Actes dentaires générant des aérosols et leur atténuation : Revue rapide des recommandations internationales en odontologie

24 Juillet 2020

COVID-19 : Groupe de travail pour l'élaboration de recommandations dentaires (CoDERs)

Comment citer ce document:

Clarkson J, Ramsay C, Richards D, Robertson C, & Aceves-Martins M, on behalf of the CoDER Working Group. Aerosol Generating Procedures and their Mitigation in International Dental Guidance Documents - A Rapid Review

https://oralhealth.cochrane.org/news/aerosol-generating-procedures-and-their-mitigation-international-guidance-documents















Objectifs

L'objectif de cette revue est d'évaluer comment les actes générant des aérosols (AGA) sont définis dans les recommandations dentaires internationales, quels moyens sont proposés pour les atténuer et si ces recommandations sont en lien avec les données épidémiologiques du virus COVID-19. Les objectifs de cette revue sont :

- Évaluer comment les AGA sont définis et classifiés dans les recommandations internationales
- Identifier les méthodes d'atténuation des AGA et leur utilisation pour les patients COVID ou non-COVID
- Déterminer la durée des périodes sans activité recommandée entre chaque patient (COVID ou non-COVID) dans une même salle de soins à la suite d'un AGA
- Identifier les facteurs favorables à une réduction de la période sans activité suite à un AGA
- (Déterminer s'il existe un lien entre les données épidémiologiques du COVID-19 et la classification des pays en fonction de leur revenu par la Banque mondiale pour l'approvisionnement des équipements de protection individuels (EPI) – publication à venir)
- (Évaluer la qualité des preuves scientifiques citées dans les recommandations en cours d'évaluation, publication à venir)

Ce travail a été entrepris afin d'aider à la rédaction d'une revue rapide des actes générant des aérosols au sein des cabinets dentaires, par le Programme Écossais sur l'Efficacité Clinique des Soins Dentaires (Scottish Dental Clinical Effectiveness Programme, SDCEP). https://www.sdcep.org.uk/published-guidance/covid-19-practice-recovery/rapid-review-of-agps/

Messages clés:

- Les recommandations nationales de 58 pays à propos des AGA et de leur atténuation sont incluses dans cette revue.
- Le niveau de détails entre les différents documents varie considérablement en fonction des sources.
- Un peu plus de la moitié des sources (56%) définit les AGA.
- 98% des pays autorisent l'usage des AGA pour les patients non-COVID.
- 94% des pays recommandent l'usage d'un masque et de lunettes de protection ou d'une visière de protection pour les patients non-COVID.
- Les masques chirurgicaux sont recommandés par 21 pays (33%) pour les patients non-COVID tandis que 44 pays (70%) recommandent l'utilisation d'un masque FFP2/N95 et 12 pays (19%) recommandent l'utilisation de masques FFP3.
- 82% des documents recommandent l'usage d'un bain de bouche avant tout soin dentaire pour les patients non-COVID.
- 48% des documents proposent une période sans activité à la suite d'un AGA pour les patients non-COVID allant de 2 à 180 minutes.
- La plupart des pays ayant des recommandations spécifiques pour les patients COVID proposent les mêmes protocoles d'atténuation pour les patients COVID et les patients non-COVID
- Un manque de preuves scientifiques est observé pour la majorité des recommandations faites dans les documents inclus dans cette revue.

Méthodologie

Lors de la première semaine de Juillet 2020, notre groupe de travail a commencé à collecter les recommandations et rapports relatifs aux mesures et précautions essentielles pour la reprise d'activité des services dentaires publiés par les organisations internationales et organismes professionnels nationaux. La méthodologie utilisée pour établir cette revue rapide est basée sur un protocole décrit par l'Organisation Mondiale de la Santé (OMS) et l'Alliance pour la recherche sur les politiques et les systèmes de santé.²

Cette revue vient complémenter la revue rapide initiale réalisée par les CoDERs et relative à la reprise d'activité des services dentaires publiée le 16 Mai 2020. Elle offre un résumé des recommandations associées à l'utilisation des AGA. Nous avons effectué une recherche de la littérature grise afin d'identifier tous documents de recommandations à inclure et avons collaboré avec l'informaticien de Cochrane Oral Health (COH) qui a ainsi pu actualiser le processus de recherche de Cochrane pour les recommandations dentaires le 13 Juillet 2020. Nous avons également contacté un réseau international de chercheurs et de responsables pour la santé bucco-dentaire via Écosystème mondial de preuves pour la santé bucco-dentaire (GEEOH). Le GEEOH a été créé avec l'intention de réduire la duplication du travail de recherche dans le monde et offrir une voie directe entre les preuves scientifiques et la production de recommandations et la pratique clinique. Cet organisme est actuellement coordonné par COH. Au sein de ce réseau, la Fédération Dentaire Internationale (FDI) a ainsi partagé sa base de données contenant les recommandations nationales de ses membres et a permis d'augmenter le nombre de recommandations inclus dans notre revue. À la suite de la publication de notre Revue Rapide relative à la reprise d'activité des services dentaires, nous avons été contactés par différents collaborateurs et groupes de travail pour nous aider à identifier les documents nécessaires à l'élaboration de cette revue. La collaboration entre COH, le Programme Écossais sur l'Efficacité Clinique des Soins Dentaires (SDCEP) et notre groupe de recherche a permis d'établir une communication et collaboration rapide et efficace entre les différents responsables dentaires nationaux et internationaux.

Aucune restriction de langue n'a été employée lors des recherches et les membres de notre groupe de travail ont pu traduire les documents publiés en Néerlandais, Français, Allemand, Portugais et Espagnol. Google traduction a été utilisé pour des analyses de recommandations dans certaines langues. Les recherches de documents ont été poursuivies jusqu'au 13 Juillet 2020 et les données furent extraites jusqu'au 15 Juillet.

Un modèle a été créé pour faciliter l'extraction des données. Les informations relatives aux AGA et les preuves scientifiques citées ont été recueillies par un même chercheur. Les données comprenaient une définition des AGA, les recommandations faites quant aux Équipements de protection Individuels (EPI) et toutes les propositions visant à atténuer les AGA.

Résultats

74 documents de recommandations ont été inclus dans cette étude parmi 72 pays, quatre documents proviennent du Royaume-Uni (Angleterre, Écosse, Pays de Galles et Irlande du Nord), deux documents proviennent du Kenya et deux documents proviennent des États-Unis. Cinq documents ont été exclus de l'étude (Hong Kong, Corée du Sud, Recommandations de l'Association de Pédiatrie d'Amérique Latine, Suède et Kenya) à cause des limitations quant aux informations fournies par ces recommandations en rapport avec nos objectifs. Nous n'avons pas pu accéder dans les délais impartis aux documents de recommandations de sept pays (Albanie, Bosnie Herzégovine, Israël, Moldavie, Népal, Palestine, Turquie). Les données correspondant à nos objectifs ont été extraites à partir de 63 documents par les membres du groupe de travail CoDER. Les principaux résultats pour chacun des objectifs sont résumés ci-dessous et les détails de chaque document pays par pays sont disponibles dans l'Appendice 1.

Définition des AGA et liste des actes générant des aérosols

21 des 63 documents (33%) incluent une définition des actes générant des aérosols (AGA) et 35 documents (56%) incluent une liste d'actes considérée comme AGA. Huit documents fournissent des références en rapport avec les définitions des AGA et cinq fournissent des références pour les actes considérés comme AGA. Les actes identifiés comme AGA par plus de 20% des documents sont l'utilisation des instruments rotatifs à haute vitesse (56%), des seringues multifonction (56%), des détartreurs ultrasoniques (43%), des instruments rotatifs à basse vitesse (29%) et des instruments rotatifs à but chirurgical (22%).

Mis à part pour l'Écosse qui, au moment de cette publication, ne permet pas l'utilisation des AGA pour les patients non-COVID, tous les autres documents (98%) indiquent que les AGA peuvent être utilisés pour les patients non-COVID. Toutefois, un certain nombre de pays émettent des réserves quant à leur utilisation.

Plusieurs documents limitent l'utilisation des AGA si possible, avec 13 documents (21%) recommandant seulement l'utilisation des AGA pour les urgences dentaires. Seulement quatre documents fournissent des références liées à l'utilisation des AGA.

Des informations supplémentaires comparant les AGA pour les patients COVID et non-COVID sont disponibles pays par pays dans l'Appendice 2. Cinquante-huit documents (92%) suggéraient d'offrir des soins dentaires aux patients soupçonnés ou confirmés COVID. Parmi ces documents, 22 suggéraient de ne traiter que les urgences dentaires et 16 indiquent que ces patients ne devraient être traités que dans des centres dédiés et non pas dans les cabinets dentaires. Aucune des recommandations pour les patients confirmés COVID positif n'étaient basées sur des preuves scientifiques.

¹ https://apps.who.int/iris/bitstream/handle/10665/333114/WHO-2019-nCoV-Sci_Brief-Transmission_modes-2020.3-eng.pdf?sequence=1&isAllowed=y).

² https://www.who.int/alliance-hpsr/resources/publications/rapid-review-guide/en/

Recommandations pour les EPI

Pour la gestion des AGA pour les patients non-COVID, cinq documents (Bolivie, Équateur, Philippines, Portugal et Espagne) préconisent l'usage de deux paires de gants. 59 des 63 pays (94%) précisent la nécessité de porter un masque de protection et 91% précisant l'usage de lunettes ou d'une visière de protection. Tous les pays préconisant l'utilisation de lunettes ou d'une visière de protection préconisent également l'usage d'un masque de protection. Cinq pays (Costa Rica, République Dominicaine, Birmanie, Portugal et Ukraine) n'ont pas précisé l'usage d'un type de masque de protection spécifique pour le traitement de patients non-COVID. Les masques chirurgicaux ont été recommandés dans 21 pays (33%) pour le traitement des patients non-COVID tandis que 44 pays (70%) recommandent l'usage de masques FFP2/N95 et 12 pays (19%) recommandent l'usage de masques FFP3.

Parmi les 21 pays recommandant l'usage des masques chirurgicaux, 10 suggèrent l'usage de masques FFP2/N95 si disponible. Neuf des 44 pays qui préconisent l'usage de masques FFP2 pour les patients non-COVID suggèrent l'usage de masques FFP3 si disponible. Seulement 19 documents précisent la nécessité d'un test d'ajustement des masques FFP2/3. L'utilisation de surblouses chirurgicales est conseillée dans 42 pays (67%) et celle des calots chirurgicaux dans 32 pays (51%), avec 21 pays (33%) recommandant l'usage de tabliers jetables et 11 pays (17%) recommandant également l'usage de surchaussures. Parmi les documents qui fournissent des recommandations pour le traitement des patients suspectés ou confirmés COVID-19 positive, la majorité (54%) recommande le même niveau de protection pour les masques de protection que pour les patients non-COVID, avec seulement 12 documents spécifiant que le niveau de masque de protection devrait être supérieur pour les patients COVID.

Mesures d'atténuation des aérosols lors de soins dentaires

Les mesures d'atténuation des aérosols lors d'un AGA comprennent l'utilisation de bain de bouche, l'utilisation de la digue dentaire et d'une aspiration à haut volume. 82% des documents recommandent l'usage d'un bain de bouche avant tout soin dentaire avec pour but de réduire la quantité de bio-aérosols pour les patients non-COVID. Les deux bains de bouche les plus couramment recommandés sont le peroxyde d'hydrogène (38 documents) et la povidone iodée (30 documents), avec plusieurs documents qui recommandent d'utiliser l'un ou l'autre. Trois documents recommandent l'usage de bain de bouche au chlorure de cétylpyridinium et trois autres recommandent l'usage d'un bain de bouche sans pour autant préciser quel type. 10 documents fournissent des références en lien avec l'utilisation de bains de bouche et tandis que le Paraguay et l'Afrique du Sud recommandent l'utilisation d'un bain de bouche, ils spécifient qu'il n'y a aucune preuve scientifique quant à leur efficacité.

L'utilisation de la digue dentaire est recommandée pour les patients non-COVID par 46 documents (73%), avec seulement six documents (10%) (Chine, France, Italie, Malaisie, Philippines et Afrique du Sud) fournissant des preuves scientifiques qui justifient ces recommandations

Tandis que l'utilisation d'une aspiration à haut volume est régulièrement un fait commun durant un soin dentaire, seulement 46 documents (73%) recommandent d'utiliser une aspiration puissante pour les patients non-COVID. Six documents (10%) (Chine, France, Italie, Malaisie, Philippines et Afrique du Sud) fournissent des preuves scientifiques qui justifient ces recommandations.

Mesures d'atténuation environnementales des aérosols

L'utilisation de la ventilation générale dans la salle de soin pour les patients non-COVID est mentionnée dans 33 des documents inclus (52%). Le conseil prodigué le plus fréquemment dans 15 documents qui mentionnent la ventilation est de s'assurer que la pièce est bien ventilée, en ouvrant les fenêtres sur l'extérieur et en utilisant l'air conditionné. Le document issu de l'Argentine recommande d'éteindre l'air conditionné tandis que d'autres documents indiquent qu'il peut être utilisé si le mode d'air recyclé est inactif. Six documents suggèrent l'usage d'une salle à pression négative ou d'une salle avec un flux d'air unidirectionnel alors que l'usage de filtration avec filtre HEPA est recommandé par le Guatemala, le Honduras, l'Inde, l'Italie, la Malaisie, le Paraguay, les Philippines, la Pologne et l'Afrique du Sud. Seul le Canada fournit des détails spécifiques liés aux changements d'air à l'heure en incluant un tableau détaillé de l'impact des différents paramètres de changement d'air à l'heure. Parmi les 33 documents fournissant des informations sur la ventilation des salles de soins, seulement six fournissent des références.

Période sans activité

Trente-trois des 63 documents (48%) mentionnent le besoin d'une période sans activité à la suite d'un AGA pour un patient non-COVID, avec seulement deux documents citant au moins une référence. Lorsque des durées spécifiques sont fournies, celles-ci différent entre 2 et 180 minutes. Les documents de huit pays (Belgique, Canada, Chine, Croatie, Angleterre, Malaisie, Malte, Irlande du Nord) fournissent des facteurs en faveur de la réduction de la durée de période sans activité. Ces facteurs incluent ouvrir les fenêtres, augmenter le volume de changement d'air à l'heure, utiliser un filtre HEPA ou une salle à pression négative et minimiser les AGA.

Parmi les documents qui offrent des recommandations pour la prise en charge de patients COVID, la plupart (21/30) recommandent les mêmes durées de période sans activité que lors de la prise en charge des patients non-COVID. Seulement 5 documents suggèrent que la période sans activité devrait être plus longue, avec le document canadien recommandant 3 heures si les informations sur le changement d'air à l'heure n'est pas disponible.

Conclusion

Cette revue rapide fournit une vue générale des recommandations internationales liées aux AGA et leur atténuation. Elle résume les éléments spécifiques identifiés dans les différents documents inclus et met en valeur certains messages clés pour aider à la rédaction de futures recommandations. Parmi ces documents internationaux, pour la plupart des recommandations, les références étaient limitées ou inexistantes.

Membres du groupe de travail

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|--------------------------------|--|
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Le groupe de travail pour l'élaboration de recommandations dentaire COVID-19 voudrait remercier et saluer la contribution des personnes mentionnées ci-dessous, pour leur conseils et leur aide pour l'accès aux documents de recommandation internationaux sans lesquels ce travail n'aurait pas été possible :

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; Paulo Melo, COVID-19 Task Team Chair, FDI World Dental Federation; Timothy Ricks, Chief Dental Officer, US

Public Health Service; James Taylor, Chief Dental Officer, Canada; Benoit Varenne, Dental Officer, World Health Organization. Merci également à Tif Qureshi pour avoir fourni des documents de recommandations internationaux.

Le groupe de travail pour l'élaboration de recommandations dentaire COVID-19 sont également reconnaissant pour l'aide et le soutien apporté par Shona Floate, University of Glasgow; Anne Littlewood, and Laura MacDonald from Cochrane Oral Health; David Felix, Postgraduate Dental Dean, NES et les collègues de NES's Clinical Effectiveness workstream: Samantha Rutherford; Douglas Stirling; Michele West; Linda Young.

