treat with basic hygiene guidelines

If patient is suspect/confirmed COVID-19 and requires urgent treatment, refer to dedicated dental treatment centre (if not possible and urgent treatment required, see patient with adequate PPE if possible)

If unclear need for urgent treatment and patient suspected/confirmed COVID-19, telemedicine then referral to urgent treatment centre or treatment at the practice if adequate PPE available or delay treatment if non-urgent

Suspected/confirmed COVID-19 patients: Patients should wear a face-mask in practice and should go straight into "isolation room"

Country: Austria
Source: Austrian Dental Chamber
Date of publication: 03.04.2020
Latest update 04.05.20

Waiting area
- At least 1 meter between patients
- Appropriate safety measures (plexiglass, removal of chairs)
- Provide area for hand hygiene
- Face-masks available for patients who do not wear one
- Ventilate room regularly
- Remove unnecessary items

Reception

All staff
- Face-mask
- Increased regular hand hygiene

Asymptomatic patients
- Surgical mask
- Single use gloves
- Eye protection

Symptomatic patients
- FFP2 with valve

Clinical room
Increased regular wipe disinfection

Air quality
Regular ventilation of clinical rooms

Asymptomatic patients
Limit AGPs as much as possible
1% H2O2 solution mouthwash recommended as mouthwash

Cleaning and disinfection procedures
Increased regular surfaces disinfection (e.g. door handles, switch, chairs)
Disinfection/sterilisation of medical equipment immediately after use

Clinical waste disposal
### Practice preparation and patient considerations

**Patients’ triage**
- Dedicated ‘infection opening hours’
- Always telephone/email agreement prior to appointment
- Patients checked via phone regarding COVID-19 symptoms in the past 2 weeks
- Symptomatic patients should be postponed unless dental emergency; refer them to ensure diagnosis
- Any risk groups: dental treatments reduced to minimum

**Patients arrival**
- All patient should wear face-mask
- Encourage people to wait in public places/outside and contact them by phone when ready
- Patients should touch as few things as possible

**Staff of dental practice**
- Observe social distancing
- Regular team meetings to ensure clarity

### PPE for dental practice personnel
- Gloves
- Safety glasses
- Surgical hat
- Surgical gown
- Protective face shield

### Management of the clinical room
- Wear of mask, gloves and eye protection during cleaning/disinfection procedures.

### Dental procedures
- All staff
  - All staff must wear a mask all day.

**Non-COVID-19 patients**
- Surgical mask
- Disposable gloves
- Eye protection
- FFP2 mask for AGPs

**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

### Post-operative cleaning/disinfection/waste management
- Disposal of potentially infectious material without intermediate storage in closed container

### Country: Switzerland

**Source:** SSO (Dental Swiss Society)

**Date of publication:** Published 17.04.20

**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

**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)

**Cleaning and disinfection procedures**
- Wear of mask, gloves and eye protection during cleaning/disinfection procedures.
- Follow hygiene guidelines implemented by the SSO.
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<tr>
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<td>symptoms following the 10 days of self-isolation.</td>
</tr>
<tr>
<td><strong>Reception area</strong></td>
<td>- If possible, use protection screens at the reception desk.</td>
</tr>
<tr>
<td></td>
<td>- Disinfect phone after each use if used by different people.</td>
</tr>
<tr>
<td></td>
<td>- Remove all unnecessary items from the waiting area.</td>
</tr>
<tr>
<td></td>
<td>- Minimize the number of staff touching drawers handles, folders, patients’ notes, keyboards and disinfect them regularly.</td>
</tr>
<tr>
<td><strong>Patient scheduling</strong></td>
<td>- Allow longer appointment than usual.</td>
</tr>
<tr>
<td></td>
<td>- Only one patient at a time per dental chair in the practice.</td>
</tr>
<tr>
<td></td>
<td>- Vulnerable patients (shielded patients) and possible treatment following COVID-19 symptomatic/asymptomatic patients:</td>
</tr>
<tr>
<td></td>
<td>- Patient scheduled at specific slots in order to avoid any contact with other patients.</td>
</tr>
<tr>
<td></td>
<td>- Professional discussion and opinion regarding pros and cons for treatment or delay.</td>
</tr>
<tr>
<td></td>
<td>- If any risks, elective procedures should be delayed.</td>
</tr>
<tr>
<td><strong>Patient triage</strong></td>
<td>- Patients triage over the phone with discussion regarding symptoms and close contact with potential COVID-19 cases.</td>
</tr>
<tr>
<td></td>
<td>- If deemed necessary, staff can provide surgical mask to patients to wear while in the practice.</td>
</tr>
</tbody>
</table>

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<tr>
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<tr>
<td><strong>COVID-19 patients</strong></td>
<td>- No treatment if these measures can’t be respected</td>
<td>solution or povidone-iodine solution for 30 seconds</td>
<td>Regular disinfection of all surfaces (following disinfectant solution instructions).</td>
</tr>
<tr>
<td>- Disposable gloves</td>
<td><strong>Air quality</strong></td>
<td>- Treatment with rubber dam when possible. Do not forget to disinfect rubber dam.</td>
<td>Disinfection of keyboard and computer screen after each patient.</td>
</tr>
<tr>
<td>- Eye protection</td>
<td>It is forbidden to provide treatment in a room without a window or adequate ventilation.</td>
<td>- Use both high and low speed suctions</td>
<td>Clean with soapy water and disinfectant all that patients or staff are susceptible to have touched. Every hour:</td>
</tr>
<tr>
<td>- Surgical gown</td>
<td>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).</td>
<td>- Limit as much as possible AGPs. If it is necessary, dental team should wear FFP2 masks.</td>
<td>- Waiting area seats</td>
</tr>
<tr>
<td>- FFP2 masks for at least 30 min following AGP and for the whole time the patient is present in the treatment room</td>
<td><strong>Patient suspected or confirmed COVID-19</strong></td>
<td>- Scaling only with hand scalers</td>
<td>- Door handles</td>
</tr>
<tr>
<td><strong>General rules applying to all patients</strong></td>
<td>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.</td>
<td></td>
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<tr>
<td></td>
<td>- Patient must wear a surgical mask when he arrives.</td>
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<tr>
<td></td>
<td>- Dental team must wear FFP2 30 minutes after the end of AGP and as long as the patient is in the treatment room.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- This patient group can be referred to hospital setting or dedicated emergency centre for COVID-19.</td>
<td></td>
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</tr>
</tbody>
</table>

