

NortonImplants



Standard Operating Procedures

COVID-19 Pandemic

Standard Operating Procedure for Norton Implants Ltd

104 Harley Street
London W1G 7JD

Introduction

This document has been created to help staff and patients understand the extent to which Norton Implants takes the COVID19 pandemic seriously and how we intend to address concerns of both patients and staff to deliver a safe working environment for the delivery of dental care and to meet the demand of patients who desire to commence or continue with their dental implant treatment.

These Standard Operating Procedures (SOPs) are based on a risk assessment performed on 21 May 2020. This process has followed numerous guidance documents made available by organizations such as Public Health England, (PHE), the National Health Service (NHS), the British Dental Association (BDA), the Office of the Chief Dental Officer (CDO) and the Care Quality Commission (CQC) amongst others.

These SOPs will be the foundation to our approach at Norton Implants to receiving and treating all patients until such time as the UK government advises there is no longer a risk to the public from the Sars-Cov2 virus. However it is anticipated that any additional processes in dentistry will remain for the foreseeable future and that on an already strong foundation of using personal protective equipment (PPE) and established decontamination procedures (HTM01-05) dentistry and specifically Norton Implants was, is and will remain a safe place for all patients to receive treatment.

Reducing Risks

The two main increased risks in dentistry with the COVID-19 pandemic are due to the fact that COVID-19 is a “transmissible virus.” These risks are:

- 1) Close physical contact (within 2 metres) between a Dental Care Professional (DCP) and patient.
- 2) High risk of contact transmission from aerosol and droplets via surface contamination These are referred to as Aerosol Generating Procedures (AGP's) and are categorized into high risk (aerosol) AGP1 and lower risk (droplet) AGP2 procedures (please see Appendix 1).

Norton Implants' Standard Operating Procedures (SOP) are aimed at reducing these two enhanced risks by:

- 1) Reducing patient - clinician contact
- 2) Reducing the risk of transmission via droplet and aerosol
 - The evidence base supporting the risk of transmission for some of these routes is conflicting and at this stage equivocal and decisions taken are done for the safety of both patients and staff, while at the same time allowing patients access to the treatment they need and desire.
 - The main methods through which we can reduce the rate of transmission of droplets and aerosol are:
 - a) Reduction of production: e.g. reduction in number of AGP procedures, the routine use of pre-treatment oral rinse to help reduce viral load, the use of PPE by staff that is appropriate to the procedure in question and the use of double suction etc.
 - b) Norton Implants has purchased hospital grade HEPA filtration air purification systems that will allow exchange of air within the operating environment to aid in removal of the viral particle suspension in the air. This along with our standard decontamination protocols and thorough cleaning after settlement of aerosol onto surfaces etc. will be used to help reduce risk.
 - c) Use of PPE

Standard Operating Procedure

This document outlines the Standard Operating Procedures (SOP) for Norton Implants.

The expectation is that these SOP's will be implemented with immediate effect and as soon as we open our doors to patients from June 8th 2020.

It includes the infection prevention and control advice for clinicians and colleagues involved in delivering face-to-face dental care in this current period of the COVID-19 pandemic and will continue to be revised alongside evolving national guidance.

This SOP will remain in place until national guidance changes. We would expect this would be once a vaccination has been developed, sufficient herd immunity established or when clinical evidence indicates the virus has naturally "burnt out".

At the present time the United Kingdom has not commenced the "test & trace" model of other countries although this is now changing and may impact on the guidance as weeks evolve. It is therefore harder to identify people who may be asymptomatic carriers of COVID-19. In light of this we will undertake our own "Triage & Testing" program and if in doubt patients will be asked to submit to a PCR or Antibody test using either the Abbott or Roche tests to determine if they have or have had the disease.

Patients who test positive to a PCR test will be refused treatment and advised to isolate for 14 days. Patients who test positive to the Antibody test will be accepted for treatment if they have fully recovered and been symptom free for at least 14 days. Patients who test negative may be asked to self-isolate for a further 14 days prior to their appointment unless they can confirm that they and anyone they live with have been fully self-isolating without symptoms for the previous month. If there is any doubt, patients will not be eligible for treatment. Any patients who have travelled outside the UK within the last month will be asked to self-isolate for 14 days prior to being asked to submit to the antibody test (This excludes the Channel Islands and Ireland in line with UK government policy).

Dr Norton and all the staff will submit to the antibody test prior to commencing the re-opening of surgery so that their serological status is known and the results will be made available to our patients, on request, to help them decide if they wish to attend for treatment or not.

Clinicians and other Dental Care Professionals (DCPs) have an independent duty of care to their patients and our professional body, the GDC. It is important that individual risk assessments and clinical judgments must also be applied within the guidance provided by this SOP.

Pre-Practice Attendance Preparation

Pre- Assessment of Colleagues: (See Appendix 2)

- Risk assessment of all colleagues prior to work is necessary to ensure they are available to return to work, do not fall into vulnerable worker groups and have either had and recovered from COVID-19 or remain asymptomatic from the disease.

Pre- Preparation of the Practice Environment: (See Appendix 3)

- It is recognized that dental treatment will require closer contact than the recommended 2 metres, however social distancing measures should be applied as far as possible throughout the process.
- Physical and social measures will need to be implemented to prepare the practice environment in advance of accepting patients and visitors.

Management of the Appointment Diary: (See Appendix 4)

- The appointment diary will need to be managed in such a way as to allow for social distancing, enhanced disinfection procedures and allocation of AGP's between surgeries 1 and 2.
- Zoning, surgery rotation and other local measures will be implemented.

Screening and Triaging of Patients: (See Appendix 5)

All patients must be screened remotely by telephone or via the link on the practice website. The COVID-19 triage form will need to be signed by patients to confirm the statements are correct and true. This is necessary to:

1. To risk assess the patient regarding their possible COVID-19 history and symptoms.
2. Identify vulnerable/shielding patient groups and manage the appointment diary accordingly.
3. To confirm any medical history changes.
4. To confirm contact details, email, phone numbers etc.
5. To clarify and prepare the patients for the altered patient journey at their appointment.

This needs to be done as close to the day of the appointment scheduled as possible.

All patients and visitors should be advised of changes in the attendance protocol and any advanced information required should be gathered.

Following patient screening and preparation, clinical triaging is recommended to confirm the purpose of the appointment and allow optimal surgery preparation.

Patient Practice Attendance Protocol: (See Appendix 6)

- ☐ Alteration to the usual attendance protocol will be necessary for patients and visitors.
- ☐ Specifically, if patients arrive early for their appointment, they will be asked to remain in their car until such time as the practice is ready to receive them.
- ☐ Patients will only be allowed to attend with one family member.
- ☐ Patients of Norton Implants will have the benefit of a private waiting area and will not need to sit in the main waiting room of 104 Harley Street.
- ☐ This should be communicated to the patient and visitor during the pre-appointment attendance screening.