Appendice 1. Actes générant des aérosols : Tableau résumé pays par pays

| Country | AGP details | COVID-19 status | Personal protective equipment | Procedural mitigation | Environmental mitigation | Fallow time | Linked evidence |
|--|--|--------------------|--|--|--|-----------------|-----------------|
| Country Argentina Source Ministry of Health - Ministerio de Salud Argentina COVID-19 Recomendaciones Para Odontologia Date of first publication 10/06/2020 Latest update No update https://www.fdiworlddent al.org/sites/default/files/ media/documents/covid- 19 recomendaciones p ara_odontologia.pdf | Definition Many of the dental procedures produce aerosols representing a potential route for the transmission of infectious diseases. List of AGP instruments and procedures High speed handpieces, slow speed drill, 3-in-1 syringe, powered scalers Permitted treatment Non COVID-19 patients: suggests emergency treatment should be prioritised but treatment is not limited to emergencies COVID-19 patients: suggests emergency treatment and avoiding AGPs as much as possible. Unclear if patients are treated in regular practice or a dedicated COVID-19 centre or hospital | COVID-19 | Face mask - surgical mask, or N95 or FFP2 if available Fit test required Goggles/face visor Surgical gown Disposable apron Face mask - N95 or FFP2 Fit test required Goggles/face visor Surgical gown Surgical gown Surgical cap/hat | Mouthwash - 30 seconds with Povidone- lodine (10%) of a concentration between 0.2 - 2%, or hydrogen peroxide (10 vol) half with warm water. Spit without rinsing High volume suction As non COVID-19 | General ventilation. AGPs procedures should be undertaken in closed places, especially in community clinics. Air conditioning is prohibited As non COVID-19 | As non COVID-19 | Yes |
| Country Australia Source Australian Dental Association | Definition COVID-19 is spread via respiratory droplets when an infected person sneezes or coughs, (within 1m) of | Non COVID-19 | Face mask - Fluid- resistant surgical mask that block particles of 3 microns or less Protective eyewear (reusable or disposable) | Treat under standard precautions Pre-procedural mouthwash | Social distancing in the waiting room Limit high-touch items that cannot be | Not reported | Yes |

| Country | AGP details | COVID-19 status | Personal protective equipment | Procedural mitigation | Environmental mitigation | Fallow time | Linked evidence |
|--|--|--------------------|---|--|--|--------------|-----------------|
| Date of first publication Various publication dates and updates https://www.ada.org.au/ Covid-19-Portal/Dental- Professionals | another or via contact routes, where the droplets land on a surface and are transferred by touch. There's a risk that airborne transmission may occur if the droplets are aerosolised when certain procedures are performed. List of AGP instruments and procedures Use of high-speed handpieces, 3-in-1 syringe, powered scalers, lasers Permitted treatment Non COVID-19: suggest taking standard precautions COVID-19: suggests AGPs are avoided for suspected COVID-19 patients. Urgent or emergency treatment only for confirmed patients in a dedicated COVID-19 centre or hospital | COVID-19 | conform to AS/NZS 1337 Face shields are an alternative to protective eyewear but do not protect from inhaled microorganisms and must be worn in conjunction with a surgical mask Surgical gown Disposable apron Face mask - Level 2/3 surgical mask or P2/N95 respirator Fit test required Protective eyewear (reusable or disposable) conform to AS/NZS 1337 Face shields are an alternative to protective eyewear but do not protect from inhaled microorganisms and must be worn in conjunction with a surgical mask Surgical gown Disposable apron | Rubber dam - Only provide treatment that does not generate aerosols or where aerosols are controlled by using dental dam High-level evacuation Pre-procedural mouthwash 1% hydrogen peroxide ABHR for patients | easily cleaned (e.g. Toys, Magazines) Confirmed cases: For provision of urgent/emergency treatment ensure airborne precautions which include treatment in a negative pressure room. Social distancing in the waiting room Limit high-touch items that cannot be easily cleaned (e.g. Toys, Magazines) | Not reported | |
| Country Austria | Definition Not reported List of AGP instruments and | Non COVID-19 | Face mask - Surgical mask Goggles/face visor | Mouthwash - 1% hydrogen peroxide | Regular general ventilation of the surgical room is advised | Not reported | No |

| Country | AGP details | COVID-19 status | Personal protective equipment | Procedural mitigation | Environmental mitigation | Fallow time | Linked evidence |
|---|--|--------------------|--|--|---|--|-----------------|
| Austrian Dental Chamber Date of first publication 03/04/2020 Latest update 04/05/2020 https://stmk.zahnaerztek ammer.at/zahnaerztinne n/informationen-corona- virus/ | procedures Not reported Permitted treatment Non COVID-19: Suggests providing care with no further specification COVID-19: Suggests providing care with no further specification | COVID-19 | Face mask - FFP1, FFP2, or FFP3 Goggles/face visor Surgical gown Surgical cap/hat | As non COVID-19 | As non COVID-19 | Not reported | |
| Country Belgium Source Conseil de l'Art Dentaire on behalf of the Service Public Fédéral de Santé Publique Date of first publication 19/04/2020 Latest update 24/05/20 | Definition Not reported List of AGP instruments and procedures Not reported Permitted treatment Non COVID-19: suggests providing care with no further specifications COVID-19: suggests | Non COVID-19 | Face mask - Surgical mask or FFP2 for patients with medical conditions at increased risk Goggles or face visor Surgical gown | Mouthwash - 1% hydrogen peroxide | Rubber dam High volume suction | Ensure room is well ventilated between appointments Fallow times can be mitigated by size of the room, number of doors and windows, wind and temperature, any General ventilation system available, any ventilator or airing system | Yes |
| https://5199.f2w.fedict.be /sites/default/files/docum ents/2020-04-19 covid- 19 modification 202005 24 - protocole soins dentaire s.pdf | treating patients in a dedicated COVID-19 centre or hospital | | Not reported | Not reported | Not reported | Not reported | |
| Country Bolivia Source College of Dentists of La Paz | Definition Not reported List of AGP instruments and procedures High speed handpieces, slow | Non COVID-19 | Double gloving Face mask - N95 or triple layer mask Goggles/face visor Surgical gown | Mouthwash - rinse with 1% hydrogen peroxide or a 0.2% povidone- iodine mouthwash for 1 minute, (after iodine allergy screening) Rubber dam | General ventilation Disinfect surfaces after treatment | 2 mins after disinfecting the room | No |

| Country | AGP details | COVID-19 status | Personal protective equipment | Procedural mitigation | Environmental mitigation | Fallow time | Linked evidence |
|--|--|--------------------|--|--|--|-----------------|-----------------|
| Date of first publication 01/05/2020 | speed drill, 3-in-1 syringe | | Surgical cap/hat Disposable apron | High volume suction | | | |
| Latest update No update https://www.fdiworlddent al.org/sites/default/files/ media/documents/protoc olo de bio- seguridad para la aten cion a pacientes y pre vencion del covid- 19 en clinicas y consul torios odontologicos.pdf | Permitted treatment Non COVID-19: suggests emergency treatment COVID-19: suggests emergency treatment only. COVID-19 patients should ideally be treated in a high level health institution (hospital) | COVID-19 | As non COVID-19 | As non COVID-19 | As non COVID-19 | As non COVID-19 | |
| Country Brazil Source Biosafety Working Group of the São Paulo Regional Dentistry Council Date of first publication 01/04/2020 | Definition Not reported List of AGP instruments and procedures High speed handpieces, surgical handpieces, slow speed drill, 3-in-1 syringe | Non COVID-19 | Face mask - FFP2 or N95 masks or superior. Do not use surgical masks Fit test required Goggles/face visor Surgical cap/hat Disposable apron | Mouthwash - 0.12% chlorhexidine digluconate; or, hydrogen peroxide 10 vol, diluted in aqueous solution (1%) Rubber dam High volume suction | Avoid any extra or unnecessary equipment | 15 minutes | No |
| Latest update No update http://www.crosp.org.br/uploads/arquivo/747df5ff5 05e7beff33c1a5ff5d6f12 a.pdf | Permitted treatment Non COVID-19: suggest providing care with no further specification. Treat all patients as suspected COVID-19 COVID-19: suggests providing care with no further specification | COVID-19 | As non COVID-19 | As non COVID-19 | As non COVID-19 | As non COVID-19 | |
| Country Bulgaria Source Recommendations/instru | Definition Not reported List of AGP instruments and | Non COVID-19 | Face mask - FFP2 or FFP3 mask depending on availability Goggles/face visor | Mouthwash - 1% hydrogen peroxide specific mouthwash not CHX | General ventilation | 60 minutes | No |

| Country | AGP details | COVID-19 status | Personal protective equipment | Procedural mitigation | Environmental mitigation | Fallow time | Linked evidence |
|--|---|------------------------|--|---|----------------------------|----------------------------|-----------------|
| ctions from the crisis | procedures | | Surgical gown | | | | |
| headquarters of the Bulgarian Dental Union | Not reported Permitted treatment | | Surgical cap/hat | | | | |
| Date of first publication 03/06/2020 Latest update No update https://bzs.bg/препоръки -инструкции-от- кризисния-ща/ | Non COVID-19: suggest providing care with no further specification. COVID-19: suggests providing care with no further specification | COVID-19 | As non COVID-19 | As non COVID-19 | As non COVID-19 | As non COVID-19 | |
| Country Burkino Faso Source Ordre National des Chirurgiens Dentistes du Burkina Ministère de la Santé Date of first publication Not reported Latest update Not reported | Definition Not reported List of AGP instruments and procedures Not reported Permitted treatment Non COVID-19: emergency treatment only COVID-19: emergency | Non COVID-19 COVID-19 | Face mask - Surgical mask or FFP2 Goggles/face visor Surgical gown – if available Surgical cap/hat Wear rubber boots As non COVID-19 | Mouthwash - hydrogen peroxide 1% or povidone-iodine solution 0.2% mouthwash the day before and/or on the day of treatment High volume suction As non COVID-19 | Not reported Not reported | Not reported Not reported | No |
| URL not available | treatment only. Unclear if COVID-19 patients are treated in regular practice or a dedicated COVID-19 centre or hospital | Non COVID-19 | Face mask - Level 2 or | Not reported | Not reported | Not reported | No |
| Country Canada Source Royal College of Dental Surgeons of Ontario COVID-19: Managing | Any dental procedure where aerosolised particles are expected to be generated by dental instrumentation | NOTI COVID-19 | Face mask - Level 2 or 3 surgical mask or N95 respirator Fit-test required Eye protection OR face shield | Not reported | not reported | Not reported | INO |

| Country | AGP details | COVID-19 status | Personal protective equipment | Procedural mitigation | Environmental mitigation | Fallow time | Linked evidence |
|---|---|--------------------|--|---|--|---|--------------------|
| Infection Risks During Inperson Dental Care Date of first publication 15/03/2020 Latest update 31/05/2020 https://www.rcdso.org/en-ca/rcdso-members/2019-novel-coronavirus/covid-19-managing-infection-risks-during-in-person-care | List of AGP instruments and procedures high-speed, low-speed and other rotary handpieces, powered scalers, and 3-in-1 syringes. Permitted treatment Non COVID-19: provide in-person care for all deferred, non- essential, and elective services, in addition to | COVID-19 | Protective gown (optional) Face mask - N95 respirator Fit-test required Eye protection AND face shield Protective gown | Must avoid AGPs whenever possible and use the lowest aerosol- generating options when necessary. Mouthwash - 1% - 1.5% hydrogen peroxide or 1% povidone-iodine for 60 seconds (acknowledges the lack | The operatory must be left empty (with the door closed) to permit the clearance and/or settling of aerosols. length of time that the operatory must be left empty (the fallow time) is determined by the | Depends on ACH but if information not available minimum fallow period is 3 hrs. | |
| | emergency and urgent care. COVID-19: patients who need urgent and emergency care that cannot be delayed | | | of documented evidence) Rubber Dam High volume suction | air changes per hour (ACH). The aim is to achieve 99.9% removal of airborne contaminants (Detailed ACH table provided) | | |
| Country Chile Source Division of Disease Prevention and Control Oral Health Department | Definition Aerosol-generating procedures in dental practice are those that involve the use of high- speed handpieces, 3- in-1 syringes and powered scalers | Non COVID-19 | Face mask - FFP2 or N95 Fit test required Goggles/face visor Surgical gown | Mouthwash - 1% hydrogen peroxide for 30 seconds prior to dental care Rubber dam | Avoid any extra or unnecessary equipment | Not reported | No |
| Date of first publication Not reported Latest update Not reported http://www.colegiodentist as.cl/inicio/wp- content/uploads/2020/04 /orientaciones-atencion- | List of AGP instruments and procedures High speed handpieces, 3-in-1 syringe, powered scalers Permitted treatment Non COVID-19: | COVID-19 | As non COVID-19 | As non COVID-19 | Treat suspected or confirmed COVID- 19 patients in an isolated room that limits filtration of air to the rest of the clinic | Not reported | |

| Country | AGP details | COVID-19 status | Personal protective equipment | Procedural mitigation | Environmental mitigation | Fallow time | Linked evidence |
|---|---|--------------------|--|--|---|---------------|-----------------|
| odontologica-covid- 19.pdf | suggests providing care with no further specification COVID-19: Suggests emergency treatment only. Unclear if patients are treated in regular practice or a dedicated COVID-19 centre or | | | | | | |
| Country China Source Chinese Stomatological Association - Chinese Response to COVID-19 in Dental Field Date of first publication Not reported Latest update 06/05/2020 URL not available | Definition During dental practice, large quantities of droplets and aerosols can be produced through the oral power device from patients' saliva, blood and secretions, which poses high risk of a disease transmission environment between dentists and patients List of AGP instruments and procedures High speed handpieces, powered scalers Permitted treatment Non COVID-19: suggests emergency treatment only COVID-19: suggests AGPs are not provided | Non COVID-19 | Face mask - N95, N99 Goggles/face visor Surgical gown (disposable isolation suits) Disposable surgical cap/hat | Mouthwash – type not specified. Avoid using the spittoon. Instead, instruct the patient to cover mouth with the disposable mouthwash cup and then spit mouthwash into the cup, then the nurse should immediately use strong suction to reduce the generation of droplets and aerosols Rubber dam High volume suction | If spatter exists during practice, it should be performed in an independent room Maintain airflow and make fresh air infuse ceaselessly indoor by opening a window or using air purification device Twice daily (noon and end of day), disinfection by irradiation with ultraviolet lamp for 30-60 minutes, then open the window for General ventilation for at least 30 minutes Surface disinfection after each treatment. 500 mg/L-1000 mg /L chlorine-containing disinfectant, (non- | 30-90 minutes | Yes |

| Country | AGP details | COVID-19 status | Personal protective equipment | Procedural mitigation | Environmental mitigation | Fallow time | Linked evidence |
|---|---|--------------------|---|--|---|--------------|-----------------|
| | | | | | corrosion resistant surfaces) or, 75% ethanol and disposable disinfection wipes | | |
| | | COVID-19 | Not reported | Not reported | Not reported | Not reported | |
| Country Colombia Source Ministry of Health and Social Protection (Ministerio de Salud y Protección Social Bogotá) Date of first publication | Definition Not reported List of AGP instruments and procedures High speed handpieces, slow speed drill, 3-in-1 syringe | Non COVID-19 | Face mask - FFP2 or N95 respirator Fit test required Goggles/face visor Surgical gown Surgical cap/hat Disposable apron | Mouthwash - chlorhexidine (0.2%) or Povidone lodide (2.0%) or hydrogen peroxide (1.5%) for one to two minutes Rubber dam | Not reported | Not reported | No |
| May 2020 Latest update No update https://www.minsalud.go v.co/Ministerio/Institucion al/Procesos%20y%20pro cedimientos/GIPS31.pdf | lay 2020 atest update lo | COVID-19 | As non COVID-19 | As non COVID-19 | Not reported | Not reported | |
| Country Costa Rica Source Ministry of Health (Ministerio de Salud Costa Rica) Date of first publication | Definition Not reported List of AGP instruments and procedures High speed handpieces, surgical handpieces, slow | Non COVID-19 | Face mask (type not reported) Goggles/face visor Surgical gown Surgical cap/hat | Mouthwash - pre- procedure mouthwash with 1% hydrogen peroxide (10 cubic centimetres diluted in one litre of water) Rubber dam | Not reported | Not reported | Yes |
| 27/03/2020 Latest update | speed drill, 3-in-1 syringe | COVID-19 | Not reported | Not reported | Not reported | Not reported | |

| Country | AGP details | COVID-19 status | Personal protective equipment | Procedural mitigation | Environmental mitigation | Fallow time | Linked evidence |
|---|---|--------------------|---|---|--|--------------|-----------------|
| No update https://www.ministeriode salud.go.cr/sobre minist erio/prensa/docs/lineami entos odontologos v2 2 7032020.pdf Country Croatia Source Croatian Chamber of Dental Medicine Date of first publication 04/05/2020 Latest update No update https://www.hkdm.hr/nov ost/1836/Smjernice-i- protokoli-za-otvaranje-i- rad-ordinacija-dentalne- medicine-i-dentalnih- laboratorija | Permitted treatment Non COVID-19: suggest providing care with no further specification COVID-19: Suggests emergency treatment only in a dedicated COVID-19 centre or hospital Definition Not reported List of AGP instruments and procedures High speed handpieces, 3-in-1 syringes, powered scalers, Permitted treatment Non COVID-19: suggests providing care with no further specification COVID-19: Suggests providing care with no further specification. Unclear if patients are | Non COVID-19 | Face mask - N95 or FFP2 Goggles/face visor Surgical cap/hat | Procedures that generate large amounts of aerosols (e.g. high speed handpieces, 3-in-1 syringes, powered scalers) should be avoided Mouthwash - chlorhexidine 0.20% solution rinse for 60 s and gargle for 15 s Hydrogen peroxide (H ₂ O ₂) 1% (one percent hydrogen peroxide) - gargling for 15 seconds and rinsing for 30 seconds Rubber dam | Keep windows open to ventilate the area and / or turn on General ventilation Disinfect clinic with UV air disinfection system if fitted (wavelength 254 nm). Protect materials and liquids sensitive to UV radiation. Use only at night when there are no people in the premises | Not reported | No |
| | treated in regular practice or a dedicated COVID-19 centre or hospital | COVID-19 | Face mask - FFP3 Goggles/face visor Surgical cap/hat Shoe covers | Not reported | Not reported | Not reported | |
| Country Denmark Source SUNDHEDSSTYRELSE N, Danish Health Board | Definition Aerosols are formed by procedures using instruments with water and air List of AGP instruments and | Non COVID-19 | Face mask - The mask must retain at least 98% of microorganisms (type II), but does not have to be R type. Must be changed regularly and | In order to prevent the spread of infection from asymptomatic patients requiring an AGP, a test for SARS-CoV-2 may be prescribed in advance of the procedure. The | At the end of treatment, the treatment room must be briefly ventilated before the next patient | Not reported | No |