Note: AGP = Aerosol Generating Procedure

Source: [https://www.sso.ch/home/coronavirus.html](https://www.sso.ch/home/coronavirus.html)
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<tr>
<td>- Highly recommended to screen patient’s temperature. If &gt;37.5°C, send patient back home and delay treatment. - Patients should directly go to the treatment room. - Exceptionally, they can wait in the waiting area for up to 15 minutes with 2m social distancing measures. - Patients should wash their hands before start of treatment.</td>
<td>- All staff should wear at least a surgical mask at all time.</td>
<td>- Turn off air conditioning. - Make sure the room is well ventilated (open windows). - Remove or cover all unnecessary items on working surfaces. - Prepare in advance all required equipment or materials for treatment.</td>
<td>- Generalise use of rubber dam. - Low and high-speed suction simultaneously. - No treatment can be provided without adequate PPE.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Country: Belgium</td>
<td><strong>Staff advice</strong> - Any member of the team with symptoms should self-isolate. - If diagnosed positive for COVID-19, self-isolate for 7 days following symptoms and at least 3 days without a fever. - If you think you are a potential risk without symptoms, same rules apply. - Enhanced hand hygiene. - Working uniform replaced regularly. - Working shoes or shoes with show protection within the dental practice. - Try and limit the number of surfaces you touch. - Respect social distancing (1.5 to 2 meters). - Limit the number of staff to the strict minimum. - Regular disinfection of common areas.</td>
<td>- All staff should wear a surgical mask at all time.</td>
<td>- <strong>Non-AGPs</strong> For treatment: - Surgical mask - Single use gloves - Protection apron with long sleeves (or change scrubs between each patient) - Eye protection (visors recommended)</td>
<td>- <strong>Treatment types</strong> <strong>Urgent treatment</strong> (treatment required within 24h): - Oral infection with facial swelling and general symptoms - Oral bleeding - Dental trauma - Severe pain not controlled with analgesia</td>
<td>- <strong>Cleaning and disinfection procedures</strong> - Wear a mask, apron and cleaning glove. - Remove all visible stains first with soapy water - Dry and then disinfect all surfaces with disposable wipes - Floors should be - cleaned every half day.</td>
</tr>
<tr>
<td><strong>Waiting area</strong> - Remove any unnecessary items (toys, reading material etc.). - Seats placed in a way to respect social distancing.</td>
<td>- <strong>AGPs</strong> - Surgical gowns with long sleeves - Eye protection + visor - Gloves For patients B1 and B2, use of FFP2 masks.</td>
<td>- <strong>Required treatment</strong> - Oral infection not controlled following antibiotics course - Oral pain difficult to control with analgesia - Treatment following dental trauma (RCT, removal of splint) - Completion of RCT - Follow up of implant case or transplantation - Dental fracture or loose filling - Fit of prosthesis - Denture ease - Orthodontic maintenance (e.g. debonded bracket, broken arch wire) - Follow up of patients with severe periodontal disease</td>
<td>- <strong>Disinfection products</strong> - Alcohol 60% to 70% ethanol - Chloroxylanol 0.12-0.24% (Dettol) - Bleach 0.1-0.5%</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Country:</strong> Belgium</td>
<td><strong>Date of publication:</strong> 19.04.2020</td>
<td><strong>Dental procedures</strong></td>
<td><strong>Post-operative cleaning/disinfection/waste management</strong></td>
<td><strong>Instruments</strong></td>
<td><strong>Laundry</strong></td>
</tr>
<tr>
<td><strong>Source:</strong> Conseil de l’Art Dentaire on behalf of the Service Public Fédéral de Santé Publique</td>
<td><strong>Latest update</strong> 30.04.2020</td>
<td><strong>Clean instruments from any</strong></td>
<td><strong>Cleaning and disinfection</strong></td>
<td><strong>Cleaning and disinfection</strong></td>
<td>Working uniform washed daily at 60 degrees minimum.</td>
</tr>
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<tr>
<td></td>
<td>- Only one patient in waiting area at a time with eventual accompanying person if necessary.</td>
<td>- Patient should perform hand hygiene and leave treatment room as soon as possible.</td>
<td>- Dental team should remove surgical gown and apron and place them in a plastic bag then sealed.</td>
<td>- All other dental treatments</td>
<td>Routine treatment</td>
</tr>
<tr>
<td></td>
<td><strong>Toilets</strong></td>
<td>- Removal of gloves and hand hygiene.</td>
<td>- Leave treatment room and then remove visor, eye protection and eventual FFP2.</td>
<td>- Patients should use mouthwash 1%H2O2 solution or Povidone Iodine 1% solution for one minute before spitting in a disposable cup.</td>
<td>- All other dental treatments</td>
</tr>
<tr>
<td></td>
<td>- Close toilet room.</td>
<td>- Hand hygiene.</td>
<td></td>
<td>- Limit use of intra oral radiographs.</td>
<td>- Patients should use mouthwash 1%H2O2 solution or Povidone Iodine 1% solution for one minute before spitting in a disposable cup.</td>
</tr>
<tr>
<td></td>
<td>- Possible to use them by asking staff.</td>
<td>- Wear a surgical mask again.</td>
<td></td>
<td>- Limit use of 3-in-1 syringe.</td>
<td>- Patients should use mouthwash 1%H2O2 solution or Povidone Iodine 1% solution for one minute before spitting in a disposable cup.</td>
</tr>
<tr>
<td></td>
<td>- After each use, the room should be disinfected.</td>
<td></td>
<td></td>
<td>- Use of rubber dam when possible including any tooth preparation. Placed prior to start AGP.</td>
<td>- Patients should use mouthwash 1%H2O2 solution or Povidone Iodine 1% solution for one minute before spitting in a disposable cup.</td>
</tr>
<tr>
<td></td>
<td><strong>Reception desk</strong></td>
<td></td>
<td></td>
<td>- Use large suction tip.</td>
<td>- Patients should use mouthwash 1%H2O2 solution or Povidone Iodine 1% solution for one minute before spitting in a disposable cup.</td>
</tr>
<tr>
<td></td>
<td>- Respect social distancing.</td>
<td></td>
<td></td>
<td></td>
<td>- Patients should use mouthwash 1%H2O2 solution or Povidone Iodine 1% solution for one minute before spitting in a disposable cup.</td>
</tr>
<tr>
<td></td>
<td>- Remove all unnecessary items.</td>
<td></td>
<td></td>
<td></td>
<td>- Patients should use mouthwash 1%H2O2 solution or Povidone Iodine 1% solution for one minute before spitting in a disposable cup.</td>
</tr>
<tr>
<td></td>
<td>- All documents should be sent electronically if possible.</td>
<td></td>
<td></td>
<td></td>
<td>- Patients should use mouthwash 1%H2O2 solution or Povidone Iodine 1% solution for one minute before spitting in a disposable cup.</td>
</tr>
<tr>
<td></td>
<td>- Contactless payment should be favoured.</td>
<td></td>
<td></td>
<td></td>
<td>- Patients should use mouthwash 1%H2O2 solution or Povidone Iodine 1% solution for one minute before spitting in a disposable cup.</td>
</tr>
<tr>
<td></td>
<td>Protective screen on payment machine or disinfect after each use.</td>
<td></td>
<td></td>
<td></td>
<td>- Patients should use mouthwash 1%H2O2 solution or Povidone Iodine 1% solution for one minute before spitting in a disposable cup.</td>
</tr>
<tr>
<td></td>
<td><strong>Patient triage based on the following patient groups:</strong></td>
<td></td>
<td></td>
<td></td>
<td>- Patients should use mouthwash 1%H2O2 solution or Povidone Iodine 1% solution for one minute before spitting in a disposable cup.</td>
</tr>
<tr>
<td></td>
<td>- <strong>Group A1:</strong> COVID-19 positive. Postpone any treatment and refer to hospital setting. No treatment unless absolute emergency.</td>
<td><strong>Air quality</strong></td>
<td></td>
<td></td>
<td>- Patients should use mouthwash 1%H2O2 solution or Povidone Iodine 1% solution for one minute before spitting in a disposable cup.</td>
</tr>
<tr>
<td></td>
<td>- <strong>Group A2:</strong> Suspected COVID-19 positive. Symptomatic patient or patient who has been in close contact with a confirmed case.</td>
<td></td>
<td></td>
<td></td>
<td>- Patients should use mouthwash 1%H2O2 solution or Povidone Iodine 1% solution for one minute before spitting in a disposable cup.</td>
</tr>
<tr>
<td></td>
<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.</td>
<td></td>
<td></td>
<td></td>
<td>- Patients should use mouthwash 1%H2O2 solution or Povidone Iodine 1% solution for one minute before spitting in a disposable cup.</td>
</tr>
</tbody>
</table>
**Group B2:** 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)