People Numbers in Surgery:

- ☐ All procedures should be carried out with a single patient and only colleagues who are needed to undertake the procedure present in the room with the doors closed. An air purification system will be in place.
- ☐ If an AGP1 has to be undertaken, this will be done in Surgery 2 on the lower ground level. No-one should enter the room during the procedure and the surgery is to be vacated as soon as the AGP1 procedure is complete. Air purification will be left on the highest setting for a minimum of 30 minutes.

Preparatory Measures

Hand Hygiene (see Appendix 7)

All colleagues, patients and visitors must follow hand and respiratory hygiene.

The entire dental team along with patients and visitors should decontaminate their hands using Alcohol-based Hand Rub (ABHR) when entering and leaving the building. This should be followed by hand washing at the nearest available facility.

For clinicians and DCPs, hand hygiene (washing with soap and water or ABHR) must be carried out at all of the following times:

- ☐ Immediately before every episode of direct patient care – to include forearms
- ☐ Prior to donning of PPE
- ☐ After any activity or contact that potentially results in hands becoming contaminated
- ☐ After the removal of PPE
- ☐ After equipment decontamination

- ☐ After waste handling
- ☐ At the end of every clinical session – to include forearms

Respiratory and Cough Hygiene (See Appendix 8)

All dental colleagues along with patients and visitors should follow good respiratory and cough hygiene.

"Catch it, Bin it, Kill it"

Pre- Preparation of the Surgery Environment: (See Appendix 9)

- ☐ It is recognized that dental treatment will require closer contact than the recommended 2 metres, however social distancing measures should be applied as far as possible throughout the process.
- ☐ Physical measures will need to be implemented to prepare the surgery environment in advance of accepting patients.
- ☐ No one can enter an AGP1 surgery without being fully Donned with enhanced PPE, so treatments must be planned well in advance to maximize surgery efficiency.

Clinic Protocols:

Standard Infection Control Precautions (SICP's):

- ☐ Standard national infection control precautions (SICPs) should be adhered to at all times.
- ☐ This COVID-19 SOP should build upon these and not replace them.

Enhanced Transmission-Based Precautions (ETBP's)

- ☐ Are applied in this document as SICP's are considered not to be sufficient alone during this pandemic.
- ☐ Contact precautions are used to prevent and control infection transmission via direct contact or indirectly from the immediate environment. This is the most common route of infection transmission.
- ☐ Airborne precautions are used to prevent and control infection transmission via aerosols ($\leq 5\mu\text{m}$) from the respiratory tract of the patient suspended in the air and therefore breathable or via settling directly onto skin, eyes or clothing of the dental team.
- ☐ Droplet precautions are used to prevent and control local infection transmission over short distances via droplets ($>5\mu\text{m}$) from the patient on to the skin, eyes or clothing of a member of the dental team.

Definition of a Treatment Session:

- A treatment session is the length of time from the start of a clinical session until the need to remove workwear to take a toilet break, eat food or after 6 hours, whichever is the soonest.

Clinical Protocols

Infection Prevention Control Protocols

- Reduction in production of AGP
- Reduction in number of social contacts – social distancing
- Reduction in contact transmission – decontamination and appropriate PPE
- Reduction in droplet transmission – Standard PPE
- Reduction in aerosol transmission – Air purification (See Appendix 10) and enhanced PPE

Measures which Must Be Employed for Reduction of Production of Aerosol

Alteration of working practice to reduce number of AGP's where such AGPs are defined as high risk or lower risk (See Appendix 1). All patients regardless of procedure type will require:

- Premedication rinse for patient with 1.5% Hydrogen peroxide, Povidine Iodine 5% or other rinses which may be considered appropriate.
- Work four handed for well-placed high-volume suction
- Use of air filtration system at the recommended setting (Appendix 10).

Protective Equipment (PPE):

Norton Implants will follow the guidance set out by PHE and the NHS in regard to exactly what PPE is appropriate for which procedure (See Appendix 1).

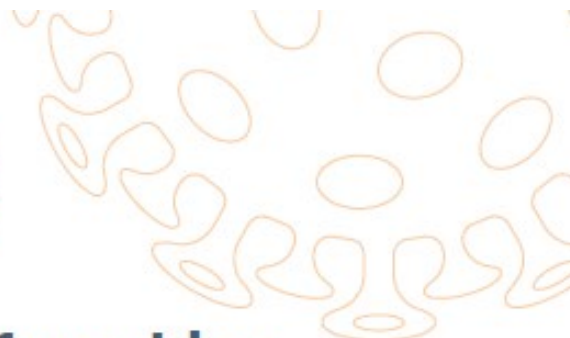
If we are confident, following a risk assessment, that a procedure is NON-AGP, or an AGP Type 2 procedure (large droplet) then the standard PPE typically used by the practice including Fluid Resistant Type IIR Surgical Masks (FRSM) will be employed.

For AGP Type1 procedures Enhanced PPE is required. (See Appendix 11)

The following PHE poster will be followed:



Public Health
England



COVID-19 Safe ways of working

A visual guide to safe PPE

The infographic is divided into two main vertical panels. The left panel, titled 'General contact with confirmed or possible COVID-19 cases', features an illustration of a person in an orange apron, blue gloves, and a blue surgical mask. The right panel, titled 'Aerosol Generating Procedures or High Risk Areas', features an illustration of a person in a blue long-sleeved gown, blue gloves, a white facepiece respirator, and eye protection. A central white box contains general PPE instructions. At the bottom, a green banner provides a website for more information.

General contact with confirmed or possible COVID-19 cases

- Eye protection to be worn on risk assessment
- Fluid resistant surgical mask
- Disposable apron
- Gloves

Aerosol Generating Procedures or High Risk Areas

- Eye protection eye shield, goggles or visor
- Filtering facepiece respirator
- Long sleeved fluid repellent gown
- Gloves

Clean your hands before and after patient contact and after removing some or all of your PPE

Clean all the equipment that you are using according to local policies

Use the appropriate PPE for the situation you are working in (General / AGPs or High Risk Areas)

Take off your PPE safely

Take breaks and hydrate yourself regularly

For more information on infection prevention and control of COVID-19 please visit:

www.gov.uk/government/publications/wuhan-novel-coronavirus-infection-prevention-and-control

Workwear Management: (See Appendix 12)

It is important that all colleagues wear appropriate clothing at work and follow the guidance for laundering.

- ☐ Workwear should not be worn to the practice or outside the clinic after use
- ☐ Clinicians and DCP's must keep clinical and normal work wear separated
- ☐ It is expected that the in-surgery work wear will be the normal Norton Implants scrubs
- ☐ The transportation and management/hygiene of work wear should follow the work wear policy

Donning and Doffing of PPE: (See Appendix 13)

The wearing of Enhanced COVID-19 PPE should be Donned (put on) and Doffed (taken off) in line with the Donning and Doffing protocol.