| Country | AGP details | COVID-19 status | Personal protective equipment | Procedural mitigation | Environmental mitigation | Fallow time | Linked evidence |
|--|---|--------------------|--|--|--------------------------|--------------|--------------------|
| Date of first publication 18/04/20 Latest update 22/04/20 https://www.sst.dk/da/ud givelser/2020/haandterin g-af-covid-19 -kritisk-funktioner-i-tandplejen | Procedures High speed handpieces, slow speed drill, 3-in-1 syringe, powered scaler Permitted treatment Suggests testing every patient for COVID-19 before providing care and postponing any appointment while the patient is COVID-19 positive | | always after each patient Goggles/face visor - Visor or goggles can be multiple use, cleaned and disinfected (according to the manufacturer's instructions) between each patient. In case of supply difficulties, full-face visors can be used alone (except for surgical procedures). Ordinary glasses and magnifying glasses can be used if they are designed for protection. Surgical gown - long-sleeve disposable coat and long-sleeve cuff | procedure must be scheduled so that test responses are available before performing the AGP Rubber dam | | | |
| | | COVID-19 | Not reported | Not reported | Not reported | Not reported | |
| Country Dominican Republic Source Ministry of Health Date of first publication Not reported Latest update Not reported https://www.fdiworlddent al.org/sites/default/files/ media/documents/recom endaciones para la gui | Definition Not reported List of AGP instruments and procedures Slow speed drill, 3-in-1 syringe, intra-oral radiography Permitted treatment Non COVID-19: suggests providing care with no further specification | Non COVID-19 | Face masks – type not specified but should be according to treatment Fit test required Goggles/face visor Surgical gown Surgical cap/hat Disposable apron Shoe covers | Mouthwash - 1% hydrogen peroxide mouthwash, 0.2% Povidone iodine or cetylpyridinium or any other effective mouthwash. Keep in mouth 30 seconds and spit High volume suction | As pan COVID 10 | 5-10 minutes | No |
| a de apertura de los s ervicios odontologicos | COVID-19: suggests providing care with no | COVID-19 | As non COVID-19 | As non COVID-19 | As non COVID-19 | | |

| Country | AGP details | COVID-19 status | Personal protective equipment | Procedural mitigation | Environmental mitigation | Fallow time | Linked evidence |
|--|--|--------------------|---|---|--|-----------------|-----------------|
| en la republica dominic ana debido a la pande mia covid-19.pdf | further specification. No restriction for COVID-19 patients except triage prior to treatment to identify higher risk and take precautions. | | | | | | |
| Country Ecuador Source Ministry of Health Date of first publication 28/05/2020 Latest update No update https://www.fdiworlddent al.org/sites/default/files/ media/documents/protoc olo para atencion odon tologica durante la em ergencia sanitaria por covid - 19.pdf | Definition Avoid procedures that involve the generation of aerosols, that is particles generated while using a manual cutting instrument, a rubber dam, low-speed rotating instruments, little irrigation or refrigeration in high-speed rotating instruments, avoiding the use of air-spray from the syringe triple and replace it with drying cotton swabs or gauze. List of AGP instruments and procedures High speed handpieces, surgical handpieces, slow speed drill, 3-in-1 syringe, powered scaler, intra-oral radiography Permitted treatment Non COVID-19: suggests providing care with no further specification COVID-19: Suggests | Non COVID-19 | Double gloving Face mask - N95 or equivalent Fit test required Goggles/face visor Surgical gown Surgical cap/hat Disposable apron As non COVID-19 | Mouthwash – pre- procedure 0.2% Povidone or 1% hydrogen peroxide for 30 seconds Rubber dam High volume suction As non COVID-19 | General/natural ventilation Avoid jewellery and accessories As non COVID-19 | As non COVID-19 | No |
| | providing care with no | | | | | | |

| Country | AGP details | COVID-19 status | Personal protective equipment | Procedural mitigation | Environmental mitigation | Fallow time | Linked evidence |
|---|---|--------------------|---|--|--------------------------|--|-----------------|
| | further specification. Unclear if patients are treated in regular practice or a dedicated COVID-19 centre or hospital | | | | | | |
| Country Estonia Source Ministry of Health Date of first publication 07/02/2020 Latest update 21/05/2020 URL not available | Definition Not reported List of AGP instruments and procedures Not reported Permitted treatment Non COVID-19: suggests providing care with no further specification COVID-19: Suggests | Non COVID-19 | Face mask - Surgical mask | Mouthwash – one minute mouth rinse prior to starting any dental procedure, such as mouth rinses containing 1% hydrogen peroxide or 0.2% - 1% Povidone or 0.05% - 0.1% cetylpyridinium chloride 4 handed dentistry with high volume suction recommended | Not reported | Starting from the end of the patient appointment 45 min | No |
| | AGPs are not provided | COVID-19 | Not reported | Not reported | Not reported | Not reported | |
| Country Finland Source Sector of administration of the Ministry of Social Affairs and Health Date of first publication Not reported Latest update | Definition Not reported List of AGP instruments and procedures High speed handpieces, slow speed drill with air and water cooling, 3-in-1 syringe, powered | Non COVID-19 | Face mask - ff AGPs used, FFP2 or FFP3 respirator or surgical mouthpiece (class 2R) Full face visor can be used instead of goggles Surgical cap/hat | Mouthwash - 1-1.5% hydrogen peroxide spray or iodine Betadine (10 mg/ml) spray for 1 minute Rubber dam High volume suction | Not reported | Not reported | Yes |
| https://thl.fi/fi/web/infektio taudit-ja- rokotukset/taudit-ja- torjunta/taudit-ja- taudinaiheuttajat-a- o/koronavirus-covid- | scalers Permitted treatment Non COVID-19: suggests providing care with no further specification | COVID-19 | Face mask - FFP2 or FFP3 Goggles with side protection, face shield | PTG or KKTT examination is used for imaging. Intraoral images are taken only if PTG or KKTT imaging is not possible. | Not reported | Following aerosol generation, personnel remaining in the room must wear a respirator for at least 30 minutes | |

| Country | AGP details | COVID-19 status | Personal protective equipment | Procedural mitigation | Environmental mitigation | Fallow time | Linked evidence |
|---|---|------------------------|--|---|--|---|--------------------|
| 19/ohje-suun- terveydenhuollon- yksikoille-covid-19- epidemian-aikana | COVID-19: Suggests providing care with no further specification. Unclear if patients are treated in regular practice or a dedicated COVID-19 centre or hospital | | Surgical gown – A long- sleeved disposable liquid-impervious jacket Surgical cap/hat | | | after the end of treatment. | |
| Country France Source Haute Autorité de Santé (HAS) Date of first publication 14/05/2020 Latest update 25/05/2020 https://www.has-sante.fr/jcms/p_3184961 /fr/mesures-et-precautions-essentielles-lors-des-soins-bucco-dentaires-apres-le-deconfinement | Definition Not reported List of AGP instruments and procedures High-speed handpieces, 3-in-1 syringe, powered scaling, air polishers Permitted treatment Non COVID-19: suggests providing care with no further specification COVID-19: Suggests providing care with no further specification. Unclear if patients are treated in regular practice or a dedicated COVID-19 centre or hospital | Non COVID-19 COVID-19 | Face mask - FFP2 Goggles/face visor Surgical gown for AGPs where rubber dam can't be used, surgical extraction or ultrasonic scale (high risk of body fluid projections) Surgical cap/hat Disposable apron for AGPs with rubber dam or conservative treatment (low risk of body fluid projections) Shoe covers As non COVID-19 but shoe covers not advised | Dental air polishing is not advised The dentist should consider the most efficient way to reduce aerosols Contra-angle should be preferred to turbine Use water cooling system to a minimum Mouthwash Rubber dam High volume suction As non COVID-19 | General ventilation Do not use AGPs in a room without windows unless having a fresh air handling unit (FAHU) No consensus regarding air conditioning systems | 15 minutes window opened and door closed As non-COVID-19 | Yes |
| Country Germany Source Institut der Deutschen Zahnärzte Date of first publication Not reported | Definition Not reported List of AGP instruments and procedures Not reported Permitted treatment Non COVID-19: | Non COVID-19 | Face mask - surgical mask Goggles/face visor | Only use of water or air on 3-in-1 syringes, use of slow speed Mouthwash - 30ml 1.5% hydrogen peroxide (or equivalent) for 1 minute before treatment | Not reported | General ventilation of clinical room for 30 mins | No |

| Country | AGP details | COVID-19 status | Personal protective equipment | Procedural mitigation | Environmental mitigation | Fallow time | Linked evidence |
|---|---|--------------------|---|--|---|---|-----------------|
| Latest update 24/04/2020 (version 3) https://www.idz.institute/ publikationen/sonstiges/s ystem-von- standardvorgehensweise n-fuer-zahnarztpraxen- waehrend-der- coronavirus- pandemie.html | suggests providing care avoiding AGPs using low speed instrumentation COVID-19: Suggests providing care avoiding AGPs using low speed instrumentation. Unclear if patients are treated in regular practice or a dedicated COVID-19 centre or hospital | COVID-19 | Face mask - FFP2 Goggles/face visor Surgical gown Surgical cap/hat Shoe covers | Rubber dam High volume suction As non COVID-19 | Not reported | As non COVID-19 | |
| Country Greece Source Instructions for dental employees in dentists and patients Date of first publication Not reported Latest update | Definition Not reported List of AGP instruments and procedures Not reported Permitted treatment Non COVID-19: suggests providing care with no further | Non COVID-19 | Face mask - FFP2/FFP3 or N95/KN95 for up to 8-10 hrs Fit test required Surgical cap/hat Shoe covers | Mouthwash – 1% Peroxide for 30 seconds Rubber dam High volume suction | Not reported | Not reported | No |
| Not reported https://www.fdiworlddent al.org/sites/default/files/ media/documents/odigie s_pros_odontiatroys_erg azomenoys_se_odontiatr eia_kai_astheneis_0.pdf | specification COVID-19: Suggests providing care with no further specification. Unclear if patients are treated in regular practice or a dedicated COVID-19 centre or hospital | COVID-19 | As non COVID-19 | As non COVID-19 | Not reported | Not reported | |
| Country Guatemala Source Estomatologic Callege of Guatemala | Definition Dental treatments involve the use of equipment that produces aerosols (drops of saliva and blood less than 5 | Non COVID-19 | Face mask - N95 or FFP2 Fit test required Goggles/face visor Surgical gown | Mouthwash - 1% hydrogen peroxide or 0.2% Povidone lodine for 1 minute Rubber dam | General ventilation The use of air renewal or filtering devices using original HEPA filters or by plasma they can also represent | Fallow period recommended but time not reported | Yes |

| Country | AGP details | COVID-19 status | Personal protective equipment | Procedural mitigation | Environmental mitigation | Fallow time | Linked evidence |
|--|---|--------------------|---|---|---|--------------|-----------------|
| Date of first publication 01/05/2020 Latest update No update https://www.fdiworlddent al.org/sites/default/files/ media/documents/protoc olo de bioseguridad od ontologica con enfasis en covid-19.pdf | micrometers in diameter that, in a suspected or positive case, are loaded with viruses List of AGP instruments and procedures High speed handpieces, surgical handpieces, slow speed drill, 3-in-1 syringe, powered scaler, intra-oral radiography Permitted treatment Non COVID-19: suggests emergency treatment only COVID-19: Suggests emergency treatment only. Unclear if patients are treated in regular practice or a dedicated COVID-19 centre or hospital | COVID-19 | Surgical cap/hat Disposable apron Shoe covers | High volume suction | a measure of contagion control cross between patient and patient. The air conditioning should ideally be turned off, unless it has a filter and extractor negative pressure room Air disinfection treatments by air using ozone or rays type C ultraviolet (UV-C), although effective against other coronaviruses have not been studied against SARS-CoV-2. High doses, could be harmful. The room should be vacated during use. Follow the manufacturer's recommendations in each case. If using UV-C sources, the complete coverage of all surfaces must be ensured Avoid jewellery and accessories Not reported | Not reported | |
| Country Honduras | Definition Not reported | Non COVID-19 | Face mask - N95 or | Mouthwash - 1% hydrogen peroxide or | General ventilation - HEPA filters and | · | Yes |
| | List of AGP instruments and | | Goggles/face visor | 0.2% Povidone Iodine or water with salt | negative pressure room | | |

| Country | AGP details | COVID-19 status | Personal protective equipment | Procedural mitigation | Environmental mitigation | Fallow time | Linked evidence |
|---|--|--------------------|---|---|--|--------------|-----------------|
| Source College of Dental Surgeons of Honduras Date of first publication Not reported Latest update | procedures Not reported Permitted treatment Non COVID-19: suggests providing care with no further | | Surgical gown Surgical cap/hat Disposable apron Shoe covers | | Avoid jewellery and accessories | | |
| Not reported http://www.cop.org.pe/wp-content/uploads/2020/04 /PROTOCOLO-DE-BIOSEGURIDAD-PARA-EL-CIRUJANO-DENTISTA.pdf | specification COVID-19: unclear if patients are treated | COVID-19 unclea | r if patients are treated | | | | |
| Country India Source Dental Council of India Date of first publication 05/07/2020 Latest update No update http://www.dciindia.gov.i n/Admin/NewsArchives/ Dental%20Clinics%20Pr otocols%20Final.pdf | Definition Not reported List of AGP instruments and procedures Not reported Permitted treatment Non COVID-19: suggests providing care with no further specification COVID-19: Suggests treating patients in a dedicated COVID-19 centre or hospital | Non-COVID | Recommended during all aerosol (preferably completely avoid) and non-aerosol based dental procedures, if carried out. Face mask - triple layer surgical mask and N95 respirator Goggles/face visor (both to be used, fitting goggles with a soft tissue seal) Disposable gowns (change daily) Suitable head caps Shoe covers | Mouthwash - Preoperative 1% hydrogen peroxide. Do not use a spittoon. Use the same sink that had been used for washing the hands and face Rubber dams and high- volume saliva ejectors High volume suction | General ventilation - If possible, use directional airflow, such as from fans, to ensure that air moves through staff work areas before patient treatment areas – not the reverse. A qualified industrial hygienist, General ventilation engineer, or other professionals can help ensure that General ventilation removes, rather than creates, workplace hazards. Fumigate clinics and other areas at the end of the day as per manufacturer's instructions based on the type and | Not reported | No |

| Country | AGP details | COVID-19 status | Personal protective equipment | Procedural mitigation | Environmental mitigation | Fallow time | Linked evidence |
|---|--|--------------------|---|--|---|---|-----------------|
| | | | | | area of the dental clinical room. Fumigation is done on daily basis in clinical or high contact areas and biweekly in nonclinical or low contact areas. | | |
| | | COVID-19 | As non COVID-19 except FFP3 instead of triple layer surgical mask | As non COVID-19 | As non COVID-19 | Not reported | |
| Country Ireland Source Irish Dental Association Date of first publication Not reported Latest update 15/05/2020 | Definition Not reported List of AGP instruments and procedures Not reported Permitted treatment Non COVID-19: suggests providing | Non COVID-19 | Face mask - FFP2 Fit test required Eye protection Disposable apron Surgical cap/hat and shoe covers not recommended | Mouthwash not recommended Rubber dam High volume suction | Not reported | Room clearance time after AGP is not required unless a patient has known or suspected COVID-19 | No |
| https://www.hpsc.ie/a-z/respiratory/coronavirus/novelcoronavirus/guidan ce/infectionpreventionan dcontrolguidance/dentals ervices/Guidance-ManagingInfectionRisk-DentalServices-COVID19.pdf | care with no further specification COVID-19: Suggests providing care with no further specification. Unclear if patients are treated in regular practice or a dedicated COVID-19 centre or hospital | COVID-19 | As non COVID-19 | As non COVID-19 | Increased General ventilation by opening window or mechanical method. | 60 minutes after an AGP is performed on a patient with known or suspected COVID-19 in a room that is not mechanically ventilated the room should be vacated for 60 minutes after completion of treatment before cleaning commences. | |
| Country Italy | Definition Not reported but refers | Non COVID-19 | Face mask - FFP2 Goggles and face visor | Minimise procedures that can produce aerosols. Prioritise minimally invasive | Shoes must be cleaned and | 10-15 minutes | Yes |

| Country | AGP details | COVID-19 status | Personal protective equipment | Procedural mitigation | Environmental mitigation | Fallow time | Linked evidence |
|--|---|------------------------|--|--|---|----------------------------|--------------------|
| Source All major Italian dental associations – available from the Italian government website Date of first publication 30/05/2020 Latest update No update http://www.salute.gov.it/portale/news/p3 2 1 1 1 .jsp?lingua=italiano&men u=notizie&p=dalminister o&id=4835 | to published protocols for AGPs List of AGP instruments and procedures Not reported Permitted treatment Non COVID-19: suggests providing care with no further specification COVID-19: Suggests providing care with no further specification. Minimise procedures that can produce aerosols. Prioritise minimally invasive restorative procedures (hand instruments only). Unclear if patients are treated in regular practice or a dedicated COVID-19 centre or hospital | COVID-19 | As non COVID-19 Reported that there is no evidence that double gloving is effective for the management of suspected or confirmed cases | restorative procedures (hand instruments only). Mouthwash - hydrogen peroxide solution 1% or Povidone-iodine 0.2% for 1 minute followed by another mouthwash with chlorhexidine 0.2-0.3% for 1 minute Rubber dam High volume suction As non COVID-19 | disinfected at the end of the day Natural General ventilation/air renovation for 10-15 minutes. If air conditioning is used, filters need to be changed once a week As non COVID-19 | Not reported | |
| Country Kenya Source Ministry of Health, Director of Healthcare Services, Oral Health Services Date of first publication 24/03/2020 Latest update No update https://www.health.go.ke/wp- | Definition Partially List of AGP instruments and procedures 3-in-1 syringe Permitted treatment Non COVID-19: suggests emergency treatment only COVID-19: Suggests emergency treatment only. Unclear if patients are treated in regular | Non COVID-19 COVID-19 | Double gloving Face masks - N95 for hospital staff Face shield Disposable apron Waterproof footwear As non COVID-19 | Rubber dam High volume suction Rubber dam High volume suction | Not reported Not reported | Not reported Not reported | No |