**Group C:** Asymptomatic patients. Dental treatment can be provided prioritising urgent treatment, then required treatment and then routine treatment.

**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
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<tr>
<td>Country: Netherlands Source: Commissie Leidraad Mondzorg Corona (CLMC) (Committee for the preparation of Oral Care Guidelines during the Corona outbreak - The Committee includes various national dentistry associations) Date of publication: 21/04/2020 <a href="https://www.knmt.nl/sites/default/files/2020-04-21-leidraad_mondzorg_corona_def.pdf">https://www.knmt.nl/sites/default/files/2020-04-21-leidraad_mondzorg_corona_def.pdf</a></td>
<td>General considerations Patient should attend alone as much as possible All individuals who enter practice (patients and staff) should clean their hands with soap and water or alcohol hand rub Prevent patients from touching door handles, surfaces etc. Reception Digital provision of paperwork e.g. receipts, referrals, invoice Indicate 1.5m distancing with floor markings Remove unnecessary items such as folders, samples Contactless payment (clean card terminal after each use) Waiting area Maintain 1.5m distance between chairs Chairs should be easily cleansable Active door policy Minimise time spent in waiting room Offer hand disinfection facility (preferably hands free) after entry Provide tissues and foot operated waste bins Decommission coffee machine/water stations</td>
<td>All staff Patient contact less than 1.5m must wear: • Surgical mouth and nose mask type II / R, or • Surgical mouth nose mask type II + face shield (face shield) • Replace nasal mask after every patient Masks can be worn until breathing becomes difficult or mask is too wet FFP2 masks are reserved for the treatment of patients with symptoms of COVID-19 or proven COVID-19</td>
<td>General Permit only one patient to surgery at any one time Equipment Remove unnecessary items Easy to clean surface Air quality Ventilate the room as much as possible Patient Preparation Mouthwash use pre-op: 1% hydrogen peroxide for 1 minute if AGP</td>
<td>Information on Emergency Care Necessary non-regular oral care Emergency and Necessary non-regular oral care only Emergency care in a designated Corona centre for Acute Oral Care. Treatment aids Use rubber dam where possible Large mist vacuum (high volume suction)</td>
<td>Cleaning and disinfection procedures Disinfect tables, chairs and surfaces regularly Consistently clean surfaces in treatment room and disinfect with 80% alcohol If surfaces are visibly contaminated, wipe with disposable cloth and water or water and soap Use disposable cleaning materials where possible Make sure surfaces/objects are dry before disinfecting Instruments not suitable for thermodisinfection, disinfect with 80% alcohol after cleaning with soap and water</td>
</tr>
</tbody>
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### Recommendations for the re-opening of dental services: a rapid review of international sources