FFP2 masks should be worn under a fluid resistant surgical mask and used for a session where possible. If the FFP2 mask becomes damaged or contaminated it should be discarded immediately. Masks should be removed outside the dental surgery where AGPs have been undertaken in line with the doffing protocol.

Lab Protocol:

- ☐ Prior to dispatch to the laboratory, laboratory work should be rinsed in the usual manner in surgery.
- ☐ It should then be disinfected again in the usual manner.
- ☐ Laboratory work should be handled appropriately and placed in a sealed bag after disinfection.
- ☐ Laboratory bag should be appropriately labelled with disinfection confirmed.
- ☐ Laboratories should be asked to sterilize work to be returned to the surgery and sealed in bags.
- ☐ Work which cannot be sterilized should be disinfected at the laboratory, sealed and sent to the clinic.
- ☐ The clinic should re-disinfect prosthetic work before insertion into the patient's mouth.

Decontamination Processes: (please see Appendix 14)

The decontamination process after a NON-AGP procedures should follow normal cross Infection Control guidelines and HTM01-05 procedures.

The decontamination process after an AGP procedure should follow the AGP Decontamination protocol.

Part of the decontamination process will involve air purification using the installed air purification units to reduce suspended viral loads following surgery time. Surgeries will be left for a minimum of 20 minutes between patients to allow for a minimum of 2 up to 5 ACH (Air Changes per Hour). This is known to reduce the viral load in the air by approximately 70% - 95%.

Appendix 1:

Aerosol Generating Procedures:

Principles:

- Aerosols are generated in dentistry through the use of equipment that delivers a spray of water usually propelled through the environment by air, or as droplets of contaminated water being splashed outside of the patient's mouth
- At Norton Implants only aerosols generating a spray typically by propelling water through the use of air will be defined as AGP Type 1 procedures and will require the use of enhanced PPE. These procedures include but may not be limited to the use of:
 - Air driven turbine handpieces
 - 3 in 1 syringes where both buttons are pressed simultaneously
 - Ultrasonic scalers
 - Piezosurgery units.
- AGP type 2 procedures, requiring a less stringent or normal PPE are defined for the purposes of this document as the use of instruments that create a flow or jet of water, NOT in spray form, that may "splash back" out of the patient's mouth into the local surrounding vicinity. These include but may not be limited to:
 - 3 in 1 syringes where only the water button is pressed
 - Surgical handpieces using physio-dispenser irrigation
 - Implant motor handpieces using physio-dispenser irrigation
 - Irrigation of periodontal/peri-implant sites using standard syringes
 - Use of prophylaxis paste with an electric handpiece

Additional Measures to be Employed for Reduction of Potentially Virally Contaminated Aerosols

- Alteration of working practice to reduce number of AGP's e.g. no ultra-sonic scaling, minimize procedures requiring the use of a turbine, and not to use both air and water simultaneously when using the triple syringe.
- Premedication rinse for patient with 1.5% Hydrogen Peroxide or equivalent.
- Work four handed unless impossible for well-placed high-volume suction.
- Ensure patients rinse regularly and spit very slowly and carefully into a disposable cup. Spittoon not to be used until further notice.

Appendix 2:

Risk Assessment of Staff

Date of COVID-19 Risk Assessment	
Name of Staff Member	
Review Date (Suggested review period is monthly/3-monthly)	

	10 points employers should consider in relation to COVID-19 Health & Safety	Y	N
1.	Can you travel to and from the surgery safely without using public transport?		
2.	If NO to Q1, can you confirm that you will wear a fresh face mask each day to travel to and from work?		
3.	Can you confirm that you will observe recommended hand washing/sanitization procedures when you have been through public places?		
4.	Can you confirm you have had or tested positive to COVID-19? If not will you agree to submit to antibody testing to determine your status?		
5.	Will you agree <u>not</u> to transfer work scrubs to and from the surgery and to use the washing machine facilities for your scrubs at work?		
6.	Can you confirm you have read both the Norton Implants Risk Assessment and the Standard Operating Procedures documents and that you will agree to adhere to these documents?		
7.	If you become unwell or think you may be starting to have symptoms do you confirm you will inform Dr Norton at the earliest opportunity?		
8.	Are you considered to be in a vulnerable group?		
9.	Do you live with anyone considered to be in a vulnerable group?		
10.	Do you have any objection to returning to work and treating patients according to the established protocols?		

I confirm that I have discussed my return to work with Dr Norton and I understand that this information will be used for the purposes of recording and monitoring the return to workplace following the COVID-19 pandemic.

Name of Person Completing	
Signature	
Date	
Additional comments	

Appendix 3:

Preparation of the Practice Environment:

- It is recognized that dental treatment will require closer contact than the recommended 2 metres, however social distancing measures should be applied as far as possible throughout the process.
- Physical measures will need to be implemented to prepare the practice environment in advance of accepting patients and visitors.
- Patient lounges and reception areas should allow for 2 metres separation.
- Reception and patient lounges must be kept clean and clutter free.
- Information posters about COVID-19 and the protective measures that we have put in place to protect patients and our policies must be displayed or available to be read.
- Remove or deactivate water dispensers and remove disposable drinking cups.
- Disposable tissues and a waste bin must be available to support respiratory and cough hygiene and signs should be displayed regarding "Catch it, bin it, kill it."
- There should be more frequent cleaning and disinfection of commonly used hand-touched surfaces (at least twice per day).
- All door handles must be wiped with appropriate cleaning products (Please see Appendix 17) when colleagues, patients and visitors enter and leave the building or a surgery.
- Surgeries must be zoned for AGP1 and AGP2 or non-AGP procedures where possible within the confines of the practice and air purification units installed.
- The appointment diary must be managed to ensure there is 30 minutes between each appointment to allow for decontamination and air purification. (Please see Appendix 5)
- No home clothes are to be worn in surgery – see Daily Clothing Protocol. (Please see Appendix 12)
- Arrange physical installation of:
 - A station at the front entrance for patient(s) for hand sanitizer, tissues and a bin to dispose of personal disposable face masks. (A fresh face mask can be provided if required)
 - Foot controlled clinical waste bin by the exit to the practice for patients and practice colleagues who need to dispose of a FRSM
 - Air purification units in AGP surgeries where available
 - Hand sanitisers outside the surgeries to be used
 - Foot controlled clinical waste bins inside and outside AGP surgeries
 - Appropriate signage and posters regarding clinical waste bins in communal areas (by exit of practice and outside surgery doors).