| Country | AGP details | COVID-19 status | Personal protective equipment | Procedural mitigation | Environmental mitigation | Fallow time | Linked evidence |
|---|---|------------------------|--|---|--|---|-----------------|
| content/uploads/2020/06 /Guidelines-for-Dental- Practicce-with-respect- to-COVID-19- Pandemic.pdf | practice or a dedicated COVID-19 centre or hospital | | | | | | |
| Country Kosovo Source Practical guidelines for dentistry professionals in the private sector during the COVID-19 virus pandemic Date of first publication Not reported Latest update Not reported http://osk-ks.org/wp-content/uploads/2020/05 /Rekomandimet-e-OSK-per-ordinancat-private-1.pdf | Definition Not reported List of AGP instruments and procedures High speed handpieces, 3-in-1 syringe, powered scaler Permitted treatment Limit use of AGPs Non COVID-19: suggests providing care with no further specification COVID-19: Suggests providing care with no further specification. Unclear if patients are treated in regular practice or a dedicated COVID-19 centre or hospital | Non COVID-19 COVID-19 | Face mask - N95 Goggles/face visor Surgical gown/protective clothing Shoe covers recommended for patients on entering clinic As non COVID-19 | Mouthwash - 1% hydrogen peroxide for 30 seconds Rubber dam High volume suction As non COVID-19 | General ventilation - natural ventilation avoid use of air conditioning As non COVID-19 | Not reported Not reported | No |
| Country Malaysia Source Malaysian Dental Association Safety Advisory to Dental Practitioners during the current Concern of COVID - 19 Infection in the initial relaxation | Definition Not reported List of AGP instruments and procedures Not reported Permitted treatment Non COVID-19: suggests providing | Non COVID-19 | Face mask - surgical masks and N95 Goggles/face visor Surgical gown (waterproof) Surgical cap/hat | Mouthwash - 1% hydrogen peroxide or 0.2% Povidone preoperative antimicrobial mouthwash Rubber dam High volume suction | Improve General ventilation in the dental surgery: opening windows, General ventilation fan, air cleaner, HEPA Room Filter Surface disinfection procedures with 62-71% ethanol, 0.5% hydrogen peroxide | There is a need to observe a reasonable turnover time between patient and disinfection of clinical contact surfaces | Yes |

| Country | AGP details | COVID-19 status | Personal protective equipment | Procedural mitigation | Environmental mitigation | Fallow time | Linked evidence |
|--|--|--------------------|--|--|--|---|-----------------|
| phase of Movement Control Order Date of first publication Not reported Latest update 01/05/2020 https://mda.org.my/home /wp- content/uploads/2020/05 /MDA advisory COVID1 9 relaxation phase MC O.pdf | care with no further specification COVID-19: Suggests providing care with no further specification. Unclear if patients are treated in regular practice or a dedicated COVID-19 centre or hospital | COVID-19 | As non COVID-19 | As non COVID-19 | or 0.1% sodium hypochlorite. Other biocidal agents such as 0.05-0.2% benzalkonium chloride have also been suggested but were reported by some to be less effective As non COVID-19 | As non COVID-19 | |
| Country Malta Source Office for the Deputy Prime Minister. Ministry for Health Date of first publication Jun-20 Latest update No update https://deputyprimeminist er.gov.mt/en/health- promotion/covid- 19/Documents/mitigation -conditions-and- guidances/Guidance_De ntal- Practices 12Jun20.pdf | Definition Not reported List of AGP instruments and procedures High and slow speed handpieces, powered scalers, 3-in-1 syringes, gagging/retching due to intra-oral radiography or an infected patient coughing Permitted treatment Non COVID-19: suggests providing care with no further specification COVID-19: Suggests providing care with no further specification. Unclear if patients are treated in regular practice or a dedicated | Non COVID-19 | PPE requirements stratified based on low medium and high risk procedures. Face mask - N95 or other respirators that offer a higher level of protection should be used. If not available, a combination of a surgical mask and full face shield/visor should be used. Goggles/full face visor Surgical cap/hat for medium risk procedures Disposable apron Shoes should be clinical shoes which are kept on premises and disinfected after every use, if not disposable shoe covers should be worn. | Mouthwash, If AGP 1% hydrogen peroxide, 0.2% Povidone or a combination of Chlorhexidine (0.5-0.12%) + CPC (0.01-1%) rinse prior to treatment. Rubber dam High volume suction | General ventilation - Keep windows open during procedure if no other means of General ventilation. Ensure space is well ventilated. Windows must be closed if there is an air purification system in place which is turned on. Consider the use of upper-room ultraviolet germicidal irradiation as an adjunct to higher General ventilation and air cleaning rates | 20 minutes to keep the window open after procedure prior to commencing disinfection and reprocessing of the clinical area. If no General ventilation of windows, 30 minutes. If air purification offers 6 air changes hourly, clinic can be disinfected after 15 minutes of resting time. | No |

| Country | AGP details | COVID-19 status | Personal protective equipment | Procedural mitigation | Environmental mitigation | Fallow time | Linked evidence |
|--|--|--------------------|--|---|--|-----------------|--------------------|
| | COVID-19 centre or hospital | COVID-19 | Face mask - N95 or other high level respirator | | Schedule patient for last appointment of the day and clean | Not reported | |
| | | | Goggles with side protection, face visor | | surfaces after the patient is dismissed and before first | | |
| | | | Surgical gown covering full length of arms | | patient of the morning with Sodium | | |
| | | | Surgical cap/hat | | Hypochlorite | | |
| Country Mexico Source Ministry of Health | Definition Not reported List of AGP instruments and | Non COVID-19 | Face mask - N95 Goggles/face visor Surgical gown | Mouthwash (type not reported) | Not reported | Not reported | No |
| Date of first publication 21/05/2020 Latest update 21/05/2020 https://www.fdiworlddent al.org/sites/default/files/media/documents/recomendaciones para la practica odontologica antecovid-24.pdf | procedures High speed handpieces, 3-in-1 syringe Permitted treatment Non COVID-19: emergency treatment only COVID-19: emergency treatment only. Patients can be treated in practice with appropriate PPE, otherwise patients must be treated in a designated COVID-19 centre or hospital | COVID-19 | Face mask - N95 Goggles/face visor Surgical gown Shoe covers | As non COVID-19 | Not reported | Not reported | |
| Country Montenegro Source | Definition Not reported List of AGP | Non COVID-19 | Face mask - N95 /FFP2 Goggles/face visor | Mouthwash - 1% hydrogen peroxide or Povidone iodine | Not reported | 60 minutes | No |
| Dental Chamber of Montenegro Protocol for providing dental treatment during the | instruments and procedures Not reported | COVID-19 | As non COVID-19 | As non COVID-19 | Not reported | As non COVID-19 | |
| COVID-19 epidemic | Permitted treatment Non COVID-19: | | | | | | |

| Country | AGP details | COVID-19 status | Personal protective equipment | Procedural mitigation | Environmental mitigation | Fallow time | Linked evidence |
|--|---|---|---|--|---------------------------|-----------------|-----------------|
| Date of first publication Not reported Latest update Not reported https://www.fdiworlddent al.org/sites/default/files/ media/documents/protok ol_za_pruzanje_stomatol oskog_lijecenja_tokom epidemije_covid- 19_0.pdf | suggests providing care with no further specification COVID-19: Suggests providing care with no further specification. Unclear if patients are treated in regular practice or a dedicated COVID-19 centre or hospital | | | | | | |
| Country Morocco Source Ordre national des médecins dentists du Maroc Date of first publication 21/05/2020 Latest update 21/05/2020 Definition Not reported List of AGP instruments and procedures High speed handpieces, 3-in-1 syringe, powered scaling, air polishers Permitted treatment Non COVID-19: | Non COVID-19 | Face mask - FFP2/N95/KN95 Goggles/face visor Surgical gown - for treatments with high risk of body fluid projections Disposable apron - for treatments with high risk of body fluid projections | Use slow speed drill instead of high speed handpieces. Limit the water cooling system to a minimum when using handpieces Mouthwash - 1% hydrogen peroxide or 0.2% Povidone-iodine Rubber dam High volume suction | No AGP in treatment room window unless adequate General ventilation available Air cooling system should be limited when AGPs are performed | 15 mins following AGPs | No | |
| https://drive.google.com/f ile/d/1x8n1etxPIVI_rq7_ Z7oG_wiQIHq2BaB3/vie w | suggests providing care with no further specification COVID-19: Suggests providing care with no further specification. Unclear if patients are treated in regular practice or a dedicated COVID-19 centre or hospital | COVID-19 | As non COVID-19 | As non COVID-19 | As non COVID-10 | As non COVID-19 | |
| Country Mozambique | Definition Not reported | Non COVID-19 | Face mask - N95 or FFP2 Goggles/face visor | Mouthwash - 1% hydrogen peroxide or 0.2% Povidone lodine or water with salt | Not reported | Not reported | No |

| Country | AGP details | COVID-19 status | Personal protective equipment | Procedural mitigation | Environmental mitigation | Fallow time | Linked evidence |
|--|--|--------------------|---|--|---|--------------|-----------------|
| Source | List of AGP | | | Rubber dam | | | |
| Ministry of Health Date of first publication 20/03/2020 | instruments and procedures Surgical hand pieces and powered scalers | COVID-19 | As non COVID-19 | As non COVID-19 | As non COVID-19 | Not reported | |
| Latest update No update https://www.fdiworlddent al.org/sites/default/files/ media/documents/protoc | Permitted treatment Non COVID-19: suggests providing care with no further specification | | | | | | |
| olo de atendimento no s servicos de estomato logia covid-19.pdf | COVID-19: Suggests emergency treatment only. Unclear if patients are treated in regular practice or a dedicated COVID-19 centre or hospital | | | | | | |
| Country Myanmar Source Myanmar Dental Association Date of first publication 23/03/2020 Latest update No update https://www.fdiworlddent al.org/sites/default/files/ media/documents/recom mendations to member dental surgeons.pdf | Definition Not reported List of AGP instruments and procedures 3-in-1 syringe Permitted treatment Non COVID-19: suggests providing care with no further specification COVID-19: Suggests emergency treatment only | Non COVID-19 | Face mask - medical mask for both patients & attendants (type not specified) Goggles/face visor | Since intraoral radiographs stimulate saliva and cough, use extra-oral panoramic radiography and cone beam radiographs Preoperative antimicrobial mouth rinse should be given to the patient before any procedure to reduce microbe load Rubber dam High volume suction | Not reported | Not reported | No |
| | | COVID-19 | Not reported | Not reported | COVID-19 suspected should be treated in well- ventilated room as the last patient to avoid the disease spread and disinfection should | Not reported | |

| Country | AGP details | COVID-19 status | Personal protective equipment | Procedural mitigation | Environmental mitigation | Fallow time | Linked evidence |
|--|--|---|---|---|--|---|-----------------|
| | | | | | be done as soon as the procedures are finished | | |
| Country Netherlands Source The Royal Dutch Dental Association Date of first publication 21/04/2020 Latest update 29/06/2020 https://www.knmt.nl/sites/default/files/20200629 eidraad mondzorg coro na_clmc_v_4.0.pdf | Definition Not reported List of AGP instruments and procedures Not reported Permitted treatment Suggests providing care with no further specification. Unclear if COVID-19 patients are treated in regular practice or a dedicated COVID-19 centre or hospital | Guidance does not explicitly specify non COVID-19 or COVID-19 patients | Face mask - FFP2 reserved only for those patients with COVID-19 symptoms or confirmed COVID-19 Type II/R or Type II + face visor | 1% hydrogen peroxide for 1 minute. (3% H ₂ O ₂ with water) pre- procedural rinses Rubber dam High volume suction | Not reported | Not reported | No |
| Country New Zealand Source Dental council, Ministry of Health Date of first publication 05/01/2020 Latest update 06/09/2020 | Definition List of AGP instruments and procedures High speed handpieces, 3-in-1 syringe, air polishing, powered scalers Permitted treatment | Non COVID-19 | PPE recommended for non-COVID-19 patients is independent of using AGPs Face mask - surgical mask (level 2 or above) Goggles/face visor Surgical gown | Mouthwash Rubber dam | Negative pressure room | Not reported | Yes |
| https://www.dcnz.org.nz/ assets/Uploads/COVID/L evel1- guidelines9Jun20.pdf | Non COVID-19: suggests providing care with no further specification COVID-19: Suggests emergency treatment only. Unclear if patients are treated in regular practice or a dedicated COVID-19 centre or hospital | COVID-19 | Face mask - N95 or FFP2 Full face visor over goggles or prescription glasses Long sleeve impervious gowns Surgical cap/hat Disposable apron | Preferably use a slow speed handpieces that operates at ≤ 40000 rpm, and where possible turn the chip air off, to minimise the aerosol generated during the procedure. Mouthwash Rubber dam | General ventilation Negative pressure room | After treating a probable or COVID-positive patient when aerosol generating procedures have occurred, the room should remain closed for a stand-down period of 20 | |

| Country | AGP details | COVID-19 status | Personal protective equipment | Procedural mitigation | Environmental mitigation | Fallow time | Linked evidence |
|---|---|--------------------|---|--|---|--|--------------------|
| | | | Shoe covers | High volume suction | | minutes prior to cleaning. | |
| Country Norway Source Norway Dental Health Service – FHI (Folkehelseinstituttet) Date of first publication 03/12/2020 | Definition Aerosol-generating procedures include certain procedures involving the patient's airways List of AGP instruments and procedures | Non COVID-19 | Face mask - surgical mask type II or IIR Goggles/face visor Surgical cap/hat Disposable apron | Mouthwash - 1% hydrogen peroxide (H ₂ O ₂) for at least 1 minute before dental treatment Rubber dam/low suction High volume suction | Not reported | Not reported | Yes |
| Latest update 26/05/2020 https://www.fhi.no/nettpub/coronavirus/helsepersonell/rad-til-tannhelsetjenesten/#tannbehandling-av-pasientersom-ikke-er-mistenkt-sannsynlig-ellerbekreftet-med-covid19 | High speed handpieces, slow speed drill, 3-in1 syringe, powered scalers, air polishing device Permitted treatment Non COVID-19: suggests providing care with no further specification COVID-19: Suggests providing care with no further specification. Unclear if patients are treated in regular practice or a dedicated COVID-19 centre or hospital | COVID 19 | Face mask - FFP2 or FFP3 Goggles/face visor Surgical gown Surgical cap/hat | Minimise use of handpieces; ultrasonic scaler or aero-polishing devices should not be used, suction and cotton rolls to dry Mouthwash - 1% hydrogen peroxide (H ₂ O ₂) for at least 1 minute before dental treatment Rubber dam/ High volume suction | General ventilation system and size of the treatment room | Fallow period stated but time not reported | |
| Country Panama Source Odontologic Association of Panama Date of first publication 16/03/2020 | Definition Dental procedures which generate misting of saliva outside the patients' oral cavity are considered as AGP List of AGP instruments and procedures | Non COVID-19 | Face mask - N95, KN95 or FPP2 mask for AGPs. Surgical face mask for non AGPs Fit test required Goggles/face visor Surgical gown | Mouthwash - preparatory rinse with 1.5% hydrogen peroxide or 0.2% iodine-povidone for 3 seconds High volume suction | General ventilation AGPs conducted in an isolated room to avoid circulating air to the rest of the practice Avoid jewellery and accessories | Not reported | Yes |

| Country | AGP details | COVID-19 status | Personal protective equipment | Procedural mitigation | Environmental mitigation | Fallow time | Linked evidence |
|---|---|--------------------|--|---|---|------------------------------------|-----------------|
| Latest update 16/05/2020 URL not available | High speed handpieces, intra-oral radiography | COVID-19 | Surgical cap/hat Disposable apron Not reported | Not reported | Not reported | Not reported | |
| | Permitted treatment Non COVID-19: suggests providing care with no further specification | | | | · | · | |
| | COVID-19: Suggests emergency treatment only in a dedicated COVID-19 centre or hospital | | | | | | |
| Country Paraguay | Definition Not reported | Non COVID-19 | Not reported | Mouthwash - 1 % hydrogen peroxide or | General ventilation HEPA filters and | 60 minutes – low risk AGP | No |
| Source Ministry of Health | List of AGP instruments and procedures | | | 0.2% Povidone lodine or water with salt Rubber dam | negative pressure room | 120 minutes - moderate risk AGP | |
| Date of first publication Not reported | High speed handpieces, slow | | | High volume suction | UV light/Ozonisation/fu migation/ fogging | 180 minutes – high risk AGP | |
| Latest update 07/05/2020 | speed drill, 3-in-1 syringe, intra-oral radiography | | | | Notes that as of the date of this report, | | |
| https://www.mspbs.gov.p y/dependencias/portal/ad junto/0f3634- Protocoloatencionodonto logica.pdf | Permitted treatment Non COVID-19: suggests urgent and emergency treatment only | | | | none of the aforementioned has conclusive scientific evidence regarding covid-19 in the dental office | | |
| | COVID-19: Suggests urgent and emergency treatment only. Unclear if patients are treated in regular practice or a dedicated COVID-19 | | | | environment and does replace the cleaning and disinfection procedures of the area. | | |
| | centre or hospital | COVID-19 | Not reported | As non COVID-19 | As non COVID-19 | As non COVID-19 | |