**6 May 2020**

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</table>
| Remove toys, magazines etc | **Patient triage**<br>Determine which procedures patients may receive. Those with symptoms of COVID-19 or are confirmed COVID-19 positive receive only Emergency care in designated CAM facility. | **Staff**<br>Space 1.5m if not possible stage breaks Those without symptoms or who have been free of symptoms for 24 hours can work Employee with 24 hours of symptoms can be tested and must remain at home | **Laundry**<br>Washed daily at 85 degrees at laundry or dental clinic. It should not be taken home. | **Non-COVID-19 patients**<br>- Hand hygiene when entering clinical room<br>- Mouthwash with 1% H₂O₂ for at least 1min prior to dental treatment<br>- AGP with turbine and contra angle should be minimized<br>- Ultrasounds and airflow should not be used<br>- AGP preferably done at the end of the day<br>- Short ventilation of treatment room between patients following AGP<br>- Dentists should work with the assistance of dental nurse | **Cleaning and disinfection procedures**<br>All surfaces that the patient has touched (e.g. chair, door handles, toilets) are disinfected according to normal routine decontamination<br><br>**Disinfection products**<br>SARS-CoV2 is sensitive to disinfectants such as Virkon®, Perasafe® and alcohol with concentration of 70%. Household chlorine can be used at a concentration of at least 1000 ppm. | **Country:** Norway <br>**Source:** Directorate for Health; Dental Health Service | **Staff advice/ personal hygiene and physical contact**<br>- Avoid any unnecessary physical contact<br>- Hand hygiene arranged for staff and patients on arrival and after treatment completion<br>- Avoid use of rings, watches and similar jewellery<br>- Assess common touched areas and whether contact can be reduced<br>- Equipment used is cleaned between each patient | **Minimise equipment**<br>- Clean surfaces including desks and shelves<br>- When AGP, only one patient present in the room<br>- All doors, drawers and cabinets closed before start of treatment<br>**Non-COVID-19 patients**<br>- Disposable gloves and adequate hand hygiene before and after use<br>- FFP2 or FFP2R, change between patients<br>- Eye protection (visors recommended)<br>- Cover clinical tools with plastic cover disinfected between patients<br>- Hat or hood covering all hair if available | **Non-COVID-19 patients**<br>- Hand hygiene when entering clinical room<br>- Mouthwash with 1% H₂O₂ for at least 1min prior to dental treatment<br>- AGP with turbine and contra angle should be minimized<br>- Ultrasounds and airflow should not be used<br>- AGP preferably done at the end of the day<br>- Short ventilation of treatment room between patients following AGP | **Clinical waste disposal**<br>This guideline is part of a comprehensive document. | **Waiting room**<br>- Posters for patients’ information<br>- Minimize number of patients at the same time. Consider adding | **Patient/staff flow**<br>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**<br>- Hand hygiene when entering clinical room<br>- Mouthwash with 1% H₂O₂ for at least 1min prior to dental treatment<br>- AGP with turbine and contra angle should be minimized<br>- Ultrasounds and airflow should not be used<br>- AGP preferably done at the end of the day<br>- Short ventilation of treatment room between patients following AGP | **Clinical waste disposal**<br>This guideline is part of a comprehensive document. | **Waiting room**<br>- Posters for patients’ information<br>- Minimize number of patients at the same time. Consider adding | **Patient/staff flow**<br>Suspected/Confirmed COVID-19 patients should not wait in waiting area but should be directed into a treatment room with closed door. 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<td>which details all aspects of the Norwegian health and social care during the COVID-19 pandemic.</td>
<td>breaks between each patient to do so.  - 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</td>
<td>AGP with non-COVID-19 patients  - Long sleeved disposable or reusable gown, changed between patients</td>
<td>Suspected/confirmed COVID-19 patients  - Disposable gloves and adequate hand hygiene before and after use  - FFP3 (alternative FFP2)  - Eye protection (visors recommended)  - 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</td>
<td>- Any conversation with patient should take place in the treatment room  - Suspected or confirmed COVID-19  - AGP should be avoided as much as possible.  - If necessary, use of vacuum suction and rubber dam is used is possible. (placed prior to start AGP)  - Extra oral X-ray should be considered instead of intra oral X-ray  - Resorbable sutures should be used to reduce need of reviews  - 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  - Resorbable sutures should be used to reduce need of reviews</td>
<td>Waste management as per local waste management procedures based on the Regulations on infectious waste from health services.</td>
</tr>
<tr>
<td>Section 5.5 of the document relates to Dental Health.</td>
<td>Patient triage  - All patients should clarify their status over the phone prior to attend (forms to be used)  - 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</td>
<td></td>
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<tr>
<td><a href="http://www.helsedirektoratet.no">www.helsedirektoratet.no</a></td>
<td>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</td>
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</tbody>
</table>
### Practice preparation and patient considerations

- 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 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

### PPE for dental practice personnel

- 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

### Management of the clinical room

- **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,

- **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 effective saliva suction should be used.

### Dental procedures

- **Suspected/confirmed COVID-19 patients**
  - Dental workers must use protective equipment with any AGP and the room aired briefly afterwards.
  - AGPs in patients not tested for COVID-19