Appendix 4:

Management of the Appointment Diary:

- The appointment diary will be managed to allow for social distancing, enhanced disinfection procedures and management of AGP's.
- Screening must occur by telephone or using the website link in advance to check for COVID-19 status etc.
- Triage should occur to clarify dental symptoms and confirm treatment needs prior to the appointment.
- Patients ideally should travel to the practice by car or by a socially distanced walk or cycle. If they need to use public transport social distancing restrictions should be followed and they should be encouraged to wear a face mask.
- Appropriate appointment times should be scheduled following screening and triage. 20-30 mins should be added to each appointment to allow for decontamination process with air purification.
- Patients will be asked to wait outside, or in their cars and called in via mobile phone or SMS text when the clinician is fully ready thereby reducing the time the patient is in the building.
- Sessions for specific patient groups e.g. vulnerable patients should be carried out at the beginning of a day.
- Appropriate zoning of the diary should be undertaken. e.g. to separate vulnerable patients such as the elderly (over 70) or those with pre-existing medical conditions as well as by procedure types (See zoning flow chart Appendix 6).
- Patient escorts should only be allowed where absolutely necessary (e.g. child attending with parent or disability or reduced capacity). These escorts should not be allowed into the dental surgery while treatment is undertaken if possible. They should be asked to leave the premises whilst the procedures are carried out or they can be directed to the Norton Implants private waiting area in the library.

Appendix 5:

Pre-Screening and Triaging of Patients:

All patients must be screened remotely by telephone or the website link before presentation at the practice for several purposes:

1. To risk assess the patient regarding their possible COVID-19 history and status.
2. Identify vulnerable patient groups and manage the appointment diary accordingly.
3. Identify patients with possible COVID-19 symptoms and treat according to Advice, Analgesia & Antibiotics strategy for the time being.
4. To confirm any medical history changes and get a remote medical history where possible and consent from the patient that they are happy to attend for the proposed treatment.
5. To confirm an Email address – aim for paperless transactions so estimates, receipts and consent should be emailed when at all possible.
6. To confirm the contact phone number (preferably a mobile) for how they will be “summoned” into practice at appointment time and ask them not to arrive too early as they will need to wait outside the practice.
7. To clarify and prepare the patients for the altered patient journey at their appointment.
8. To clarify that payment will be preferably made in advance and ideally by BACS.
9. To recommend that the patient uses the Toilet before leaving home.
10. To advise patients to bring minimum belongings with them as these will be left outside the surgeries.

COVID-19 Triage Form

COVID19 TRIAGE FORM

Thank you for helping Norton Implants stay safe by completing and submitting the following form

Name *First Name Last Name **Email ***

example@example.com

Mobile Phone Number *

07XXX 6-digit Phone Number

Date of Birth *

Day Month Year

In the last month have you or anyone in your immediate family had any of the common symptoms of COVID19 such as a persistent dry cough, headache, fever, diarrhoea, or a loss of smell or taste? *

YES

NO

Do you think you may have already had COVID19 more than one month ago? *

YES

NO

If you answered YES to the either of the previous two question have you tested positive to either a nasopharyngeal swab or antibody test? *

YES

NO

Have you tested negative to either a nasopharyngeal swab test or antibody test in the last 14 days? *

YES

NO

Have you been in close contact with anyone who has tested positive to COVID19 in the last month? *

YES

NO

Do you think you might have COVID19 at the moment? (If you are not sure please answer YES)

YES

NO

Have you or anyone you have been in close contact with returned from abroad in the last 14 days

YES

NO

Are you a key worker? *

YES

NO

ADDITIONAL INFORMATION

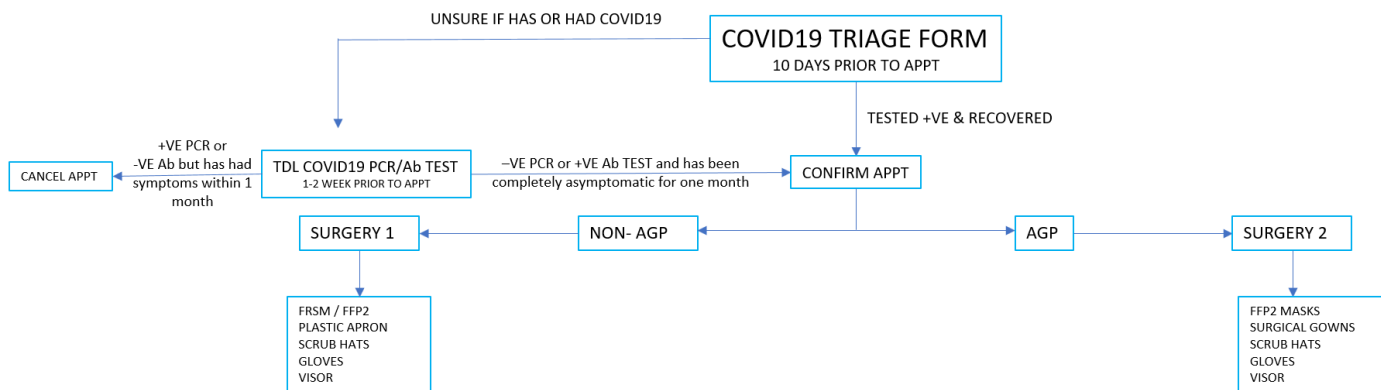
Please enter any additional information you may feel would be useful to us in assessing your COVID19 history and/or susceptibility such as any reasons you may be consider vulnerable due to medical history or alike

Appendix 6:

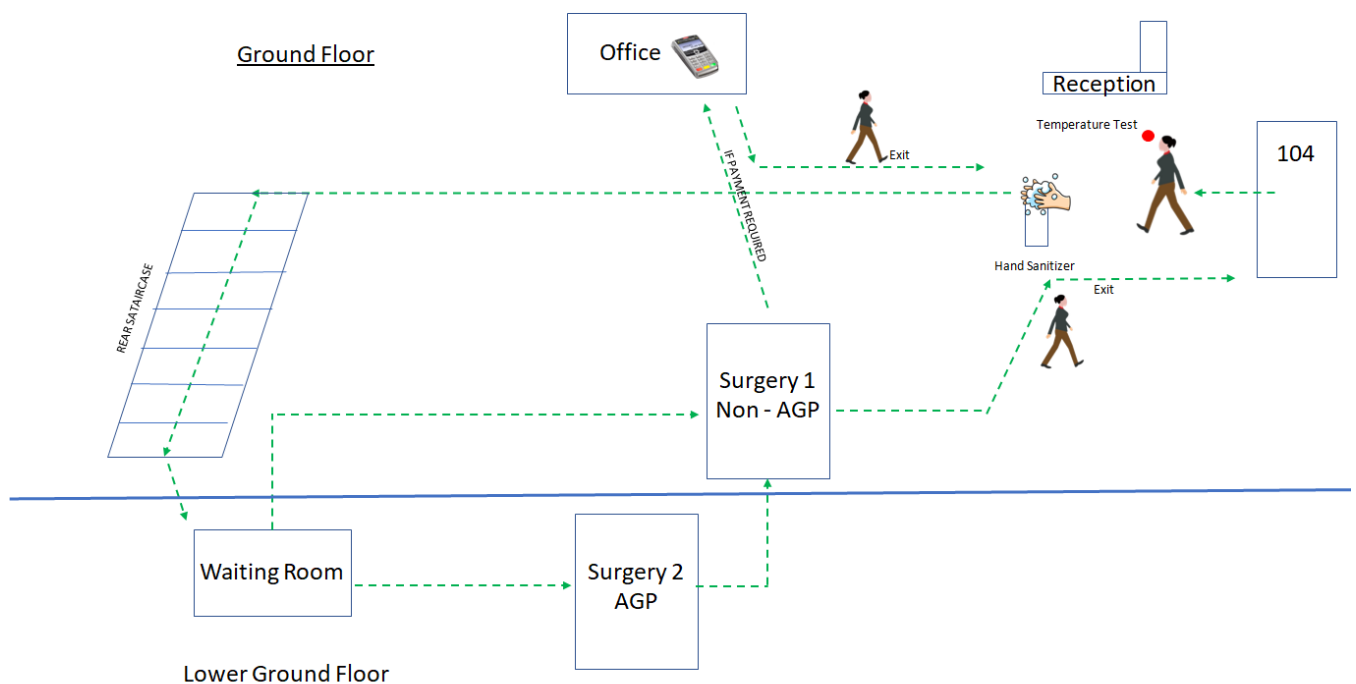
Patient Practice Attendance Protocol:

Arrival:

1. The patient must not enter the building until summoned by phone or SMS when the clinician is ready to see them hence minimizing the level of exposure.
2. The patient should leave most of their belongings at home or in the car and bring minimal into the practice with them.
3. The patient must use the hand sanitizer station when entering the building, inside the front door. They should put away or dispose of any personal face mask. If they wish to continue to wear a face mask, a new one will be provided at reception.
4. They must follow the social distancing protocol of standing 2 metres away from the reception desk. This should be clearly demarcated.
5. The patient's temperature will be taken at reception and if it is above 37.5°C they should be asked to wait outside for 10 minutes (weather permitting) before having it re-taken. If their temperature is still high, they will be sent home and their appointment re-booked.
6. The reception team should be wearing a surgical face mask which can be worn for one session.
7. The same questions should be asked as were asked on the phone previously regarding their COVID-19 status and symptoms.
8. Payment should have been made in advance of the dental appointment. If not the patient will be encouraged to use contactless technology such as Apple Pay.
9. The patient should be escorted directly into the designated surgery if possible. If not they will be escorted to the Norton Implants private waiting area in the library. (See Patient Flow Chart)
10. The patient's coat and belongings should be left in their car if possible or with their escort. Any coats will be hung up away from other items.
11. Prior to their treatment the patient should be directed to wash their hands in the nearest facility. This most likely will be the toilets or in the surgery in which they will undergo their procedure.
12. The patient should have used the toilet before leaving home as per the screening recommendation. Should there be a risk of them needing to use the facilities again during an AGP they should be encouraged to use the toilet prior to the treatment commencing. The door, toilet flush and tap handles will need to be disinfected after use.



1. Patients advised that they should arrive 10 mins prior to appt. Anyone more than 10 minutes late will not be seen – Get here in good time
2. Temperature check and hand sanitization at reception.
3. LW to direct patient to private waiting room at lower ground level.
4. AGP patients to be taken to S2 at lower ground level. All AGP to be performed in S2. Then if further treatment required move up to S1.
5. Air filtration to be run at level 6 between patients for a minimum of 20 minutes (~5 ACH) and level 3-4 at all other times (~1-2 ACH).
6. Surgery downtime minimum 20 mins with full decon using fresh HCL0 acid, alcohol wipes and full autosterile.
7. Patients to leave via atrium door opposite office and only to go into office if payment required. No loitering to chat with LW
8. Payments to be made contactless if possible or via BACS and LW to request payments in advance wherever possible
9. Patients to use hand sanitizer on way out of 104.



Appendix 7:

Hand Hygiene:

Patients and visitors should decontaminate their hands using Alcohol Based Hand Rub (ABHR) when entering and leaving the practice. This should be followed by hand washing at the nearest available facility.

For clinicians and dental care professionals hand hygiene, (washing with soap and water or ABHR) must be carried out at all of the following times:

- Immediately before every episode of direct patient care – to include forearms.
- Prior to donning of PPE.
- After any activity or contact that potentially results in hands becoming contaminated.
- After the removal of PPE.
- After equipment decontamination.
- After waste handling.
- At the end of every clinical session – to include forearms.

Key Steps to Consider Prior to Hand Washing:

- a) Keep nails short and pay attention to them when washing your hands.
- b) Most microbes on hands come from beneath the fingernails.
- c) Do not wear artificial nails or nail polish.
- d) Remove all jewelry (rings, watches, bracelets) – a single plain wedding band is acceptable.
- e) Wash hands and arms to elbows with a non-medicated soap. The forearms must be included at the beginning and end of every session and after non AGP procedures when we expose bare arms to the elbow.

Hand washing technique with soap and water



Wet hands with water



Apply enough soap to cover all hand surfaces



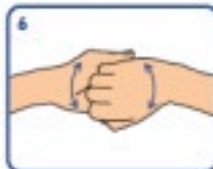
Rub hands palm to palm



Rub back of each hand with palm of other hand with fingers interlaced



Rub palm to palm with fingers interlaced



Rub with back of fingers to opposing palms with fingers interlocked



Rub each thumb clasped in opposite hand using a rotational movement



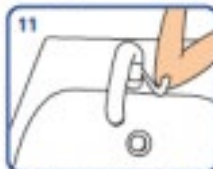
Rub tips of fingers in opposite palm in a circular motion



Rub each wrist with opposite hand



Rinse hands with water



Use elbow to turn off tap (if no elbow tap available use paper towel to turn off tap)



Dry thoroughly with a single-use towel



Hand washing should take 40-60 seconds

Issued by  www.debgroup.com



World Health Organization

Adapted from World Health Organization Guidelines on Hand Hygiene in Health Care 2009

58217567/0216

Appendix 8:

Respiratory and Cough Hygiene:

- 1) Respiratory hygiene refers to covering the mouth and nose during coughing or sneezing using medical masks, cloth masks, tissues or flexed elbow, followed by hand hygiene to reduce the dispersal of respiratory secretions containing potentially infectious particles.
- 2) Provide resources for hand hygiene (e.g. dispensers of alcohol-based hand rubs and handwashing supplies) and respiratory hygiene (e.g. tissues) in communal areas.
- 3) Place signage to promote respiratory and cough hygiene.