| Country | AGP details | COVID-19 status | Personal protective equipment | Procedural mitigation | Environmental mitigation | Fallow time | Linked evidence |
|--|--|------------------------|---|---|---|---|-----------------|
| Country Peru Source Ministry of Health Date of first publication Not reported Latest update Not reported https://cdn.www.gob.pe/ uploads/document/file/71 6209/DIRECTIVA SANI TARIA N 100-MINSA- 2020-DGIESP.pdf | Definition Aerosols are defined as particles that measure less than 50um diameter List of AGP instruments and procedures High speed handpieces, surgical handpieces, slow speed drill, 3-in-1 syringe, powered scaler, intra-oral radiography Permitted treatment Non COVID-19: suggests urgent and emergency treatment only COVID-19: Suggests urgent and emergency treatment only. Unclear if patients are treated in regular practice or a dedicated COVID-19 centre or hospital | Non COVID-19 COVID-19 | Face mask - surgical mask Fit test required Goggles/face visor Surgical gown Surgical cap/hat Disposable apron As non COVID-19 but wear N95 or FFP2 instead of surgical face mask | Mouthwash - Hydrogen peroxide or Povidone-iodine Rubber dam High volume suction As non COVID-19 | Avoid any extra equipment/accessor ies As non COVID-10 | Not reported Not reported | Yes |
| Country Philippines Source Philippine Dental Association Science Committee Date of first publication Not reported Latest update 31/05/2020 | Definition Dental procedures which generate misting of saliva outside the patients' oral cavity are considered as AGP List of AGP instruments and procedures High speed handpieces, 3-in-1 | Non COVID-19 | Double gloving of non- sterile examination over gloves. Gloves should be tapped to the wrists Face mask - N95 or FFP Fit test required Goggles/face visor Surgical gown | Mouthwash - 1% hydrogen peroxide or 0.2% Povidone is recommended at the start and during entire procedure, since SARS-CoV-2 may be vulnerable to oxidation. Rinse initially for 60 seconds, swab in children and patients who are unable to rinse | AGPs can only be conducted in a negative pressure room. AGPs can only be conducted in a negative pressure room. Air flow in the operatory and waiting area should be away from you and your staff. | 5 minutes (negative pressure room only) | Yes |

| Country | AGP details | COVID-19 status | Personal protective equipment | Procedural mitigation | Environmental mitigation | Fallow time | Linked evidence |
|--|---|--------------------|-------------------------------|--------------------------------|--|-------------|-----------------|
| https://www.fdiworlddent al.org/sites/default/files/ media/documents/interim guidelines on infection prevention during covi d-19 pandemic.pdf | syringe, powered scaler Permitted treatment Non COVID-19: suggests emergency treatment only COVID-19: Suggests emergency treatment only. Unclear if patients are treated in regular practice or a dedicated COVID-19 centre or hospital | | Surgical cap/hat | Rubber dam High volume suction | Open windows or use mechanical General ventilation to increase air changes Clinic staff should ensure that infected air to be delivered out should be sterilized so as not to infect other individuals where infected air is blown out. The US CDC advises dental clinics to consider using HEPA air filtration units DURING and AFTER AGP to reduce particle and droplet counts. CDC advises placing HEPA filter beside the patient's chair, NOT BEHIND the dental health worker. Ultra Violet Germicidal Irradiation (UVGI) - an established means of disinfection and can be used to prevent the spread of certain infectious diseases. | | |

| Country | AGP details | COVID-19 status | Personal protective equipment | Procedural mitigation | Environmental mitigation | Fallow time | Linked evidence |
|---|---|--------------------|--|---|---|---|-----------------|
| | | | | | Ultra Violet Germicidal Irradiation (UVGI) - an established means of disinfection and can be used to prevent the spread of certain infectious diseases. | | |
| | | COVID-19 | As non COVID-19 | As non COVID-19 | As non COVID-19 | As non COVID-19 | |
| Country Poland Source The Polish Dental Association Date of first publication 08/04/2020 Latest update NA https://doi.org/10.5114/jo s.2020.94168 | Definition Not reported List of AGP instruments and procedures Not reported Permitted treatment Non COVID-19: suggests providing care with no further specification COVID-19: Suggests providing care with no further specification. Unclear if patients are treated in regular practice or a dedicated COVID-19 centre or hospital | COVID-19 | Face mask - FFP2 or FFP3 (depending on the risk of the patient) Goggle/face visor Surgical Gown Surgical cap/hat As non COVID-19 | Mouthwash - 1% hydrogen peroxide solution, 0.2% Povidone iodine solution, or 0.2% chlor- hexedine-alcohol solution Rubber dam High volume suction As non COVID-19 | HEPA 14 filters recommended as general ventilation method. UV light and Ozone mentioned as optional As non COVID-19 | Room General ventilation suggested, but no specific time provided. As non COVID-19 | Yes |
| Country Portugal Source Direcao Geral da Saude (Directorate General of | Definition AGPs are defined as any procedures that involve a rotating instrument or an air- | Non COVID-19 | Double gloving Face masks (type not specified) Goggles/face visor | Mouthwash Rubber dam High volume suction | General ventilation | Not reported | No |
| Health) | water syringe List of AGP instruments and | | Surgical gown Surgical cat/hat | | | | |

| Country | AGP details | COVID-19 status | Personal protective equipment | Procedural mitigation | Environmental mitigation | Fallow time | Linked evidence |
|--|--|---|---|---|--|---|-----------------|
| Date of first publication 01/05/2020 | procedures Not reported | | Disposable apron Shoe covers | | | | |
| Latest update No update https://www.omd.pt/covid -19/procedimentos/ | List of permitted treatment Non COVID-19: suggests providing care with no further specification COVID-19: Suggests urgent and emergency treatment only | COVID-19 - Urgent treatments only | As non COVID-19 | As non COVID-19 | As non COVID-19 | Not reported | |
| Country Romania Source Not reported Date of first publication 25/05/2020 Latest update Not reported https://www.dsptimis.ro/d ata_files/content/legislati e-covid/files/ordin-873- 2020.pdf | Definition Not reported List of AGP instruments and procedures Not reported Permitted treatment Non COVID-19: suggests providing care with no further specification COVID-19: Suggests providing care with no further specification | Non COVID-19 | Face mask - disposable surgical mask (changed after each patient). If a standard N95, FFP2, FFP3 mask or equivalent is used, the specific rules of use apply (change to a maximum of 4 hours). Goggles/face visor (protective screen) will be disinfected after each patient or, if they are disposable, will be replaced. Surgical cap/hat Disposable gown Shoe protection | Limit use of particle and aerosol generating procedures and equipment if absolutely necessary, they are scheduled at the end of the working day Mouthwash - both before and at end of treatment for at least 30 seconds using 1% or 1.5% hydrogen peroxide or Povidone iodine 0.2% -10 % (watch out for allergic reactions) Rubber dam High volume | Dental interventions are provided only in rooms with automatic or natural ventilation (window) | Open door / window for at least 15 minutes, after each patient | No |
| | | COVID-19 | Face mask - FFP2 / KN95 or FFP3 (standard or equivalent) Goggles/face visor | As non Covid-19 | As non Covid-19 | As non Covid-19 | |
| | | | Surgical gown - non- sterile waterproof long- sleeved surgical gown | | | | |

| Country | AGP details | COVID-19 status | Personal protective equipment | Procedural mitigation | Environmental mitigation | Fallow time | Linked evidence |
|--|---|------------------------|---|--|---------------------------------------|--------------------------|-----------------|
| | | | Surgical cap/hat - disposable waterproof cap | | | | |
| | | | Disposable waterproof apron/cape | | | | |
| | | | Disposable protective boots or disposable waterproof coveralls | | | | |
| Country Singapore Source Ministry of Health Circular 132/2020 – Gradual resumption of dental services after COVID-19 circuit breaker period Date of first publication 14/02/2020 Latest update 21/05/2020 https://www.healthprofes sionals.gov.sg/docs/libra riesprovider11/default- document-library/moh- cir-no- 132 2020 21may20 de ntal-services-after-cb- period67b93be2bc2542d 18c675325ab75f730.pdf | Definition Not reported List of AGP instruments and procedures Not reported Permitted treatment Non COVID-19: suggest urgent/emergency dental care prioritised but a wide range of dental procedures with AGPs are permitted only where no other option is possible COVID-19: suggests AGPs are not provided | Non COVID-19 COVID-19 | Face mask - surgical mask Not reported | Mouthwash - 1% hydrogen peroxide or 0.2% - 1% povidone or 0.05% - 0.1% cetylpyridinium chloride for 60 seconds Rubber dam High volume suction 4-handed dentistry Not reported | Not reported Not reported | 45 minutes Not reported | No |
| Country Slovakia Source Methodological guidelines of the Chief Expert for the Department of Dentistry | Definition Not reported List of AGP instruments and procedures Not reported | Non COVID-19 | Face mask - FFP2/N95 Fit test required Goggles/face visor Surgical gown (change after each AGP) | Mouthwash – 1% Hydrogen peroxide Rubber dam High volume suction | General ventilation – large extractor | Not reported | No |

| Country | AGP details | COVID-19 status | Personal protective equipment | Procedural mitigation | Environmental mitigation | Fallow time | Linked evidence |
|--|---|--------------------|---|-----------------------|--------------------------|--------------|-----------------|
| for the provision of healthcare during the COVID-19 pandemic | Permitted treatment Limit use of high speed handpieces, powered | | Surgical cap/hat Shoe covers | | | | |
| Date of first publication 20/05/2020 Latest update No update https://www.health.gov.sk/?covid-19-metodicke-usmernenia | scalers, and air polishers Non COVID-19: suggests providing care with no further specification COVID-19: Suggests providing care with no further specification. Unclear if patients are treated in regular practice or a dedicated COVID-19 centre or hospital | COVID-19 | As non COVID-19 | As non COVID-19 | As non COVID-19 | Not reported | |
| Country Slovenia | Definition Not reported | Non COVID-19 | Face mask - FFP2/N95 for up to 4 hours wear | Not reported | Not reported | Not reported | No |
| Source Expert recommendations for the treatment of patients in dental clinics during the release of | List of AGP instruments and procedures Not reported | | Goggles/face visor Surgical gown – water repellent Surgical cap/hat | | | | |
| measures in the field of dentistry in the context of COVID-19 Date of first publication 06/05/2020 Latest update No update https://www.gov.si/assets/ministrstva/MZ/DOKUMENTI/Koronavirus/Zobozdravstvo/Strokovna-priporocila-za-obravnavo-pacientov-vzobozdravstvenihordinacijah-v-casu- | Permitted treatment Non COVID-19: Prioritise those with problems or undergoing a course of treatment. Routine care not obviously restricted but not encouraged. Limit AGPs where possible COVID-19: patients, treated at selected emergency dental clinics and limited to emergency care | COVID-19 | Face mask - FFP3 or FFP2 mask Goggles/face visor – disinfect after each patient Surgical gown – waterproof and should be changed after each patient Surgical cap/hat | Not reported | Not reported | 10 minutes | |

| Country | AGP details | COVID-19 status | Personal protective equipment | Procedural mitigation | Environmental mitigation | Fallow time | Linked evidence |
|---|--|--------------------|--|--|--|--------------|-----------------|
| sproscanja-ukrepov-na- podrocju-zobozdrav.docx | | | Shoe covers - alternatively use special disinfectable footwear | | | | |
| Source SADA (South African Dental Association) Dental Protocol in Response to the COVID- 19 Pandemic – A South African Private Practice Perspective Date of first publication May-20 Latest update No update https://cdn.sada.co.za/fil es/clinical- resources/downloads/cor onavirus/SADA%20DEN TAL%20PROTOCOL%2 OIN%20RESPONSE%20 TO%20THE%20COVID1 9%20PANDEMIC%2020 20.pdf?v=202006301124 02 | Definition Any patient and medical care procedure that results in the production of airborne particles (aerosols) List of AGP instruments and procedures 3-in-1 syringe, powered scalers, high and slow speed hand pieces with or without water coolant, surgical hand pieces, high speed hand pieces, maxillofacial and oral surgery where high-speed devices are used, lasers. Permitted treatment Non COVID-19: suggests providing care with no further specification COVID-19: Suggests providing care with no further specification. Dentists need to assess their environment to assure optimal isolation and general ventilation, and see the patient at the end of the day. Otherwise, these patients need to be seen in a specific | Non COVID-19 | Face mask – FFP2/N95 Fit test required Goggles, glasses with side protection and face shields. Disinfect with 70% isopropyl after each procedure. Surgical gown (disposable and reusable) and coveralls. Must meet the following criteria: sterile if reusable, long sleeves to cover arms and water resistant. Cloth gowns are not recommended, as they are not water resistant. Commercially available reusable gowns should be water resistant, washable and sterilisable according to manufacturer's recommendations. Surgical cap/hat - patient could be provided with disposable headwear. Additional hair cover is recommended when working in a sterile or high-risk environment with long hair and beards. Plastic aprons are not recommended for dental and surgical purposes | Utilise lowest aerosol- generating equipment and instrumentation when delivering any type of restorative or hygiene care. Mouthwash - the patient must rinse their mouths immediately with hydrogen peroxide (1% for 2 periods of 30 seconds each) or Povidone-iodine rinses (0.23% to 1%) as well as nasal spray. Although not scientifically tested or proven, we strongly suggest that the patient use the same rinsing procedure as before contact at the completion of the appointment The use of Listerine and chlorhexidine is not supported by the literature Rubber dam High volume suction Postoperative sanitation | General ventilation Perform disinfectant fogging only for extraordinary circumstances and purposes in patient-care areas. Disinfectant fogging recommendations refer to the spraying of chemicals, such as formaldehyde or phenol-based agents, to decontaminate environmental surfaces or disinfect the air in health care facilities. Newer technologies involving fogging for room decontamination fogging-type applications, such as ozone mists or vaporised hydrogen peroxide, have become available and are preferred. | Not reported | Yes |

| Country | AGP details | COVID-19 status | Personal protective equipment | Procedural mitigation | Environmental mitigation | Fallow time | Linked evidence |
|--|---|--------------------|---|--|---|-----------------------------|-----------------|
| | COVID clinic or hospital, not in a regular practice | | because they do not provide full body and arm cover. | | | | |
| | | | Shoe covers | | | | |
| | | | Patient could be provided with disposable overshoes and shoe covers. It is suggested that overshoes and shoe covers should be single patient use. | | | | |
| | | COVID-19 | As non COVID-19 | Keep appointments short | Optimal patient isolation | Not reported | |
| | | | | COVID-positive or suspected positive patients need to be scheduled for the end of the day or referred to areas where they can be managed safely (a dedicated facility or a hospital theatre environment recommended) | General ventilation - Remember to factor in enough time for General ventilation specific attention to your own environment and disinfection of the treatment area between cases | | |
| Country Spain | Definition Interventions that generate aerosols are | Non COVID-19 | Double gloving >2mts No face mask. | Mouthwash - pre- procedural 1% hydrogen peroxide, | General ventilation - Although numerous systems | 15 minutes between patients | Yes |
| Source Spanish National Dentistry Council | considered riskier including tracheotomies, all operative activity that | | 1-2mts surgical face mask. <1mts FFP2 face mask. | 0.2% Povidone iodine or 0.05 cetylpyridinium chloride. 0.1% mouthwash for 30 | are available for air filtration, none present concrete scientific | | |
| Date of first publication 13/04/2020 Latest update | requires high-speed rotary instruments, phases in carving in | | If AGP, use FFP2 mask and in specific cases consider using FFP3 | seconds. Avoid the use of spittoons and use disposable cups. | effectiveness against SARS- CoV2. Methods | | |
| 01/05/2020 | prosthodontics, surgery that involves the | | masks | Rubber dam | include: - ozone purification | | |
| https://www.consejodentistas.es/comunicacion/actualidad-consejo/notas- | generation of aerosols (implantology, osteotomy, etc.), | | Fit test - After hand wash, put on the mask, | High volume suction | purification with chlorine dioxide use of | | |

| Country | AGP details | COVID-19 status | Personal protective equipment | Procedural mitigation | Environmental mitigation | Fallow time | Linked evidence |
|--|---|--------------------|--|--|--|--------------|--------------------|
| de-prensa- consejo/item/1783-plan- estrategico-de-accion- para-clinicas-dentales- durante-el-periodo-de- desescalada.html | certain phases in orthodontics (removal of brackets and polishing) etc. AGPs are categorised by No AGPs, AGP and AGPs with high risk of spillage. List of AGP instruments and procedures High speed handpieces, 3-in-1 syringes, powered scalers, surgical handpieces, hard tissue lasers, air polishers Permitted treatment Non COVID-19: suggests providing care with no further specification. AGPs are classified as low, medium and high risk depending on PPE COVID-19: Suggests providing care with no further specification. Unclear if patients are treated in regular practice or a dedicated COVID-19 centre or hospital | | then adjust and fit test in nose and chin. Goggles/face visor - certified eye protectors based on the UNE-EN 166: 2002 standard for protection against liquids can be integral glasses against drops or face shields against splashes. Surgical gown Surgical cap/hat | The usual work clothes and footwear must be exclusively for work, avoiding the use of street clothes or footwear in the office. It is important to avoid wearing rings, bracelets, pendants, watches or other items, since they behave like reservoirs of COVID 19 | hypochlorous acid - purification by generation of hydroxyl radicals (OH) - use of UVC radiation - use of negative pressure or high pressure, associated with HEPA (High- Efficiency Particulate Air) filters The Spanish Society for Environmental Health (SESA) advises against chlorine dioxide and ozone in disinfecting the air against the coronavirus. The Ministry of Health in in Spain, does not recommend hypochlorous acid. The use of UVC rays in the dental field is not indicated While hydroxyl radical generating systems are effective with other viruses, it is not yet documented for SARS-Cov-2 | | |
| | | COVID-19 | As non COVID-19 | Avoid mouthwash | As non COVID-19 | Not reported | |