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

- **Country:** Denmark
- **Source:** Danish Health Board
- **Date of publication:** Unclear
- **Latest update:** 22.04.2020
<table>
<thead>
<tr>
<th>Reference</th>
<th>Practice preparation and patient considerations</th>
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<th>Dental procedures</th>
<th>Post-operative cleaning/disinfection/waste management</th>
</tr>
</thead>
<tbody>
<tr>
<td><a href="https://www.sst.dk/de/udgivelser/2020/haandterning-af-covid-19-kritik-funktioner-i-tandplejen">https://www.sst.dk/de/udgivelser/2020/haandterning-af-covid-19-kritik-funktioner-i-tandplejen</a></td>
<td>Information on COVID-19 symptoms should be posted on entrance to clinic</td>
<td>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 locally for the removal of clinical clothes, if applicable using a short video.</td>
<td>Protective equipment as specified in the section &quot;Reg. dental protective equipment&quot;. 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 handlebar and saddle) is sanitised after each visit.</td>
<td>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 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. 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. Prescribing Prescribing antibiotics and painkillers after conducting an individual telephone assessment of the patient:</td>
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<td></td>
<td>Waiting room</td>
<td>- minimum of one meter distance between seating - remove newspapers, magazines, toys, beverages from common jugs, etc., - focus on frequent and thorough cleaning - poster with information on protective measures against coronavirus on the clinic door in waiting room.</td>
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<td>Personal hygiene</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>
<td>Staff screening</td>
<td>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.</td>
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<td></td>
<td>Patient triage</td>
<td>Patients with respiratory symptoms where COVID-19 may be suspected or patients with</td>
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<td></td>
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<td>COVID-19 (fever, cough, sore throat, headache and muscle soreness).</td>
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proven COVID-19 should not be treated in [primary dental clinics] but should be referred to hospital

Patients should not be referred for treatment which is usually performed in the primary sector which is not acute/critical. For Dental, Oral and Oral Surgery that is acute/critical, the patient can be seen once symptom free for 48 hours.

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.

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<td>proven COVID-19 should not be treated in [primary dental clinics] but should be referred to hospital</td>
<td></td>
<td></td>
<td>1. Painkillers for short-term treatment (up to a couple of weeks in minimum packs), where milder preparations prior to prescription have not proved sufficiently successful. 2. Prescription antibiotics where it is obvious that infection is not due to any other disease that falls within the medical field</td>
<td></td>
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<tr>
<td></td>
<td>Patients should not be referred for treatment which is usually performed in the primary sector which is not acute/critical. For Dental, Oral and Oral Surgery that is acute/critical, the patient can be seen once symptom free for 48 hours.</td>
<td></td>
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<td>Dental treatment of children and adolescents 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.</td>
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<td>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.</td>
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Recommendations for the re-opening of dental services: a rapid review of international sources

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<td>- Plan fewer appointment times so that there is a lower daily patient flow in the clinic and fewer patients in the waiting room.</td>
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</tbody>
</table>
| - 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 disease / condition becoming chronic if not treated; impact on quality of life; influence on function and / or ability to work | Staff screening
Staff should be screened for symptoms prior to entry into the dental practice. | | | | |
| | Patient triage
Patient walk-in should be discouraged. | Non-COVID-19 patients
Clinicians should wear disposable surgical masks, protective eyewear/face-shields and disposable gloves | | | |
| | | Suspected/confirmed COVID-19 patients
Patients who have tested positive or are suspected positive for COVID-19 should | | | |
| | | 1% hydrogen peroxide or 0.2% povidone rinse prior to the treatment. | | | |

Country: Malta
Source: Ministry for Health
Date of publication: 18.03.2020

- Staff screening
- Patient triage
- Non-COVID-19 patients
- Suspected/confirmed COVID-19 patients
- 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.
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<tr>
<td><a href="https://deputypri">https://deputypri</a> meminister.gov.mt/en/health-promotion/Documents/Guidance-%20for-%20Dental-practi ces-%20in-%20Malta-%20%20Covid19.pdf</td>
<td>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. <strong>Patient scheduling</strong> Patient appointments should be spread out (20-30mins) to allow effective disinfection of all areas and avoid cross infection between patients in waiting rooms.</td>
<td>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><strong>All staff</strong> 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</td>
<td>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>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. <strong>Clinical waste disposal</strong> Medical waste should be disposed of as appropriate.</td>
</tr>
<tr>
<td>USA</td>
<td><strong>Staff screening</strong> Screen all staff at the beginning of their shift for symptoms of COVID-19 and actively measure their temperature <strong>Patient triage</strong> 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 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 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</td>
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<td>Date of publication: Unclear Latest update 27.04.2020</td>
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<tr>
<td><strong>Country:</strong> USA <strong>Source:</strong> Centers for Disease Control and Prevention (CDC) <strong>Date of publication:</strong> Unclear Latest update 27.04.2020</td>
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<td><strong>Non-AGPs</strong> 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</td>
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<td><strong>AGPs</strong> During aerosol generating procedures a N95 respirator or equivalent is required</td>
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<td><strong>Suspected/confirmed COVID-19 patients</strong> 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>
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<td><strong>Non-AGPs</strong> 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</td>
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<td><strong>Cleaning and disinfection procedures</strong> 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 <strong>Clinical waste disposal</strong> Manage laundry and medical waste in accordance with routine procedures</td>
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<td>Improvement of respiratory symptoms and negative results of FDA approved COVID-19 tests from two swabs ≤24 hours apart.</td>
<td>All staff</td>
<td>Clinical room</td>
<td>Pre-treatment</td>
<td>Cleaning and disinfection procedures</td>
</tr>
<tr>
<td></td>
<td>(test-based) 7 days since a laboratory positive COVID-19 test with no symptoms</td>
<td>- Front desk staff can wear masks and goggles, or face shields, or a clear barrier should be installed.</td>
<td>Limit paperwork as much as possible. If using paper charting, cover with clear barrier to allow reading.</td>
<td>Check with indemnity regarding any required changes to consent forms</td>
<td>Clean surfaces with soap and detergent prior to disinfection</td>
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<td></td>
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<td>- Wear mask prior to entry to surgery</td>
<td>Place new chart notes into document away from patient contact area when possible</td>
<td>Decide on treatment based on clinical judgement and known facts: combining patient health/risks factors/geographic incidence and availability of PPE</td>
<td>Replace surface barriers</td>
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<td>Clinical staff Professional judgement should be exercised with regards to disposable foot/ head covers.</td>
<td>Cover keyboard of computer with disposable, flexible, clear barrier (e.g. plastic wrap) and change it between patients.</td>
<td>Consider clinical risks: aerosol production, ability to employ rubber dam and induction of patient cough</td>
<td>Waiting areas</td>
</tr>
<tr>
<td></td>
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<td>Use highest level of PPE available. Assume all patients can transmit disease.</td>
<td>Limit access only to patient where possible</td>
<td>Employ lowest aerosol producing technique available (e.g. hand scaling)</td>
<td>To disinfect, use products that meet EPA’s criteria for use against SARS-CoV2, the cause of COVID-19, and are appropriate for the surface</td>
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<td>N95, KN95, or surgical mask (based on risk assessment) with face shield or goggles</td>
<td>Minimise staff numbers in the clinical room</td>
<td>AGPs</td>
<td>On a regular schedule, wipe all touchable surface areas with an approved surface cleaner.</td>
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<td>For clinical staff, if available gowns should be used. Change gowns if soiled. Dispose gowns or launder after each use.</td>
<td>No hand shaking or physical contact</td>
<td>Use high velocity evacuation where possible</td>
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<td>Long sleeved garments should be worn.</td>
<td>No evidence exists for use of pre-operative oral rinses</td>
<td>Post-operative instructions</td>
<td>Remember to include tables, chair arms, doorknobs, light switches, hangers, and anything else with which people come in contact. If surfaces are dirty, they should be cleaned using a detergent or soap and water prior to disinfection.</td>
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<td></td>
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<td>Remove mask outside of operating room</td>
<td>Shock dental waterlines if returning from extended break in practice. Consult manufacturers’ instructions</td>
<td>They should include a reminder to report any signs or symptoms of COVID-19 within next 14 days.</td>
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<td>Replace mask if it is soiled, damaged or hard to breathe through</td>
<td>Strict hand hygiene measures:</td>
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</table>