All staff, patients and visitors should follow good respiratory and cough hygiene.

'Catch it, Bin it, Kill it'

- Disposable, single-use tissues should be used to cover the nose and mouth when sneezing, coughing, or wiping and blowing the nose – used tissues should be disposed of promptly in the nearest clinical waste bin.
- Tissues, waste bins (lined and foot operated) and hand hygiene facilities should be available for patients, visitors and staff
- Hands should be cleaned (using soap and water if possible, otherwise using ABHR) after coughing, sneezing, using tissues or after any contact with respiratory secretions and contaminated objects
- Instruct patients to keep hands away from the eyes, mouth and nose
- Some patients (such as the elderly and children) may need assistance with containment of respiratory secretions; those who are immobile will need a container (for example a plastic bag) readily at hand for immediate disposal of tissues.

Appendix 9:

Pre- Preparation of the Surgery Environment for AGP Procedures.

- All clutter must be removed from surgeries – bare minimum.
- Treatment should be well planned in advance.
- Disinfection of water and suction lines – these should be run through at the start of the session and between patients and again at the end of each session and usual suction cleaning at end of day including running the full auto-sterile of dental unit water lines.
- Worktops must be completely clear except for items required for the procedure.
- Computer keyboard in the surgery must be disinfected after every patient. They should also be disinfected between colleagues after shifts.
- Any larger pieces of equipment which are not to be used but cannot be removed e.g. computer monitors or microscopes etc. should be covered with a disposable surface drape which is discarded after AGP procedures, during decontamination.
- Expected materials and instrumentation planned for a procedure should be planned in advance and placed on the worktop in sterilization pouches or covered and opened as required.
- Possible additional items should be stored on the worktop in readiness.
- Drawers should not be opened during a procedure if possible. Any item in the draw not sealed or in containers will need to be disinfected.
- Should a colleague need to leave the surgery during an AGP then the doffing process (Please see Appendix 13) will need to be followed by a new donning process before re-entry. The other colleague should remain in the surgery with the patient.
- Should a patient need to leave the room for a comfort break or any other reason, the surgical mask will need to be replaced and hand and door handle hygiene will need to be carried out. The bathroom used will need immediate cleaning.
- If an additional person must enter an AGP room to deliver additional materials or any other reason, they must be fully donned in appropriate PPE and must follow the doffing procedure on exit. (Please see Appendix 13)
- Single use items should be used wherever possible.
- At the end of the treatment appointment, the surgery will need to be vacated to low a period of air purification. (See Appendix 10)

Appendix 10:

Air Purification Protocol:

The aim of air purification is to remove dust particles, pollens, and small particles such as bacteria and the Sars Cov-2 virus from the air suspension. In order to achieve a >65% removal of all particles there is a minimum requirement for 1 ACH per room. In order to remove >95% of particulates there needs to be 5 ACH. Surgery 1 has a cubic capacity of 174m³, while Surgery 2 has a capacity of 46m³. The following recommendations are based on these capacities.

- The air purification filter should be set to a level which ensures a minimum of 1-2 complete air changes per hour (ACH) when the facility is not being used:
 - For surgery 1 this requires setting 3.
 - For surgery 2 this will require setting 2.
- The air purification filter should be set to a level which ensures a minimum of 2 complete air changes per hour (ACH) when the facility is being used for Non-AGP procedures:
 - For surgery 1 this requires setting 5.
 - For surgery 2 this will require setting 3.
- The air purification filter should be set to a level which ensures a minimum of 5 complete air changes per hour (ACH) when the facility is being used for AGP Type 1 and 2 procedures:
 - For surgery 1 this requires setting 6.
 - For surgery 2 this will require setting 4.
- After any patient session whether AGP or Non-AGP the air purifiers should be set to level 6 and left for a minimum of 20 minutes to help ensure a well filtered room exists prior to entry by the next patient. During this period the air conditioner should be switched off.

Appendix 11:



Recommended PPE for primary, outpatient, community and social care by setting, NHS and independent sector

Setting	Context	Disposable Gloves	Disposable Plastic Apron	Disposable fluid-repellent coverall/gown	Surgical mask	Fluid-resistant (Type IIR) surgical mask	Filtering face piece respirator	Eye/face protection ¹
Any setting	Performing an aerosol generating procedure ² on a possible or confirmed case ³	✓ single use ⁴	✗	✓ single use ⁴	✗	✗	✓ single use ⁴	✓ single use ⁴
Primary care, ambulatory care, and other non emergency outpatient and other clinical settings e.g. optometry, dental, maternity, mental health	Direct patient care – possible or confirmed case(s) ³ (within 2 metres)	✓ single use ⁴	✓ single use ⁴	✗	✗	✓ single or sessional use ^{4,5}	✗	✓ single or sessional use ^{4,5}
	Working in reception/communal area with possible or confirmed case(s) ³ and unable to maintain 2 metres social distance ⁶	✗	✗	✗	✗	✓ sessional use ⁵	✗	✗
Individuals own home (current place of residence)	Direct care to any member of the household where any member of the household is a possible or confirmed case ^{3,7}	✓ single use ⁴	✓ single use ⁴	✗	✗	✓ single or sessional use ^{4,5}	✗	✓ risk assess single or sessional use ^{4,5,8}
	Direct care or visit to any individuals in the extremely vulnerable group or where a member of the household is within the extremely vulnerable group undergoing shielding ⁹	✓ single use ⁴	✓ single use ⁴	✗	✓ single use ⁴	✗	✗	✗
	Home birth where any member of the household is a possible or confirmed case ^{3,7}	✓ single use ⁴	✓ single use ⁴	✓ single use ⁴	✗	✓ single or sessional use ^{4,5}	✗	✓ single or sessional use ^{4,5}
Community and social care, care home, mental health inpatients and other overnight care facilities e.g. learning disability, hospices, prison healthcare	Facility with possible or confirmed case(s) ³ – and direct resident care (within 2 metres)	✓ single use ⁴	✓ single use ⁴	✗	✗	✓ sessional use ⁵	✗	risk assess sessional use ^{4,5}
Any setting	Collection of nasopharyngeal swab(s)	✓ single use ⁴	✓ single or sessional use ^{4,5}	✗	✗	✓ single or sessional use ^{4,5}	✗	✓ single or sessional use ^{4,5}