| Country | AGP details | COVID-19 status | Personal protective equipment | Procedural mitigation | Environmental mitigation | Fallow time | Linked evidence |
|---|--|---|--|---|---|--|-----------------|
| Country Switzerland Source Swiss Dental Association Date of first publication 17/04/2020 Latest update 28/05/2020 | Definition Not reported List of AGP instruments and procedures Not reported Permitted treatment Non COVID-19: suggests providing | Non COVID-19 | Face mask - surgical mask or FFP2 mask if rubber dam can't be used Goggles/face visor | Mouthwash - 1.5% hydrogen peroxide solution or Povidone- iodine solution mouthwash for 30 seconds Rubber dam High volume suction | General ventilation – windows or adequate General ventilation system | At least 15 minutes for complete airing of room post AGP Forbidden to treat patient in a room without window or adequate General ventilation system | No |
| https://www.sso.ch/filead min/upload_sso/5_Newsl etter/2020/Covid-19- Positionspapier4-6-F.pdf | care with no further specification COVID-19: Suggests providing care with no further specification. Unclear if patients are treated in regular practice or a dedicated COVID-19 centre or hospital | COVID-19 - Only in case of absolute emergency that can't be postponed | Face mask - FFP2 worn for up to 30 minutes following last AGP and as long as patient is in the room Goggles/face visor Surgical gown | As non COVID-19 | As non COVID-19 | Up to 30 minutes | |
| Country Tunisia Source Conseil National d'Ordre des Médecins Dentistes de la Tunisie Date of first publication 12/04/2020 Latest update 11/05/2020 | Definition Not reported List of AGP instruments and procedures Not reported Permitted treatment Non COVID-19: suggests providing care with no further specification | Non COVID-19 | Face mask - FFP2 Goggles/face visor Surgical gown Surgical cap/hat | Use slow speed drill instead of high speed handpieces Mouthwash - hydrogen peroxide or Povidoneiodine Rubber dam whenever possible High volume suction | | 15 minutes | No |
| https://cnomdt.tn/docs/rel atedInfo/protocole- covid4-cnomdt-26.pdf | COVID-19: Suggests providing care with no further specification. Unclear if patients are treated in regular practice or a dedicated COVID-19 centre or hospital | COVID-19 | As non COVID-19 | As non COVID-19 | As non COVID-19 | As non COVID-19 | |

| Country | AGP details | COVID-19 status | Personal protective equipment | Procedural mitigation | Environmental mitigation | Fallow time | Linked evidence |
|---|--|--------------------|---|---|---|--|--------------------|
| Country United Arab Emirates (Dubai) Source Dubai Health Authority Date of first publication | Definition Not reported List of AGP instruments and procedures Not reported | Non COVID-19 | Face mask - N95 Goggles/face visor Surgical gown for AGPs Separate shoes for clinical activities | Mouthwash - 1% hydrogen peroxide or 0.2% Povidone iodine Rubber dam High volume suction | Designated room, HEPA filter | 20 minutes between appointments | No |
| 2/06/2020 Latest update No update https://services.dha.gov. ae/sheryan/wps/portal/ho me/circular- details?circularRefNo=CI R-2020- 00000236&isPublicCircul ar=1&fromHome=true | Permitted treatment Non COVID-19: suggests providing care with no further specification COVID-19: Suggests providing care with no further specification. Unclear if patients are treated in regular practice or a dedicated COVID-19 centre or hospital | COVID-19 | Not reported | Not reported | Not reported | Not reported | |
| Country UK - England Source Office of the Chief Dental Officer, England Date of first publication 06/04/2020 Latest update No update https://www.england.nhs. uk/coronavirus/wp- content/uploads/sites/52/ 2020/06/C0575-dental- transition-to-recovery- SOP-4June.pdf | Definition Aerosol generating procedures (AGPs) are defined as any medical and patient care procedure that results in the production of airborne particles (aerosols). List of AGP instruments and procedures High-speed handpieces and high speed surgical handpieces, powered scalers, 3-in-1 syringe | Non COVID-19 | Face mask - FFP3 for AGPs Fit test required Goggle/face visor Surgical gown Rubber dam/low suction High volume suction | | Windows in neutral pressure rooms should be opened, or extractor fans that vent to the exterior should be used as air passing externally will be highly diluted and is not considered to be a risk. The greater the number of air changes per hour (General ventilation rate), the sooner any aerosol will be cleared. to be a risk | Negative pressure room: 20 minutes Neutral room: 60 minutes | No |
| | Permitted treatment Non COVID-19: Suggests providing care with no further | COVID-19 | As non COVID-19 | As non COVID-19 | As non COVID-19 | As non COVID-19 | |

| Country | AGP details | COVID-19 status | Personal protective equipment | Procedural mitigation | Environmental mitigation | Fallow time | Linked evidence |
|---|---|--------------------|-------------------------------|-----------------------|--------------------------|---|-----------------|
| | specification. Whilst in sustained community transmission treat all patients as high risk. Treatment with extra care and PPE, minimise APGs | | | | | | |
| | COVID-19: Suggests emergency treatment only in a dedicated COVID-19 centre or hospital | | | | | | |
| Country | Definition | Non COVID-19 | Face mask - FFP3 | Rubber dam | General ventilation | After providing an | No |
| UK - Northern Ireland | Not reported | | | | (Windows may be | AGP, it is | 110 |
| Source | List of AGP | | Fit test required | High volume suction | opened) | recommended that the room is left | |
| Health and Social Care | instruments and | | Goggles/face visor | | | vacant with the door | |
| Board | procedures | | Surgical gown | | | closed for 20 | |
| Date of first publication | High speed handpieces, powered | | | | | minutes in a | |
| 06/04/2020 | scalers, 3-in-1 syringe, | | | | | negative pressure isolation room or 60 | |
| Latest update | slow-speed drill with | | | | | minutes in a neutral | |
| 22/06/2020 | coolant spray (e.g. | | | | | pressure room | |
| http://www.haahaaahaaa | surgical extractions), air abrasion and air | | | | | before cleaning and | |
| http://www.hscbusiness. hscni.net/pdf/Preparation | polishing | | | | | decontamination | |
| %20for%20the%20Re- establishment%20of%20 the%20GDS%20Update d%2022%20June%2020 | Permitted treatment Non COVID-19: suggests emergency | | | | | If your practice has an air flow system or equivalent in place | |
| <u>20.pdf</u> | treatment only | | | | | manufacturers | |
| | COVID-19: Suggests | | | | | guidance should be sought regarding | |
| | emergency treatment | | | | | the possible | |
| | only. Unclear if patients are treated in regular | | | | | reducing air settling | |
| | practice or a dedicated | | | | | time with 6 air | |
| | COVID-19 centre or | | | | | changes recommended prior | |
| | hospital | | | | | to cleaning and | |
| | | | | | | decontamination | |

| Country | AGP details | COVID-19 status | Personal protective equipment | Procedural mitigation | Environmental mitigation | Fallow time | Linked evidence |
|---|---|--------------------|---|--|---|---|--------------------|
| | | COVID-19 | As non COVID-19 | As non-COVID-19 | As non-COVID-19 | As non-COVID-19 | |
| Country UK - Scotland Source | Definition Aerosol generating procedures (AGPs) are | Non COVID-19 | No AGP related advice /recommendations | No AGP related advice /recommendations | No AGP related advice/recommenda tions | No AGP related advice /recommendations | No |
| Scottish Dental Clinical Effectiveness Programme Date of first publication 25/05/2020 Latest update 06/12/2020 http://www.sdcep.org.uk/ wp- content/uploads/2020/06 /SDCEP-Resuming- | defined as any medical or patient care procedure that results in the production of airborne particles (aerosols). List of AGP instruments and procedures 3-in-1 syringe, high-speed handpieces, powered scalers Permitted treatment | COVID-19 | No AGP related advice /recommendations | No AGP related advice /recommendations | No AGP related advice /recommendations | No AGP related advice /recommendations | |
| General-Dental- Services-Following- COVID-19-Shutdown- Update-120620.pdf | Non COVID-19: suggests urgent and routine treatment but no AGP treatment. COVID-19: suggests AGP treatment in a dedicated COVID-19 centre or hospital | | | | | | |
| Country UK - Wales Source Chief Dental Officer, Wales Date of first publication 08/06/2020 Latest update No update | Definition AGPs are procedures that create aerosols (air suspension of fine (≤ 5µm) particles List of AGP instruments and procedures High speed handpieces, air polishers, powered scaler, air polishing, | Non COVID-19 | Face mask - FFP3 or FFP2 Fit test - Copies of fit test certificates (where issued) and records of fit tests (pass and fail) for each staff member and each mask type should be retained by the practice. | Mouthwash mentioned but document indicates lack of evidence regarding COVID-19 Rubber dam High volume suction | Space appointments to ensure social distancing. Book at the end of a session Schedule time for procedure and time for decontamination (to include air clearance in an appropriate room) | 60 minutes when air changes per hour (ACPH) is not known. Expert infection control team advice should be sought when calculating times. If the patient has evidence of immunity (laboratory) or of being non-infected | Yes |

| Country | AGP details | COVID-19 status | Personal protective equipment | Procedural mitigation | Environmental mitigation | Fallow time | Linked evidence |
|---|--|--------------------|---|-----------------------|--|---|-----------------|
| https://gov.wales/sites/de fault/files/publications/20 20-06/standard- operating-process-for non-covid-19-dental- centres-providing- aerosol-generating- procedures-in-wales.pdf | Slow speed drill, 3-in-1 syringe) Permitted treatment Non COVID-19: suggests providing care with no further specification COVID-19: Suggests providing care with no further specification. Treat patients in a dedicated COVID-19 centre or hospital | | Full face shield if FFP is not water resistant Surgical gown Disposable apron - Only if gown is not water repellent | | Negative pressure room with known air changes per hour General ventilation - Windowless surgeries with no air changes should not be used. Windows should be open where appropriate (this may not be appropriate where closed environment, negative pressure systems are in place). Air conditioning which recirculates air into the surgery should be switched off if it is linked to other practice areas Air conditioning that removes air from the environment should be switched on (venting of extractor fans must be assessed alongside the risk of contamination of other areas) with notices placed at the vents. Seek advice in relation to air conditioning as required. (Seek advice for windowless surgeries as these | (laboratory) and there is no possibility of infection on the day of treatment, the patient may be treated with standard infection control measures with no additional settle time. Leave the room for 60 minutes after an AGP. Measurements can be taken by health and safety/ infection control teams to determine air changes per hour for each surgery and the exact time needed. If this has taken place, records of measurements and advice should be kept. The current recommended time for negative pressure rooms is 20 minutes. If a negative pressure room then with 12+ air exchanges leave for 20 minutes | |

| Country | AGP details | COVID-19 status | Personal protective equipment | Procedural mitigation | Environmental mitigation | Fallow time | Linked evidence |
|---------|--------------|--------------------|-------------------------------|-----------------------|--|---|-----------------|
| | | | | | should not routinely | | |
| | | | | | Air purifiers and devices to improve air quality can be considered but there is insufficient evidence on their effectiveness in relation to COVID-19 at this time. If practices wish to consider these pieces of equipment, they should seek advice (contact the dental COVID-19 lead who will ask for advice from the local Infection Prevention Control Teams). Any decision should be clearly documented and retained by the practice for possible future reference. The default position otherwise is to follow the guidance described above Fogging techniques (with e.g. hypochlorous acid) are not currently | | |
| | | COVID-19 | As non COVID-19 | As non COVID-19 | recommended As non COVID-19 | As non COVID-19 | |
| Country | Definition | Non COVID-19 | Face mask – type not | 4-handed dentistry | General ventilation | 20-30 minutes | No |
| Ukraine | Not reported | | specified | | | , | |

| Country | AGP details | COVID-19 status | Personal protective equipment | Procedural mitigation | Environmental mitigation | Fallow time | Linked evidence |
|---|---|------------------------|---|---|--------------------------|--------------|-----------------|
| Source National Academy of Medical Sciences of Ukraine | List of AGP instruments and procedures Not reported | | Goggles/face visor Surgical gown/protective suit | Mouthwash Rubber dam High volume suction | Quartz Lamps | | |
| Date of first publication 08/05/2020 Latest update No update http://amnu.gov.ua/spilni-rekomendacziyi-du-instytut-stomatologiyi-ta-shhelepno-lyczevoyi-hirurgiyi-namn-ukrayiny-i-go-asocziacziya-stomatologiv-ukrayiny-shhodo-protyepidemichnyh-zahodiv-v-stomatologichnyh-zakladah-ohor/ | Permitted treatment Non COVID-19: suggests providing care with no further specification. Minimise AGPs COVID-19: Suggests providing care with no further specification. Unclear if patients are treated in regular practice or a dedicated COVID-19 centre or hospital | COVID-19 | Not reported | Not reported | Not reported | Not reported | |
| Country Uruguay Source Ministry of Health Date of first publication Not reported Latest update Not reported https://www.gub.uy/ministerio-salud-publica/sites/ministerio-salud-publica/files/documentos/noticias/MSP RECOME NDACIONES ODONTO LOGOS HIGIENISTAS DENTALES.pdf | Definition The practice of dentistry, as well as the use of dental instruments and equipment, can generate aerosols that contain droplets of water particles, saliva, blood, microorganisms and other wastes. These biological materials settle on the environment and work surfaces, dental care personnel and the patient List of AGP instruments and procedures | Non COVID-19 COVID-19 | Face mask - N95 or FFP2 Goggles/face visor Surgical gown Surgical cap/hat Disposable apron Not reported | Mouthwash - 70% alcohol, 3% hydrogen peroxide or 10 volumes (medical hydrogen peroxide) or iodopovidone pre- and post-treatment High volume suction Not reported | Not reported | Not reported | No |

| Country | AGP details | COVID-19 status | Personal protective equipment | Procedural mitigation | Environmental mitigation | Fallow time | Linked evidence |
|---|---|--------------------|---|---|--------------------------|---|-----------------|
| Country USA Source American Dental Association (ADA) Date of first publication 24/04/2020 Latest update 06/09/2020 https://success.ada.org/~ /media/CPS/Files/Open %20Files/ADA Return t o_Work_Toolkit.pdf?utm campaign=covid-19- Return-to-Work- Toolkit&utm_medium=e | High speed handpieces, 3-in-1 syringe, intra-oral radiography Permitted treatment Non COVID-19: suggests emergency treatment only COVID-19: Suggests providing care with no further specification. Treat in a dedicated COVID-19 centre or hospital Definition Not reported List of AGP instruments and procedures Not reported Permitted treatment Non COVID-19: suggests providing care with no further specification. COVID-19: Suggests providing care with no further specification. COVID-19: Suggests providing care with no further specification. Unclear if patients are treated in regular practice or a dedicated | Non COVID-19 | Face mask - surgical face mask, N95 or KN95 Fit test required for N95 and KN95. Annual fit testing requirement lifted and currently unavailable Goggles/face visor Surgical gown (clinical judgement) Surgical cap/hat (clinical judgement) Shoe covers (clinical judgement) | Rubber dam High volume suction Use hand scaling instead of ultrasonic scaling | Not reported | Until further evidence demonstrates a clear answer, the ADA is not making a recommendation on waiting for a specific time period to begin cleaning the operatory. | No |
| mail& hsmi=86924194& hsenc=p2ANqtz- HVpP4Wh9sKaPxqGZI A1G9Ro1coYT29m3pRX N1TDeZSalr3 - PzyReYsAnmYdx6fX rJ mFesmgepGb1 VhbsxZ 6Zu6g&utm content=86 | COVID-19 centre or hospital | COVID-19 | As non COVID-19 | As non COVID-19 | Not reported | As non COVID-19 | |

| Country | AGP details | COVID-19 status | Personal protective equipment | Procedural mitigation | Environmental mitigation | Fallow time | Linked evidence |
|---|---|--------------------|---|--|---|--------------|-----------------|
| 924194&utm_source=hs automation | | | | | | | |
| Country USA Source Centers for Disease Control and Prevention (CDC) Date of first publication Not reported Latest update 17/06/2020 https://www.cdc.gov/coro navirus/2019- ncov/hcp/dental- settings.html | Definition Not reported List of AGP instruments and procedures Avoid use of dental handpieces, 3-in-1 syringe, powered scalers Permitted treatment Non COVID-19: suggests providing care with no further specification. Treat all patients as high risk with extra care and PPE if necessary COVID-19: Suggests providing care with no further specification. Avoid AGPs if possible. Unclear if patients are treated in regular practice or a dedicated COVID-19 centre or hospital | Non COVID-19 | Face mask - N95 or a respirator that offers a higher level of protection such as other disposable filtering face piece respirators, powered air-purifying or elastomeric respirators. Fit test – dental health-care personnel should be medically cleared and fit tested if using respirators with tight fitting face pieces Goggles, protective eyewear with solid side shields or a full face shield Gown or protective clothing | Mouthwash Rubber dam High volume suction | General ventilation - systems that provide air movement in a clean-to-less clean flow direction are better at protecting staff and patients. Consider the use of a HEPA air filtration unit while the patient is undergoing and immediately following an AGP to reduce aerosol concentrations and increase the effectiveness of the turnover time. Place the HEPA unit near the patient's chair but not behind the DHCP. Consider the use of upper-room ultraviolet germicidal irradiation as an adjunct to higher General ventilation and air cleaning rates Ensure to account for the time required to clean and disinfect operating rooms between patients when | Not reported | Yes |

| Country | AGP details | COVID-19 status | Personal protective equipment | Procedural mitigation | Environmental mitigation | Fallow time | Linked evidence |
|--|---|--------------------|--|---|---|--------------|-----------------|
| | | | | | calculating your daily patient volume | | |
| | | COVID-19 | Face mask - N95 or higher level respirator Fit test Goggles/face visor Surgical gown | | AGPs should ideally take place in an airborne infection isolation room | Not reported | |
| Country | Definition | Non COVID-19 | Not reported | Not reported | Not reported | Not reported | No |
| Zimbabwe Source Zimbabwe Dental Association COVID-19 Dental Practice Recommendations/Guid elines Date of first publication Not reported Latest update 22/04/2020 https://www.fdiworlddent al.org/sites/default/files/ media/documents/covid- 19 dental practice recommendations guidelines .pdf | List of AGP instruments and procedures High speed handpieces, 3-in-1 syringe and scaler use Permitted treatment Non COVID-19: suggests providing care with no further specification. AGPs undertaken with standard precautions COVID-19: Suggests emergency treatment only with AGPs if possible. If AGP required, undertake proper COVID-19 precautions. Unclear if patients are treated in regular practice or a dedicated COVID-19 | COVID-19 | Face mask – ideally N95 Goggles/face visor Protective gown | Manage emergency without the generation of aerosol Mandatory use of hydrogen peroxide mouth rinse before dental procedures Rubber dam | Not reported | Not reported | |