**Country:** USA  
**Source:** American Dental Association  
**Date of publication:** 24.04.2020  
**Latest update:** 07.05.2020  
[https://success.ada.org/~media/CPS/Files/Ope n%20Files/ADA_Return_to_Work_Toolkit.pdf](https://success.ada.org/~media/CPS/Files/Open%20Files/ADA_Return_to_WorK_Toolkit.pdf)  
Patient screening questionnaire available.  
Staff screening questionnaire and log available.
### Reference

Practice preparation and patient considerations

- Confirm patient screening questions

**Staff screening**
- Pregnant staff should follow available guidance. Limit exposure to AGPs
- Consider screening checkpoint and log for all staff.

**Reception and waiting area**
- Use should be minimised: patients can wait in their own car or outside. If not possible consider alternative entrance arrangements
- Wipes should be provided to clean surfaces that patients may touch.
- 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
- 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 staffer to reduce virus spread

**Patient triage**
- Pre-appointment patient screening.
- Patient questionnaire repeated and temperature taken on arrival at the dental clinic. If this

### PPE for dental practice personnel

- Upon entry
- Before and after contact with patients
- After contact with contaminated surfaces or equipment
- After removal of PPE

**PPE for companions**
- Provide mask for anyone who accompanies patient

### Management of the clinical room

### Dental procedures

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

To disinfect, use products that meet EPA’s criteria for use against SARS-CoV, the cause of COVID-19, and are appropriate for the surface.

**Laundry**
- Cloth gowns should be laundered after use
- Scrubs should be laundered in office or by contracted service
## Recommendations for the re-opening of dental services: a rapid review of international sources