Table 2

- This may be single or reusable face/eye protection/full face visor or goggles.
- The list of aerosol generating procedures (AGPs) is included in section 8.1 at: www.gov.uk/government/publications/wuhan-novel-coronavirus-infection-prevention-and-control/covid-19-personal-protective-equipment-ppe. (Note AGPs are undergoing a further review at present)
- A case is any individual meeting case definition for a possible or confirmed case: <https://www.gov.uk/government/publications/wuhan-novel-coronavirus-initial-investigation-and-initial-clinical-management-of-possible-cases-of-wuhan-novel-coronavirus-wncv-infection>
- Single use refers to disposal of PPE or decontamination of reusable items e.g. eye protection or respirator, after each patient and/or following completion of a procedure, task, or session; dispose or decontaminate reusable items after each patient contact as per Standard Infection Control Precautions (SICPs). Sessional use should always be risk assessed and considered where there are high rates of hospital cases. PPE should be disposed of after each session or earlier if damaged, soiled, or uncomfortable.
- Non clinical staff should maintain 2m social distancing, through marking out a controlled distance; sessional use should always be risk assessed and considered where there are high rates of community cases.
- Initial risk assessment should take place by phone prior to entering the premises or at 2 metres social distance on entering; where the health or social care worker assesses that an individual is symptomatic with suspected/confirmed cases appropriate PPE should be put on prior to providing care.
- Risk assessed use refers to utilising PPE when there is an anticipated/likely risk of contamination with splashes, droplets or blood or body fluids.
- For explanation of shielding and definition of extremely vulnerable groups see guidance: <https://www.gov.uk/government/publications/guidance-on-shielding-and-protecting-extremely-vulnerable-persons-from-covid-19/guidance-on-shielding-and-protecting-extremely-vulnerable-persons-from-covid-19>



Appendix 12:

Daily Clothing Protocol:

Getting to work:

- 1) Wear clean clothes every day
- 2) Pack two pillowcases and use a washable bag like a rucksack

At work:

- 1) Change into clinical work wear
- 2) Put your home clothes into one pillowcase
- 3) Prior to clinical activity put on appropriate PPE, including doffing and donning procedures as appropriate

At break times:

- 1) No food should be consumed wearing PPE
- 2) If you are doing a back-to-back session you will need to change into a new set of clinic work wear for a second session

Leaving work:

- 1) Shower if possible
- 2) Put your work clothes in the other pillowcase
- 3) Change into the clothes you had on in the morning

Arriving home:

- 1) Enter your home with minimal contact with the premises
- 2) Wipe down the door with sanitizer wipes
- 3) Place the pillowcase with all work clothes in the washing machine
- 4) Machine wash all your clothes and pillowcases at 60°C + ideally on a 90°C wash. Do not wash anything else in the machine with the pillowcase
- 5) Wipe down the machine with sanitizer wipes after placing pillowcase in washing machine
- 6) Wash your hands with hot soapy water for 20 seconds or shower if not possible at work
- 7) Shower and dress in clean clothes

Appendix 13:

Donning and Doffing:

Prior to donning PPE, the following should be carried out:

- 1) Consider going for a comfort break
- 2) Ensure you are well hydrated
- 3) Tie back any long or loose hair
- 4) Remove all jewellery
- 5) Ensure hand hygiene has been carried out
- 6) Identify hazards and manage risk.
- 7) Gather the necessary PPE.
- 8) Plan where to put on and take off PPE.
- 9) If required ask a colleague to help?

Donning PPE for a Non-AGP:

Clinical Team member starts in their normal scrubs and closed footwear

1. Hand hygiene
2. Apron
3. FRSM (adapt to bridge of nose). You may use double FRSMs if desired.
4. Eye protection/visor
5. Gloves

Doffing PPE for a Non-AGP:

Avoid contamination of self, others and the environment. - Remove the most heavily contaminated items first.

1. Gloves - Remove gloves. Grasp the outside of glove with the opposite gloved hand; peel off. Hold the removed glove in the remaining gloved hand. Slide the fingers of the un-gloved hand under the remaining glove at the wrist. Peel the remaining glove off over the first glove and dispose of in clinical waste.
2. Perform hand hygiene with alcohol-based rub
3. Eye protection/visor - Remove eye protection if worn. Use both hands, pulling away from face. Decontaminate if reusable with warm soapy water or preferably hypochlorous (HClO) acid.
4. Apron. Break apron ties at the neck and let the apron fold down on itself. Break ties at waist and fold apron in on itself – do not touch the outside – this will be contaminated. Dispose of in clinical waste.

5. Perform hand hygiene with alcohol-based rub
6. FRSM. Remove facemask once your clinical work is completed. Remove by handling the ear loops only. Lean forward slightly. Discard. DO NOT reuse once removed. Dispose of in clinical waste. If you are using double mask, you can continue to wear the internal of the two masks for up to one session of 6 hours.
7. Clean Hands and forearms.

Donning PPE for an AGP1/2 procedure:

Donning for an AGP1 or 2 procedure must be done in an area remote from the AGP surgical zone.

Ideally it should still be as close to the AGP room as possible to minimize contamination.

Procedure:

- 1) Put on shoe covers (patients and DCPs)
- 2) Replace regular scrub cap with disposable scrub cap
- 3) Put on gown ensuring this covers scrubs and up to the neck
- 4) Put on fit tested FFP2 mask (See Appendix 16); perform user seal check. You may use an FRSM to place over the top of your FFP2 mask if you so choose.
- 5) Put on Loupes or prescription glasses if not already on
- 6) Put on visor
- 7) Put on gloves (over cuff).

Doffing PPE for an AGP procedure:

Avoid contamination of self, others and the environment. - Remove the most heavily contaminated items first.

- 1) Gloves - Remove gloves. Grasp the outside of glove with the opposite gloved hand; peel off. Hold the removed glove in the remaining gloved hand. Slide the fingers of the un-gloved hand under the remaining glove at the wrist. Peel the remaining glove off over the first glove and dispose of in clinical waste.
- 2) Perform hand hygiene with alcohol-based rub
- 3) Remove shoe coverings and dispose of in clinical waste
- 4) Perform hand hygiene with alcohol-based rub
- 5) Eye protection/visor - Remove eye protection if worn. Use both hands, pulling away from face. Decontaminate if reusable with warm soapy water or preferably hypochlorous (HClO) acid.
- 6) Remove gown – Break ties and peel off gown and roll inside out and dispose of in clinical waste
- 7) Remove cap and dispose of in clinical waste
- 8) Perform hand hygiene with alcohol-based rub

- 9) Remove dental loupes/ glasses and clean with HCLO spray
- 10) Perform hand hygiene with alcohol-based rub or soap and water
- 11) Remove FRSM or FFP2 mask by grasping the ear loops and dispose of in clinical waste. If double masked, you may dispose of the outer FRSM and continue to use the FFP2 mask for up to one 6-hour session.
- 12) Perform hand hygiene with alcohol-based rub or soap and water.