Non COVID-19 refers to patients who are presumed to have negative COVID-19 status; COVID-19 refers to patients with suspected or confirmed positive COVID-19 status. ABHR, alcohol-based hand rub, ACH, air changes per hour; AGP, aerosol generating procedure; HEPA, high-efficiency particulate air; HVAC, heating ventilation and air conditioning

Appendice 2. Actes générant des aérosols par pays

| Country | AGPs reported | List of AGP instruments or procedures | Treatment recommendation for Non COVID-19 patients | Treatment recommendation for COVID-19 patients |
|--|---------------|--|--|--|
| Country: Argentina Source: Ministry of Health - Ministerio de Salud Argentina COVID-19 Recomendaciones Para Odontologia Date of first publication: 10/06/2020 Latest update: No update https://www.fdiworlddental.org/sites/default/files/media/documents/covid-19_recomendaciones_para_odontologia.pdf | Yes | High speed handpieces, slow speed drill, 3-in-1 syringe, powered scalers | Suggests prioritising emergency treatment but treatment is not limited to emergencies | Suggests urgent treatments only and avoiding AGPs as much as possible. Unclear if patients are treated in regular practice or a dedicated COVID-19 centre or hospital |
| Country: Australia Source: Australian Dental Association Date of first publication: Various publication dates and updates https://www.ada.org.au/Covid-19-Portal/Dental-Professionals | Yes | High speed handpieces, Surgical handpieces, 3-in-1 syringe, Powered scalers (sonic/ ultrasonic), Air polishers, Lasers | Suggests taking standard precautions | Suggests AGPS are avoided for suspected COVID-19 cases. Urgent or emergency treatment only for confirmed cases in a dedicated COVID-19 centre or hospital, not in a regular practice |
| Country: Austria Source: Austrian Dental Chamber Date of first publication: 03/04/2020 Latest update: 04/05/2020 https://stmk.zahnaerztekammer.at/zahnaerztinnen/informationen-corona-virus/ | No | None reported | Suggests providing care with no further specification | Suggests providing care with no further specification |
| Country: Belgium Source: Conseil de l'Art Dentaire on behalf of the Service Public Fédéral de Santé Publique Date of first publication: 19/04/2020 Latest update: 24/05/20 https://5199.f2w.fedict.be/sites/default/files/documents/2020-04- 19 covid-19 modification 20200524 -protocole soins dentaires.pdf | No | None reported | Suggests providing care with no further specification | Suggest treating patients in a dedicated COVID-19 centre or hospital, not in a regular practice |

| Country | AGPs reported | List of AGP instruments or procedures | Treatment recommendation for Non COVID-19 patients | Treatment recommendation for COVID-19 patients |
|---|------------------|--|---|--|
| Country: Bolivia Source: College of Dentists of La Paz Date of first publication: 01/05/2020 Latest update: No update https://www.fdiworlddental.org/sites/default/files/media/documents/proto colo de bio- seguridad para la atencion a pacientes y prevencion del covid- 19 en centreas y consultorios odontologicos.pdf | Yes | High speed handpieces, slow speed drill, 3-in-1 syringe | Suggests emergency treatment only | Suggests emergency treatment only but patients should ideally be treated in a high level health institution (hospital) |
| Country: Brazil Source: Biosafety Working Group of the São Paulo Regional Dentistry Council Date of first publication: 01/04/2020 Latest update: No update http://www.crosp.org.br/uploads/arquivo/747df5ff505e7beff33c1a5ff5d6f 12a.pdf | Yes | High speed handpieces, surgical handpieces, slow speed drill, 3-in-1 syringe | Suggests providing care with no further specification | Suggests providing care with no further specification |
| Country: Bulgaria Source: Recommendations/instructions from the crisis headquarters of the Bulgarian Dental Union Date of first publication: 03/06/2020 Latest update: No update https://bzs.bg/препоръки-инструкции-от-кризисния-ща/ | No | None reported | Suggests providing care with no further specification | Suggests providing care with no further specification |
| Country: Burkino Faso Source: Ordre National des Chirurgiens Dentistes du Burkina Ministère de la Santé Date of first publication: Not reported Latest update: Not reported URL not available | No | None reported | Suggests emergency treatment only | Suggests emergency treatment only. Unclear if patients are treated in regular practice or a dedicated COVID-19 centre or hospital |

| Country | AGPs reported | List of AGP instruments or procedures | Treatment recommendation for Non COVID-19 patients | Treatment recommendation for COVID-19 patients |
|--|------------------|--|--|--|
| Country Canada Source Royal College of Dental Surgeons of Ontario COVID-19: MANAGING INFECTION RISKS DURING IN-PERSON DENTAL CARE Date of first publication 15/03/2020 Latest update 31/05/20 https://www.rcdso.org/en-ca/rcdso-members/2019-novel-coronavirus/covid-19-managing-infection-risks-during-in-person-care | Yes | high-speed, low-speed and other rotary handpieces, powered scalers, and 3-in-1 syringes. | in-person care for all deferred, non-essential, and elective services, in addition to emergency and urgent care. | Patients who need urgent and emergency care that cannot be delayed |
| Country: Chile Source: Division of Disease Prevention and Control Oral Health Department Date of first publication: Not reported Latest update: Not reported http://www.colegiodentistas.cl/inicio/wp- content/uploads/2020/04/orientaciones-atencion-odontologica-covid- 19.pdf | Yes | High speed handpieces, 3-in-1 syringe, powered scalers | Suggests providing care with no further specification | Suggests emergency treatment only. Unclear if patients are treated in regular practice or a dedicated COVID-19 centre or hospital |
| Country: China Source: Chinese Stomatological Association - Chinese Response to COVID-19 in Dental Field Date of first publication: Not reported Latest update: 06/05/2020 URL not available | Yes | High speed handpieces, powered scalers | Suggests emergency treatment only | Suggests AGPs are not provided in COVID-19 patients |
| Country: Colombia Source: Ministry of Health and Social Protection - Ministerio de Salud y Protección Social Bogotá Date of first publication: May 2020 Latest update: No update https://www.minsalud.gov.co/Ministerio/Institucional/Procesos%20y%20 procedimientos/GIPS31.pdf | Yes | High speed handpieces, surgical handpieces, slow speed drill, 3-in-1 syringe | Suggests providing care with no further specification | Suggests emergency treatment only. Unclear if patients are treated in regular practice or a dedicated COVID-19 centre or hospital |

| Country | AGPs reported | List of AGP instruments or procedures | Treatment recommendation for Non COVID-19 patients | Treatment recommendation for COVID-19 patients |
|--|------------------|---|--|--|
| Country: Costa Rica Source: Ministry of Health - Ministerio de Salud Costa Rica Date of first publication: 27/03/2020 Latest update: No update https://www.ministeriodesalud.go.cr/sobre_ministerio/prensa/docs/linea mientos_odontologos_v2_27032020.pdf | Yes | High speed handpieces, surgical handpieces, slow speed drill, 3-in-1 syringe | Suggests providing care with no further specification | Suggests emergency treatment only treated in a dedicated COVID-19 centre or hospital |
| Country: Croatia Source: Croatian Chamber of Dental Medicine Date of first publication: 04/05/2020 Latest update: No update https://www.hkdm.hr/novost/1836/Smjernice-i-protokoli-za-otvaranje-i-rad-ordinacija-dentalne-medicine-i-dentalnih-laboratorija | Yes | High speed handpieces, Powered scalers (sonic/ultrasonic) | Suggests providing care with no further specification | Suggests providing care with no further specification. Unclear if patients are treated in regular practice or a dedicated COVID-19 centre or hospital |
| Country: Denmark Source: SUNDHEDSSTYRELSEN, Danish Health Board Date of first publication: 18/04/20 Latest update: 22/04/20 https://www.sst.dk/da/udgivelser/2020/haandtering-af-covid-19kritisk-funktioner-i-tandplejen | Yes | High speed handpieces, Surgical handpieces, Slow speed drill, 3-in-1 syringe, Powered scalers (sonic/ ultrasonic) | Suggest testing every patient for COVID-19 before providing care | Suggest postponing any appointment while patient is COVID-19 positive |
| Country: Dominican Republic Source: Ministry of Health Date of first publication: Not reported Latest update: Not reported https://www.fdiworlddental.org/sites/default/files/media/documents/recomendaciones para la guia de apertura de los servicios odontologic os en la republica dominicana debido a la pandemia covid-19.pdf | Yes | Slow speed drill, 3- in-1 syringe, intra- oral radiography | Suggests providing care with no further specification | Suggests providing care with no further specification except triage patients prior to treatment to identify higher risk and take precautions. Unclear if patients are treated in regular practice or a dedicated COVID-19 centre or hospital |
| Country: Ecuador Source: Ministry of Health Date of first publication: 28/05/2020 Latest update: No update | Yes | High speed handpieces, surgical handpieces, slow speed drill, 3-in-1 syringe, powered | Suggests providing care with no further specification | Suggests providing care with no further specification. Unclear if patients are treated in regular practice or a |

| Country | AGPs reported | List of AGP instruments or procedures | Treatment recommendation for Non COVID-19 patients | Treatment recommendation for COVID-19 patients |
|--|------------------|---|---|---|
| https://www.fdiworlddental.org/sites/default/files/media/documents/protocolo_para_atencion_odontologica_durante_la_emergencia_sanitaria_por_covid19.pdf | | scaler, intra-oral radiography | | dedicated COVID-19 centre or hospital |
| Country: Estonia Source: Ministry of Health Date of first publication: 07/02/2020 Latest update: 21/05/2020 URL not available | No | None reported | Suggests providing care with no further specification | Suggests AGPs are not provided in COVID-19 patients |
| Country: Finland Source: Sector of administration of the Ministry of Social Affairs and Health Date of first publication: Not reported Latest update: 01/06/2020 https://thl.fi/fi/web/infektiotaudit-ja-rokotukset/taudit-ja-torjunta/taudit-ja-taudinaiheuttajat-a-o/koronavirus-covid-19/ohje-suun-terveydenhuollon-yksikoille-covid-19-epidemian-aikana | Yes | High speed handpieces, Slow speed drill, 3-in-1 syringe, Powered scalers (sonic/ ultrasonic) | Suggests providing care with no further specification | Suggests providing care with no further specification. Unclear if patients are treated in regular practice or a dedicated COVID-19 centre or hospital |
| Country: France Source: Haute Autorité de Santé (HAS) Date of first publication: 14/05/2020 Latest update: 25/05/2020 https://www.has-sante.fr/jcms/p_3184961/fr/mesures-et-precautions-essentielles-lors-des-soins-bucco-dentaires-apres-le-deconfinement | Yes | High speed handpieces, 3-in-1 syringe, Powered scalers (sonic/ultrasonic), Air polishers | Suggests providing care with no further specification | Suggests providing care with no further specification. Unclear if patients are treated in regular practice or a dedicated COVID-19 centre or hospital |
| Country: Germany Source: Institut der Deutschen Zahnärzte Date of first publication: Not reported Latest update: 24/04/2020 (version 3) https://www.idz.institute/publikationen/sonstiges/system-von-standardvorgehensweisen-fuer-zahnarztpraxen-waehrend-der-coronavirus-pandemie.html | No | None reported | Suggests providing care avoiding AGPs using low-speed instrumentation | Suggests providing care avoiding AGPs using low-speed instrumentation. Unclear if patients are treated in regular practice or a dedicated COVID-19 centre or hospital |

| Country | AGPs reported | List of AGP instruments or procedures | Treatment recommendation for Non COVID-19 patients | Treatment recommendation for COVID-19 patients |
|--|------------------|--|---|---|
| Country: Greece Source: Instructions for dental employees in dentists and patients Date of first publication: Not reported Latest update: Not reported https://www.fdiworlddental.org/sites/default/files/media/documents/odigiesprosodontiatroysergazomenoysseodontiatreiakaiastheneiso.ph | No | None reported | Suggests providing care with no further specification | Suggests providing care with no further specification. Unclear if patients are treated in regular practice or a dedicated COVID-19 centre or hospital |
| Country: Guatemala Source: Estomatologic Callege of Guatemala Date of first publication: 01/05/2020 Latest update: No update https://www.fdiworlddental.org/sites/default/files/media/documents/protocolo-de-bioseguridad-odontologica-con-enfasis-en-covid-19.pdf | Yes | High speed handpieces, surgical handpieces, slow speed drill, 3-in-1 syringe, powered scaler, intra-oral radiography | Suggests emergency treatment only | Suggests emergency treatment only. Unclear if patients are treated in regular practice or a dedicated COVID-19 centre or hospital |
| Country: Honduras Source: College of Dental Surgeons of Honduras Date of first publication: Not reported Latest update: Not reported http://www.cop.org.pe/wp-content/uploads/2020/04/PROTOCOLO-DE-BIOSEGURIDAD-PARA-EL-CIRUJANO-DENTISTA.pdf | No | None reported | Suggests providing care with no further specification | Unclear if patients are treated |
| Country: India Source: Dental Council of India Date of first publication: 05/07/2020 Latest update: No update http://www.dciindia.gov.in/Admin/NewsArchives/Dental%20Centres%20 Protocols%20Final.pdf | No | None reported | Suggests providing care with no further specification | Suggest treating patients in a specific COVID-19 centre or hospital, not in a regular practice |

| Country | AGPs reported | List of AGP instruments or procedures | Treatment recommendation for Non COVID-19 patients | Treatment recommendation for COVID-19 patients |
|---|------------------|--|---|---|
| Country: Ireland Source: Irish Dental Association Date of first publication: Not reported Latest update: 15/05/2020 https://www.hpsc.ie/a- z/respiratory/coronavirus/novelcoronavirus/guidance/infectionprevention andcontrolguidance/dentalservices/Guidance-ManagingInfectionRisk- DentalServices-COVID19.pdf | No | None reported | Suggests providing care with no further specification | Suggests providing care with no further specification. Unclear if patients are treated in regular practice or a dedicated COVID-19 centre or hospital |
| Country: Italy Source: All major Italian dental associations – available from the Italian government website Date of first publication: 30/05/2020 Latest update: No update http://www.salute.gov.it/portale/news/p3-2-1-1-isp?lingua=italiano&menu=notizie&p=dalministero&id=4835 | No | None reported | Suggests providing care with no further specification | Suggests providing care with no further specification. Unclear if patients are treated in regular practice or a dedicated COVID-19 centre or hospital |
| Country: Kenya Source: Ministry of Health, Director of Healthcare Services, Oral Health Services Date of first publication: 24/03/2020 Latest update: No update https://www.health.go.ke/wp-content/uploads/2020/06/Guidelines-for- Dental-Practicce-with-respect-to-COVID-19-Pandemic.pdf | Yes | 3-in-1 syringe | Suggests emergency treatment only. Treat all patients as high risk with extra care and PPE if necessary | Suggests emergency treatment only. Unclear if patients are treated in regular practice or a dedicated COVID-19 centre or hospital |
| Country: Kosovo Source: Practical guidelines for dentistry professionals in the private sector during the COVID-19 virus pandemic Date of first publication: Not reported Latest update: Not reported http://osk-ks.org/wp-content/uploads/2020/05/Rekomandimet-e-OSK-per-ordinancat-private-1.pdf | Yes | High speed handpieces, 3-in-1 syringe, powered scaler | Suggests providing care with no further specification | Suggests providing care with no further specification. Unclear if patients are treated in regular practice or a dedicated COVID-19 centre or hospital |

| Country | AGPs reported | List of AGP instruments or procedures | Treatment recommendation for Non COVID-19 patients | Treatment recommendation for COVID-19 patients |
|---|------------------|--|---|---|
| Country: Malaysia Source: Malaysian Dental Association Safety Advisory to Dental Practitioners during the current Concern of COVID - 19 Infection in the initial relaxation phase of Movement Control Order Date of first publication: Not reported Latest update: 01/05/2020 https://mda.org.my/home/wp- content/uploads/2020/05/MDA_advisory_COVID19_relaxation_phase_M CO.pdf | No | None reported | Suggests providing care with no further specification | Suggests providing care with no further specification. Unclear if patients are treated in regular practice or a dedicated COVID-19 centre or hospital |
| Country: Malta Source: Office for the Deputy Prime Minister. Ministry for Health Date of first publication: Jun-20 Latest update: No update https://deputyprimeminister.gov.mt/en/health-promotion/covid-19/Documents/mitigation-conditions-and-guidances/Guidance_Dental-Practices_12Jun20.pdf | Yes | High speed handpieces, Slow speed drill, 3-in-1 syringe, Powered scalers (sonic/ ultrasonic), Intra-oral radiography | Suggests providing care with no further specification | Suggests providing care with no further specification. Unclear if patients are treated in regular practice or a dedicated COVID-19 centre or hospital |
| Country: Mexico Source: Ministry of Health Date of first publication: 21/05/2020 Latest update: 21/05/2020 https://www.fdiworlddental.org/sites/default/files/media/documents/recomendaciones_para_la_practica_odontologica_ante_covid-24.pdf | Yes | High speed handpieces, 3-in-1 syringe | Suggests treating emergencies only | Suggests emergency treatment only. Patients can be treated in practice with appropriate PPE, otherwise patients must be treated in a designated COVID-19 hospital |
| Country: Montenegro Source: Dental Chamber of Montenegro Protocol for providing dental treatment during the COVID-19 epidemic Date of first publication: Not reported Latest update: Not reported https://www.fdiworlddental.org/sites/default/files/media/documents/protokol_za_pruzanje_stomatoloskog_lijecenja_tokom_epidemije_covid-19_0.pdf | No | None reported | Suggests providing care with no further specification | Suggests providing care with no further specification. Unclear if patients are treated in regular practice or a dedicated COVID-19 centre or hospital |