6 May 2020

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</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  
- 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 notify practice if develops signs or symptoms of COVID-19 in next 14 days. | All staff including those disinfecting treatment room  
- 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)  
- 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  
- All patients: patients to perform pre-procedural 1% hydrogen peroxide mouth rinse for 60 seconds and expectorated into the same dispensing cup  
- 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  
- All patients: patients to perform pre-procedural 1% hydrogen peroxide mouth rinse for 60 seconds and expectorated into the same dispensing cup  | 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)  
Donning and doffing procedures and clinical waste disposal | |
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<th>Dental procedures included in Phase 1</th>
<th>Post-operative cleaning/disinfection/waste management</th>
</tr>
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| rim_Protocol_Update.pdf | - 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 | High risk AGPs without rubber dam  
- N95 or K95 respirator (fitted)  
- Face shield  
- Cap/bouffant  
- Gown/lab coat (with cuff)  
- Gloves | 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 (decontamination side or area) anteroom or hallway area  
- 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)  
- 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. | - any emergency NAGP or emergency AGP  
- Examinations and consultations  
- Simple extractions (NAGP)  
- Hygiene – hand scaling only and no ultrasonic instrumentation  
- Preventive procedures such as the application of topical agents (fluoride, silver diamine fluoride, etc.)  
- Oral & maxillofacial radiology procedures  
- Orthodontic procedures (NAGP)  
- Removable prosthodontic procedures  
- Cementation of previously fabricated fixed prosthodontics  
- Temporomandibular dysfunction management and procedures  
- Medical management of soft tissue presentations  
- Oral pathology and oral medicine procedures  
- Periodontal procedures (NAGP)  
- Urgent endodontic procedures  
- Urgent restorative procedures  
- Urgent paediatric restorative procedures  
- Urgent complex extractions  
- Dental public health initiatives including community programing and preventive measures. | - PPE must be donned in the decontamination side 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 touch the outside of the gown, grasp the gown and pull away from the body without rapid movements, roll gown/coat inside out 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  
- Remove eye protection at sides with the hands without touching facial skin and place in the disinfection or garbage receptacle  
- Remove cap or bonnet by grasping at the rear and pulling forward off the head and place in the laundry or garbage receptacle  
- 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 |
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<tr>
<td>Reopening practice:</td>
<td>Moderate risk of COVID-19</td>
<td>Dental procedures not included in Phase 1:</td>
<td>- All elective and non-urgent AGP</td>
<td>- Perform hand hygiene</td>
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<tr>
<td>- What additional surgery re-commissioning or maintenance procedures need to be undertaken before commencing more routine care (for example, has any validation and maintenance that was deferred during closures now been completed)?</td>
<td>Surgical masks and eye protection protect the wearer from droplet contamination of the nasal or oral mucosa, or conjunctivae. Use of appropriate PPE (this includes disposable gowns, gloves and eye protection) Minimising patient transfer or get the patient to wear a surgical mask while they are being transferred and to follow cough etiquette</td>
<td>- Hygiene ultrasonic instrumentation Selective polishing /prophy Laser instrumentation Dental implant placement Nitrous oxide sedation</td>
<td>- Put on a clean surgical mask</td>
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<tr>
<td>- What water management processes need to be undertaken following the non-use of dental unit waterlines for an extended period?</td>
<td>Use a pre-operative mouthwash, use a dental dam for any</td>
<td>Phase 1:</td>
<td>Cleaning and disinfection procedures</td>
<td>Non-AGPs</td>
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<tr>
<td>- Has stock, including medications been checked to avoid the use of out of date materials?</td>
<td></td>
<td>Dental procedures not included in Phase 1:</td>
<td>Provision of dental treatments that are unlikely to generate aerosols or where aerosols generated have the presence of minimal saliva/blood due to the use of rubber dam. This includes:</td>
<td>For those at risk of COVID-19 previous publication recommended: applying two complete cycles of cleaning of all environmental surfaces using detergent and disinfectant (as per contact transmission-based guidelines)</td>
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<td>- What staffing and PPE requirements are anticipated?</td>
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<td>- Examinations</td>
<td>- Examinations</td>
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<tr>
<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>Use appropriate PPE (this includes disposable gowns, gloves and eye protection)</td>
<td>- Simple non-invasive fillings without use of high-speed handpieces</td>
<td>- Simple non-invasive fillings without use of high-speed handpieces</td>
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<tr>
<td>- What refresher training is required for team members who have not been working?</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>- Restorative procedures using high speed handpieces only provided with the use of rubber dam</td>
<td>- Restorative procedures using high speed handpieces only provided with the use of rubber dam</td>
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<tr>
<td>- How will patients be prioritised according to their treatment needs (e.g. periodontally compromised, high caries risk)</td>
<td>Patients confirmed with COVID-19 may either be treated as hospital in-patient or managed by hospital care workers in their home</td>
<td>- Hand scaling (no use of ultrasonic scalers)</td>
<td>- Hand scaling (no use of ultrasonic scalers)</td>
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<tr>
<td>Country: Australia</td>
<td>Moderate risk of COVID-19 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>All confirmed coronavirus cases will only have dental treatment as in-patient or within a hospital</td>
<td>- Medical management of soft tissue presentations (such as ulcers)</td>
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<td>Source: Australian Dental Association</td>
<td></td>
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<td>- Temporomandibular dysfunction management</td>
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<td>Date of publication: 23.04.2020</td>
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<td>- Denture procedures</td>
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<td><a href="https://www.ada.org.au/Covid-19-Portal/Cards/Dental-Profesionals/Guidelines-and-Risk-Factors/Practica">https://www.ada.org.au/Covid-19-Portal/Cards/Dental-Profesionals/Guidelines-and-Risk-Factors/Practica</a> l-Advice-for-stepping-back-to-Level-2-Rest</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>- Orthodontic treatment</td>
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<td>Use a pre-procedural mouthwash, use a dental dam for any</td>
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| when restrictions are lifted further?  
- How will patients be managed who may have missed their regular care cycle? Checklist for practice start up: Water  
- Turn on the mains water supply as the first action of the start-up process. Listen and look for any water leaks.  
**Detail chair**  
- Check the dental unit manufacturer’s instructions for the correct protocol for waterline treatment for chair start-up.  
- 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 setting by appropriately trained dental personnel. | | procedures generating aerosols.  
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.  
Necessary treatment such as crown and bridge preparation that can be completed using dental dam isolation is permitted under Level 2 restrictions.  
**AGPs:**  
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 |
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|           | the appropriate type of water, and include any required additives.  
Suction system and compressor  
- 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.  
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 aluminum 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 symptom criteria for COVID-19 risk or confirmed as a COVID-19 case, provided as per ADA Managing COVID-19 Guidelines.  
Confirmed COVID-19 cases  
For provision of urgent or emergency treatment use airborne precautions which includes treatment in a negative pressure 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 |
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<td>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. 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. 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. Scheduled medicines  - Ensure that sufficient supplies of all required scheduled transmission based precautions.  For suspected COVID-19 cases For provision of urgent/emergency treatment use droplet precautions in addition to standard precautions. 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 guidelines</td>
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### Practice preparation and patient considerations

- Medicines (including local anaesthetic) are available, within the use-by date, and are kept securely away from patient/public access.

### 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 >60% alcohol-based wipes 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.
Recommendations for the re-opening of dental services: a rapid review of international sources