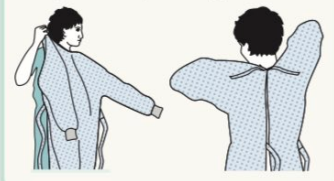
Quick guide COVID-19
Public Health England
Putting on (donning) personal protective equipment (PPE)

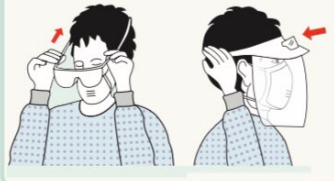
This is undertaken outside the patient's room.

Pre-donning instructions

- ensure healthcare worker hydrated
- tie hair back
- remove jewellery
- check PPE in the correct size is available

Perform hand hygiene before putting on PPE

- 1 Put on the long-sleeved fluid repellent disposable gown**

- 2 Respirator**
Perform a fit check.

- 3 Eye protection**

- 4 Gloves**


Quick guide COVID-19
Public Health England
Removal of (doffing) personal protective equipment (PPE)

PPE should be removed in an order that minimises the potential for cross contamination.

The order of removal of PPE is as follows:

- 1 Gloves – the outsides of the gloves are contaminated**

Clean hands with alcohol gel
- 2 Gown – the front of the gown and sleeves will be contaminated**

- 3 Eye protection – the outside will be contaminated**

- 4 Respirator**
Clean hands with alcohol hand rub. Do not touch the front of the respirator as it will be contaminated

- 5 Wash hands with soap and water**


Appendix 14:

Decontamination and Disinfection Procedures

These procedures should be performed prior to doffing PPE.

Post Non-AGP Procedure:

- ☐ Air conditioning should be kept on if required but this should be in conjunction with using the air purifier.
- ☐ Disposable items that have been used for the care of the patient must be bagged as clinical waste.
- ☐ Usual HTM01-05 procedures should be followed with standard cross infection control and boxing of dirty instruments.
- ☐ Visors and headbands should be removed and cleaned/wiped with appropriate disinfection solution such as hypochlorous acid.
- ☐ Run auto-sterile for disinfection of DUWL and suction lines.
- ☐ Using disposable alcohol wipes/paper roll/ appropriate cleaning equipment, the DCP should clean and disinfect all the surfaces with Hypochlorous acid or equivalent disinfectant

Post AGP Procedure.

As above but in addition:

- The DCP should clean and disinfect the following by wiping the surfaces with Hypochlorous acid or equivalent disinfectant
 - Clean all reusable equipment and surfaces systematically and ensure that you regularly change wipes: Ensure the whole chair is cleaned from top to base unit.
 - Clean the light on the dental chair thoroughly
 - Clean the foot pedals
 - Clean the clinician and DCP dental stools
 - Clean the outside of any material containers used during the procedure. Where possible dispense materials prior to the treatment and minimize containers on surfaces.
 - When cleaning the surfaces, work systematically from the top or furthest away point
 - Clean wall cabinets, work surfaces, and base cabinets
 - Clean all handles on units/ cupboards
 - Clean Wall mounted X-ray equipment if used
 - Clean Sharps bins
 - Clean the computers and keyboards
 - Clean the taps
 - Clean the hand wash basins
 - Wipe down the alcohol gel and soap dispensers
 - Clean the door handle
 - Clean the light switches

- Other items which are not disposable
- Clean the outside of the door handle
- Floor (This should be done at the end of every treatment session)
- Any cloths and paper roll used must be disposed of as single use items in clinical waste
- Non single use cleaning items should be thoroughly rinsed in hot water with bleach or disinfectant
- Discard detergent/disinfectant solutions safely at disposal point
- Dispose of all waste following normal clinical waste procedures.
- Clean, dry and store re-usable parts of cleaning equipment, such as mop handles etc.
- The DCP should wipe the exterior of the dirty instrument box and set ready to leave the surgery.

The DCP should then doff PPE as per training and leave the room and not re-enter until the air purification cycle is complete.

Appendix 15:

Disinfection and Cleaning Products.

COSHH:

Under the Control of Substances Hazardous to Health (COSHH) the practice must adequately control the risk of exposure to hazardous substances where such exposure cannot be prevented. The provision and use of personal protective equipment (PPE), including respiratory protective equipment (RPE), will protect colleagues, patients and visitors. Employees have an obligation to make full and proper use of any control measures, including PPE, provided by their employer.

Dedicated or disposable equipment must be used for environmental decontamination and disposed as clinical waste. Reusable equipment (such as mop handles, buckets etc) must be decontaminated after use with a recognized disinfectant.

Patient care equipment and surfaces should be cleaned according to manufacturer's instructions, and where possible with hypochlorous acid disinfectant, 70% alcohol or an alternative disinfectant that is proven to be effective against viruses.

The production of Hypochlorous Acid for Disinfection:

Hypochlorous acid is formed when chlorine dissolves in water. One manufacturing method involves the electrochemical activation of a saturated salt solution (e.g., brine) to form HOCl. In other words, it is made from the electrolysis of salt and water. Though mildly acidic this solution is known to be odourless, tasteless and irritant free to skin, conjunctiva, and mucosa. The American Environmental Protection Agency lists HOCl as one of only 10 recommend active ingredients to kill the Sars Cov-2 virus in under 10 minutes. More information on this chemical can be found at:

➤ <https://www.hypochlorousacid.com/>

Add salt and water
8 minutes homemade disinfectant

Only ordinary edible salt and tap water can be made at home, non-toxic and environmentally friendly, no chemical residue disinfectant.

$\text{NaCl} \xrightarrow{2e^-} \text{Cl}_2 + \text{H}_2\text{O} \xrightarrow{\text{HCl}} \text{HClO}$

Disinfectant making machine

Low concentration-applicable range:
300ml+7.5g salt, electrolysis for 8 minutes, the concentration is about 300-500mg/L.

Standard concentration-applicable range:
300ml water +15g salt, sterilize for 8 minutes, and the concentration is about 500-800mg/L.

High concentration-applicable range:
300ml+22.5g salt, electrolysis for 8 minutes, the concentration is about 1000-1500mg/L.

The practice has provided USB chargeable HOCl-producing spray canisters. The effectiveness of this process and the resultant solution will be tested by using the DIP test method to assess the number of c.f.u. grown on a DIP plate compared to a control. This test will be repeated regularly to ensure the HOCl being produced is effective at killing microbes.

Appendix 16:

Procedure for Fit Testing:

Fit Testing Training:

Dr Norton will undergo Fit Test training and thus be able to ensure that every clinician and DCP is correctly fit tested for the FFP2 masks to be used on the practice.

Some peoples face/shape means that the masks do not fit and therefore they fail the fit test. This means that an alternative mask may need to be sourced and tested for that individual and until then, they cannot work in an AGP Type 1 environment.

The Fit Testing is a 10-minute process which involves testing each individual's sensitivity to "Bittrex", a bitter smelling and tasting solution. This is a nebulized aerosol which mimics the aerosol that we will experience in a clinical AGP environment.