| Country | AGPs reported | List of AGP instruments or procedures | Treatment recommendation for Non COVID-19 patients | Treatment recommendation for COVID-19 patients |
|--|------------------|--|---|---|
| Country: Morocco Source: Ordre national des médecins dentists du Maroc Date of first publication: 21/05/2020 Latest update: 21/05/2020 https://drive.google.com/file/d/1x8n1etxPIVI_rq7_Z7oG_wjQIHq2BaB3/view | Yes | Powered scaling, Use of handpieces, air polishing, 3-in-1 syringe | Suggests providing care with no further specification | Suggests providing are with no further specification. Unclear if patients are treated in regular practice or a dedicated COVID-19 centre or hospital |
| Country: Mozambique Source: Ministry of Health Date of first publication: 20/03/2020 Latest update: No update https://www.fdiworlddental.org/sites/default/files/media/documents/protocolo de atendimento nos servicos de estomatologia covid-19.pdf | No | None reported | Suggests providing care with no further specification | Suggests emergency treatment only. Unclear if patients are treated in regular practice or a dedicated COVID-19 centre or hospital |
| Country: Myanmar Source: Myanmar Dental Association Date of first publication: 23/03/2020 Latest update: No update https://www.fdiworlddental.org/sites/default/files/media/documents/recommendations_to_member_dental_surgeons.pdf | Yes | 3-in-1 syringe | Suggests providing care with no further specification | Suggests emergency treatment only |
| Country: Netherlands Source: The Royal Dutch Dental Association Date of first publication: 21/04/2020 Latest update: 29/06/2020 https://www.knmt.nl/sites/default/files/20200629_leidraad_mondzorg_corona_clmc_v_4.0.pdf | No | None reported | Suggests providing care with no further specification | Suggests providing care with no further specification. Unclear if patients are treated in regular practice or a dedicated COVID-19 centre or hospital |

| Country | AGPs reported | List of AGP instruments or procedures | Treatment recommendation for Non COVID-19 patients | Treatment recommendation for COVID-19 patients |
|---|---------------|---|---|---|
| Country: New Zealand Source: Dental council, Ministry of Health Date of first publication: 05/01/2020 Latest update: 06/09/2020 https://www.dcnz.org.nz/assets/Uploads/COVID/Level1-guidelines9Jun20.pdf | Yes | High speed handpieces, 3-in-1 syringe, Powered scalers (sonic/ultrasonic), Air polishers | Suggests providing care with no further specification | Suggests emergency treatment only. Unclear if patients are treated in regular practice or a dedicated COVID-19 centre or hospital |
| Country: Norway Source: Norway Dental Health Service – FHI (Folkehelseinstituttet) Date of first publication: 03/12/2020 Latest update: 26/05/2020 https://www.fhi.no/nettpub/coronavirus/helsepersonell/rad-til-tannhelsetjenesten/#tannbehandling-av-pasienter-som-ikke-er-mistenkt-sannsynlig-eller-bekreftet-med-covid19 | Yes | High speed handpieces, Slow speed drill, 3-in-1 syringe, Powered scalers (sonic/ ultrasonic), Air polishers | Suggests providing care with no further specification | Suggests providing care with no further specification. Unclear if patients are treated in regular practice or a dedicated COVID-19 centre or hospital |
| Country: Panama Source: Odontologic Association of Panama Date of first publication: 16/03/2020 Latest update: 16/05/2020 URL not available | Yes | High speed handpieces, intra- oral radiography | Suggests providing care with no further specification | Suggests emergency treatment only in a dedicated COVID-19 centre or hospital |
| Country: Paraguay Source: Ministry of Health Date of first publication: Not reported Latest update: 07/05/2020 https://www.mspbs.gov.py/dependencias/portal/adjunto/0f3634- Protocoloatencionodontologica.pdf | Yes | High speed handpieces, slow speed drill, 3-in-1 syringe, intra-oral radiography | Suggests urgent care and emergency treatment only | Suggests urgent care and emergency treatment only. Unclear if patients are treated in regular practice or a dedicated COVID-19 centre or hospital |
| Country: Peru Source: Ministry of Health Date of first publication: Not reported Latest update: Not reported https://cdn.www.gob.pe/uploads/document/file/716209/DIRECTIVA_SA NITARIA N 100-MINSA-2020-DGIESP.pdf | Yes | High speed handpieces, surgical handpieces, slow speed drill, 3-in-1 syringe, powered | Suggests emergency treatment only | Suggests emergency treatment only. Unclear if patients are treated in regular practice or a dedicated COVID-19 centre or hospital |

| Country | AGPs | List of AGP | Treatment | Treatment |
|--|----------|--|---|---|
| | reported | instruments or procedures | recommendation for Non COVID-19 patients | recommendation for COVID-19 patients |
| | | scaler, intra-oral radiography | | |
| Country: Philippines Source: Philippine Dental Association Science Committee Date of first publication: Not reported Latest update: 31/05/2020 https://www.fdiworlddental.org/sites/default/files/media/documents/interim_guidelines_on_infection_prevention_during_covid-19_pandemic.pdf | Yes | Hgh speed handpieces, 3-in-1 syringe, powered scaling | Suggests emergency treatment only | Suggests emergency treatment only. Unclear if patients are treated in regular practice or a dedicated COVID-19 centre or hospital |
| Country: Poland Source: The Polish Dental Association Date of first publication: 08/04/2020 Latest update: NA https://doi.org/10.5114/jos.2020.94168 | No | None reported | Suggests providing care with no further specification | Suggests providing care with no further specification. Unclear if patients are treated in regular practice or a dedicated COVID-19 centre or hospital |
| Country: Portugal Source: Direcao Geral da Saude (Directorate General of Health) Date of first publication: 01/05/2020 Latest update: No update https://www.omd.pt/covid-19/procedimentos/ | No | High speed handpieces, 3-in-1 syringe | Suggests providing care with no further specification | Suggests urgent and emergency treatment only |
| Country: Romania Source: Not reported Date of first publication: 25/05/2020 Latest update: No update https://www.dsptimis.ro/data_files/content/legislatie-covid/files/ordin-873-2020.pdf | No | None reported | Suggests providing care with no further specification | Suggests providing care with no further specification |
| Country: Singapore Source: Ministry of Health Circular 132/2020 – Gradual resumption of dental services after COVID-19 circuit breaker period Date of first publication: 14/02/2020 Latest update: 21/05/2020 | No | None reported | Suggests urgent and emergency care is prioritised but a wide range of dental procedures with AGPs are permitted where no other option is possible | Suggests AGPs are not provided in COVID-19 patients |

| Country | AGPs reported | List of AGP instruments or procedures | Treatment recommendation for Non COVID-19 patients | Treatment recommendation for COVID-19 patients |
|--|------------------|---|--|---|
| https://www.healthprofessionals.gov.sg/docs/librariesprovider11/default-document-library/moh-cir-no-132_2020_21may20_dental-services-after-cb-period67b93be2bc2542d18c675325ab75f730.pdf | | | | |
| Country: Slovakia Source: Methodological guidelines of the Chief Expert for the Department of Dentistry for the provision of healthcare during the COVID-19 pandemic Date of first publication: 20/05/2020 Latest update: No update https://www.health.gov.sk/?covid-19-metodicke-usmernenia | No | None reported | Suggests providing care with no further specification | Suggests providing care with no further specification. Unclear if patients are treated in regular practice or a dedicated COVID-19 centre or hospital |
| Country: Slovenia Source: Expert recommendations for the treatment of patients in dental centres during the release of measures in the field of dentistry in the context of COVID-19 Date of first publication: 06/05/2020 Latest update: No update https://www.gov.si/assets/ministrstva/MZ/DOKUMENTI/Koronavirus/Zobozdravstvo/Strokovna-priporocila-za-obravnavo-pacientov-v-zobozdravstvenih-ordinacijah-v-casu-sproscanja-ukrepov-na-podrocju-zobozdrav.docx | No | None reported | Suggests prioritising those with problems or undergoing a course of treatment. Routine care not obviously restricted but not encouraged. Limit AGPs where possible | Suggests patients are treated at selected emergency dental centres and limited to emergency care |
| Country: South Africa Source: SADA (South African Dental Association) Dental Protocol in Response to the COVID-19 Pandemic – A South African Private Practice Perspective Date of first publication: May-20 Latest update: No update https://cdn.sada.co.za/files/centreal- resources/downloads/coronavirus/SADA%20DENTAL%20PROTOCOL %20IN%20RESPONSE%20TO%20THE%20COVID19%20PANDEMIC %202020.pdf?v=20200630112402 | Yes | High speed handpieces, Surgical handpieces, Slow speed drill, 3-in-1 syringe, Powered scalers (sonic/ ultrasonic), Lasers | Suggests providing care with no further specification | Suggest providing care with no further specification. Dentists need to assess their environment to assure optimal isolation and ventilation, and see at the end of the day. Otherwise, these patients need to be seen in a dedicated COVID-19 centre or hospital, not in a regular practice |
| Country: Spain Source: Spanish National Dentistry Council | Yes | High speed handpieces, Surgical | Suggest providing care with no further | Suggests providing care with no further |

| Country | AGPs reported | List of AGP instruments or procedures | Treatment recommendation for Non COVID-19 patients | Treatment recommendation for COVID-19 patients |
|---|------------------|--|---|---|
| Date of first publication: 13/04/2020 Latest update: 01/05/2020 https://www.consejodentistas.es/comunicacion/actualidad-consejo/notas-de-prensa-consejo/item/1783-plan-estrategico-de-accion-para-centreas-dentales-durante-el-periodo-de-desescalada.html | | handpieces, 3-in-1 syringe, Powered scalers (sonic/ ultrasonic), Air polishers, Lasers | specification. AGPs are classified as low, medium, and high risk depending on PPE | specification. Unclear if patients are treated in regular practice or a dedicated COVID-19 centre or hospital |
| Country: Switzerland Source: Swiss Dental Association Date of first publication: 17/04/2020 Latest update: 28/05/2020 https://www.sso.ch/fileadmin/upload_sso/5_Newsletter/2020/Covid-19-Positionspapier4-6-F.pdf | No | None reported | Suggests providing care with no further specification | Suggests providing care with no further specification. Unclear if patients are treated in regular practice or a dedicated COVID-19 centre or hospital |
| Country: Tunisia Source: Conseil National d'Ordre des Médecins Dentistes de la Tunisie Date of first publication: 12/04/2020 Latest update: 11/05/2020 https://cnomdt.tn/docs/relatedInfo/protocole-covid4-cnomdt-26.pdf | No | None reported | Suggests providing care, with no further specification | Suggests providing care with no further specification. Unclear if patients are treated in regular practice or a dedicated COVID-19 centre or hospital |
| Country: United Arab Emirates (Dubai) Source: Dubai Health Authority Date of first publication: 2/06/2020 Latest update: No update https://services.dha.gov.ae/sheryan/wps/portal/home/circular-details?circularRefNo=CIR-2020-00000236&isPublicCircular=1&fromHome=true | No | None reported | Suggests providing care with no further specification | Suggests providing care with no further specification. Unclear if patients are treated in regular practice or a dedicated COVID-19 centre or hospital |

| Country | AGPs reported | List of AGP instruments or procedures | Treatment recommendation for Non COVID-19 patients | Treatment recommendation for COVID-19 patients |
|--|------------------|--|--|--|
| Country: UK - England Source: Office of the Chief Dental Officer, England Date of first publication: 06/04/2020 Latest update: No update https://www.england.nhs.uk/coronavirus/wp- content/uploads/sites/52/2020/06/C0575-dental-transition-to-recovery- SOP-4June.pdf | Yes | High speed handpieces, Surgical handpieces, 3-in-1 syringe, Powered scalers (sonic/ ultrasonic) | Suggests providing care with no further specification. Whilst in sustained community transmission, suggests treating all patients as high risk. Treatment with extra care and PPE. Minimise APGs | Suggests emergency treatment only in a dedicated COVID-19 centre or hospital |
| Country: UK - Northern Ireland Source: Health and Social Care Board Date of first publication: 06/04/2020 Latest update: 22/06/2020 http://www.hscbusiness.hscni.net/pdf/Preparation%20for%20the%20Reestablishment%20of%20the%20GDS%20Updated%2022%20June%202 020.pdf | Yes | High speed handpieces, Surgical handpieces, 3-in-1 syringe, Powered scalers (sonic/ ultrasonic), Air polishers | Suggests emergency treatment only | Suggests emergency treatment only. Unclear if patients are treated in regular practice or a dedicated COVID-19 centre or hospital |
| Country: UK- Scotland Source: Scotlish Dental Centreal Effectiveness Programme Date of first publication: 25/05/2020 Latest update: 06/12/2020 http://www.sdcep.org.uk/wp-content/uploads/2020/06/SDCEP- Resuming-General-Dental-Services-Following-COVID-19-Shutdown-Update-120620.pdf | Yes | High speed handpieces, 3-in-1 syringe, powered scalers (sonic/ultrasonic) | Suggests urgent and routine treatment but no AGP treatment. | Suggests AGP treatment in a dedicated COVID-19 centre or hospital |
| Country: UK- Wales Source: Chief Dental Officer, Wales Date of first publication: 08/06/2020 Latest update: No update https://gov.wales/sites/default/files/publications/2020-06/standard-operating-process-fornon-covid-19-dental-centres-providing-aerosol-generating-procedures-in-wales.pdf | Yes | High speed handpieces, Slow speed drill, 3-in-1 syringe, powered scalers (sonic/ ultrasonic), air polishers | Suggests providing care with no further specification | Suggest providing care with no further specification and treat patients in a specific COVID centre or hospital, not in a regular practice |

| Country | AGPs reported | List of AGP instruments or procedures | Treatment recommendation for Non COVID-19 patients | Treatment recommendation for COVID-19 patients |
|--|------------------|--|---|---|
| Country: Ukraine Source: National Academy of Medical Sciences of Ukraine Date of first publication: 08/05/2020 Latest update: No update http://amnu.gov.ua/spilni-rekomendacziyi-du-instytut-stomatologiyi-ta-shhelepno-lyczevoyi-hirurgiyi-namn-ukrayiny-i-go-asocziacziya-stomatologiv-ukrayiny-shhodo-protyepidemichnyh-zahodiv-v-stomatologichnyh-zakladah-ohor/ | No | None reported | Suggests providing care with no further specification | Suggest providing care with no further specification and treat patients in a dedicated COVID centre or hospital, not in a regular practice |
| Country: Uruguay Source: Ministry of Health Date of first publication: Not reported Latest update: Not reported https://www.gub.uy/ministerio-salud-publica/sites/ministerio-salud-publica/files/documentos/noticias/MSP_RECOMENDACIONES_ODONT OLOGOS_HIGIENISTAS_DENTALES.pdf | Yes | High speed handpieces, 3-in-1 syringe, intra-oral radiography | Suggests emergency treatment only | Suggest providing care with no further specification and treat patients in a specific COVID centre or hospital, not in a regular practice |
| Country: USA Source: American Dental Association Date of first publication: 24/04/2020 Latest update: 06/09/2020 https://success.ada.org/~/media/CPS/Files/Open%20Files/ADA_Return to_Work_Toolkit.pdf?utm_campaign=covid-19-Return-to-Work- Toolkit&utm_medium=email&_hsmi=86924194&_hsenc=p2ANqtz- HVpP4Wh9sKaPxqGZIA1G9Ro1coYT29m3pRXN1TDeZSalr3 - PzyReYsAnmYdx6fX_rJmFesmgepGb1_VhbsxZ6Zu6g&utm_content=8 6924194&utm_source=hs_automation | No | None reported | Suggests providing care with no further specification | Suggests providing care with no further specification. Unclear if patients are treated in regular practice or a dedicated COVID-19 centre or hospital |
| Country: USA Source: Centers for Disease Control and Prevention (CDC) Date of first publication: Not reported Latest update: 17/06/2020 https://www.cdc.gov/coronavirus/2019-ncov/hcp/dental-settings.html | Yes | High speed handpieces, Slow speed drill, 3-in-1 syringe, powered scalers (sonic/ultrasonic) | Suggest providing care with no further specification. Treat all patients as high risk, with extra care and PPE if necessary | Suggests providing care with no further specification. Avoid AGPs if possible. Unclear if patients are treated in regular practice or a dedicated |

| Country | AGPs reported | List of AGP instruments or procedures | Treatment recommendation for Non COVID-19 patients | Treatment recommendation for COVID-19 patients |
|--|------------------|---|--|--|
| | | | | COVID-19 centre or hospital |
| Country: Zimbabwe Source: Zimbabwe Dental Association COVID-19 Dental Practice Recommendations/Guidelines Date of first publication: Not reported Latest update: 22/04/2020 https://www.fdiworlddental.org/sites/default/files/media/documents/covid- 19 dental practice recommendations guidelines.pdf | Yes | High speed handpieces, 3-in-1 syringe and scaler use | Suggests providing care with no further specifications. AGPs undertaken with standard COVID-19 precautions | Suggests emergency treatment only without AGPs if possible. If procedure requires AGP, undertake proper COVID-19 precautions. Unclear if patients are treated in regular practice or a dedicated COVID-19 centre or hospital |

Non COVID-19 refers to patients who are presumed to have negative COVID-19 status; COVID-19 refers to patients with suspected or confirmed positive COVID-19 status

AGP, aerosol generating procedure