Reference | Practice preparation and patient considerations | PPE for dental practice personnel | Management of the clinical room | Dental procedures | Post-operative cleaning/disinfection/waste management
---|---|---|---|---|---
| 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. | | | | |
| - Provide entrance 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
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| ...       | 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. | Low risk patients  
- Surgical mask (level 2 or above)  
- Eye protection  
- Gloves  
- Outer protective clothing as per IPC practice standard  
High risk patients and non-AGPs  
- Surgical mask (level 2 or above)  
- Eye protection  
- Gloves  
- Outer protective clothing as per the IPC practice standard. In addition, an impervious single-user layer, e.g. apron, must be worn with resuable outer protective clothing  
High risk patients and AGPs  
- N95 or FFP2 mask (single use)  
- Eye protection  
- Gloves  
- Long sleeved impervious gowns | For low risk patients: dental surgery, standards precautions apply  
AGP procedures: close the door whenever possible; use measures aimed at reducing the extent and contamination of aerosol and splatter whenever possible; high volume evacuations systems, use of dental dam, and pre-procedural mouthrinses.  
For high risk patients and non-aerosol generating procedures: single room, door closed  
For high risk patients & aerosol generating procedures: negative pressure, single room, door closed stand room down for 20 min after treatment before cleaning | High risk patients  
Avoid aerosol-generating procedures where possible. All rotary handpieces generate aerosols, regardless of whether the motor is electric or air-driven (with or without water). Other aerosol generating instruments commonly used in oral health care include ultrasonic and sonic scalers, triplex syringe, air-abrasion and air-polishing etc.  
Use measures aimed at reducing the extent and contamination of aerosol and splatter as appropriate, for example, high volume evacuation systems, use of rubber dam, and preprocedural mouth rinse.  
Preferably use a slow speed handpiece that operates at ≤40000 rpm, and where possible turn the chip air off, to minimise the aerosol generated during the procedure. | Cleaning and disinfection procedures  
Appropriate PPE should be worn for cleaning down the room. At minimum wear a gown, gloves, surgical mask and protective eyewear.  
Wipe down hard surfaces using a two-step process: first with detergent and water, then hospital grade disinfectant with activity against respiratory virus, including COVID-19.  
After treating a suspected or COVID-positive patient when aerosol generating procedures have occurred, the room should remain closed for a stand-down period of 20 minutes prior to cleaning. |
| Country: New Zealand,  
Source: Dental Council,  
Date of publication: 11.05.2020  
For all patients ask COVID-19 symptom related questions before scheduling an appointment, and record the patient’s responses in their record about COVID-19 and suspected symptoms  
If the patient doesn’t have COVID-19 or symptoms, manage the patient as a ‘low risk patient’. When the patient arrives for their appointment, confirm their responses to the questions asked when scheduling, and record the | General recommendations  
Any reusable PPE must be properly cleaned, decontaminated, and maintained after use and between patients.  
Oral health care practitioners must have received appropriate training in the use of PPE | ... | ... | ... | ... |
patient’s responses in their record. Someone who has recovered from COVID-19 infection is classified as a low risk patient. If the patient has COVID-19 or symptoms of COVID-19, manage the patient as a ‘high risk patient’. You can provide only urgent or emergency care for these patients, defer all other care.

**High risk patient:**
- Schedule and manage the patient in a way that minimises face-to-face interaction with others (e.g. at the end of day or session).

**Waiting areas**
- All unnecessary items should be removed from the waiting room
- Separate waiting room chairs by at least 2 metres.
- Clean surfaces and high-touch surfaces regularly with a detergent or ready detergent wipes.
- Areas of known contamination should be cleaned and disinfected as described in the Dental Council’s Transmission Based Precautions – Cleaning section contained in the Infection Prevention and Control Practice Standard.

**Country:**
- India

**Source:**
- Dental Council of India

**Date of publication:**
- 07.05.2020

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<td>- Patients and any companion should wear masks to attend practice and avoid wearing jewellery or accessories. Masks and shields should be provided when possible.</td>
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<td>- Avoid face touching and carefully remove PPE after each procedure.</td>
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<td>- Staff members should change from personal clothing to scrubs and vice versa before entering</td>
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<td>- All instruments need to be disinfected, cleaned, and sterilised as per standard protocols.</td>
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</table>
| http://www.dciindia.gov.in/Admi/n/NewsArchives/Dental%20Clinics%20Protocol%20Final.pdf | - Patients’ temperature should be taken at arrival and they should be checked for any COVID symptoms. If any, they should be referred to a government hospital or designated hospital.  
- COVID-19 patients should be seen after viral clearance is confirmed by primary care doctors.  
- Physical/Social distancing should be maintained in clinical areas.  
- Avoid receiving cash payments.  
- Protective screens for reception desks.  
- Limit use of waiting area.  
- Tissues, hand sanitizer and soap should be available.  
- Display health awareness posters regarding COVID-19 | the dental practice and before returning home.  
Observe frequent hand hygiene.  
PPE protocol should be followed (including instructions for removal of PPE)  
**Non-AGPs**  
- Goggles and face shield (fitted goggles with a soft tissue seal)  
- Triple layer surgical mask  
- N95 respirator during routine dental procedures  
- Disposable gowns  
- Shoe covers  
- Head cap  
- Surgical gloves  
**AGPs**  
- Goggles and face shield (fitted goggles with a soft tissue seal)  
- Triple layer surgical mask  
- N95 respirator during routine dental procedures  
- FFP3 – standard mask should be used during treatment of COVID19 positive patients.  
- Surgical gloves  
- Disposable and waterproof gown (gown maybe improvised but needs to be changed after each patient).  
- Shoe covers | - Usage of saliva ejectors is recommended, since can reduce the production of droplets and aerosols.  
**Air quality**  
- Adequate ventilation is advised. If dental offices are equipped with the capability, local exhaust ventilation should be used to capture and remove mists or aerosols generated during procedures.  
- Use directional airflow, (e.g. fans), to ensure that air moves through staff working areas before patient treatment areas.  
**Pre-operative and post-operative infection control protocols should be followed.**  
**AGPs**  
- Avoid or minimise operations that can produce droplets or aerosols.  
- If patient needs aerosol-based treatment, detailed medical history and contact history should be recorded.  
- Patients should be scrubbed with iso Propyl alcohol extra orally prior to any dental procedure.  
- Post-procedure rinses like 1% hydrogen peroxide should take place when the patient is conscious.  
- Four-handed technique recommended. After the patient leaves the treatment room, all hand instruments should be cleaned immediately. | - Perform as many tasks as possible in areas away from patients.  
- Ensure dental unit waterlines are flushed, disinfected using appropriate organic disinfectant and drained.  
- Remove visible pollutants completely before disinfection.  
- Equipment (e.g. keyboards) should be covered with a disposable, flexible, clear barrier (e.g. plastic wrap), which needs to be changed between patients.  
- Fumigation of clinics periodically is advised.  
- Sterilise and oil hand pieces, store upright in a clean dry environment.  
- Remove couplings and air motors from tubing.  
- Suction pumps should be flushed with chemical cleaning solution.  
**Clinical waste disposal**  
- PPE should be judiciously used and appropriately disposed as per cleaning protocols.  
- Change the surgical mask after every dental procedure.  
- All waste pertaining to patient care should be carefully disposed as per the Bio Medical Waste (Management and Handling) Rules. |