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COVID-19 is an illness caused by the SARS-CoV-2 virus that is thought to be spread primarily through respiratory droplets. The presence of SARS-CoV-2 in saliva provides a major COVID-19 transmission route as saliva droplets are expelled from everyday activities such as talking, coughing, or from specialized aerosol-generating basic dental procedures. The virus has been shown to survive in aerosols for hours and on some surfaces for days. Some indications show that people may be able to spread the virus while pre-symptomatic or asymptomatic (Source: CDC, “Presymptomatic Transmission of SARS-CoV-2”) (Source: CDC, Asymptomatic and PreSymptomatic SARS-CoV-2 Infections in Residents of a Long-Term Care Skilled Nursing Facility).

The nature of practicing dentistry involves the use of instruments that create spray and spatter which may transmit diseases. This has placed all Dental Health Care Workers (DHCW) in a very high exposure risk category. (Source: OSHA). Therefore, the College of Dentistry has created a pandemic strategy with additional Infection Prevention and Control (IPAC) components to ensure the highest level of safety is available to our patients, students, staff and faculty.

Please refer to the IPAC Committee and IPAC Officer Roles sections of this document.
DENTAL HEALTH CARE WORKER RISK LEVELS

A Dental Health Care Worker (DHCW) includes any person who delivers dental care services for patients either directly as dentists, dental hygienists, dental assistants, or students in dental programs. DHCWs also include any person who supports the provision of dental care indirectly, such as, aides, receptionists, laboratory technicians, maintenance technicians or waste handling custodians.

A. Low Risk
   a. Administrative DHCW in non-public areas, away from clinical DHCWs
      i. Deans offices staff/faculty

B. Medium Risk
   a. DHCWs who provide urgent or emergency Non-Aerosol Generating Procedures (NAGP) to patients who are NOT known or suspected COVID-19 patients
   b. DHCWs who frequent busy areas within the facility:
      i. Patient Reception/Waiting Areas
      ii. Dental Clinic Manager’s office
      iii. Designated coffee/lunch rooms
      iv. Pre-Clinic and Dry Lab
   c. Dental stores and equipment maintenance staff

C. High Risk
   a. DHCWs performing Aerosol Generating Procedures (AGP) on HEALTHY patients with unknown COVID-19 status

D. Very High Risk
   a. DHCWs performing NAGP or AGP on KNOWN or SUSPECTED COVID-19 patients
   b. DHCWs collecting or handling specimens from KNOWN or SUSPECTED COVID-19 patients
   c. DHCWs who self-identify as having higher risk factors of contracting COVID-19 such as: older age, pre-existing medically compromised conditions, pregnancy, etc.

(Source: Occupational Safety and Health Administration (OSHA) USA)
CONTROL SYSTEMS

The College of Dentistry has developed a system of control strategies. These are specific safeguards put in place to shield DHCW’s, patients and their companions from potential exposure to the SARS-CoV-2 virus.

A. Engineering Controls
   a. Physical barriers between patient care areas that are easily decontaminated
   b. Physical barriers between DHCWs and patients at Front Office
   c. Additional suction line added to the delivery cart in all AGP operatories
   d. Specific air-handling systems added to all AGP operatories
      i. Monitoring and management of the number of room Air Exchanges per Hour (AEH) for all clinical treatment areas
      ii. Addition, as needed, of HEPA filters/vacuums to ensure adequate hourly air exchange

B. Administrative Controls
   a. IPAC Committee and four IPAC Officers to develop, implement, and oversee the College of Dentistry COVID-19 Pandemic Management Strategy
   b. New COVID-19 Clinical and Preclinical protocols and procedures
   c. Student, staff and faculty screening protocols to ensure that only symptom and risk-factor free personnel access dental school infrastructure
   d. Telephone protocols that systematically screen potential/existing patients for presence of, or risk for, COVID-19
   e. Patient triage protocols that ensure only symptom and risk-factor free patients are admitted into the dental clinic
   f. Signage detailing COVID-19 screening questions, social distancing guidelines, and patient PPE requirements posted at all accessible College of Dentistry entrances
   g. Access to College of Dentistry facilities will be limited to designated portals, which will be monitored by staff at appropriate times
   h. Front Office staff perform scheduled cleaning/decontaminating of waiting room area at least twice per day
      i. Removal of all extraneous materials from reception, preclinical, and clinical areas (including reading materials, toys and other objects from public access areas of the facility that may be touched by others and are not easily disinfected)
      ii. Ensure sufficient 70% alcohol-based hand sanitizer and masks are available at entrances to the building, preclinics, and clinics
   i. Signage for cough etiquette and social distancing present in strategic areas of the building
   j. Floor markings, placed to maintain two (2) meter interpersonal distancing, will be placed in known congestion areas to help guide and ensure appropriate social distancing
   k. Minimize transmission risk when receiving deliveries by (Source: CDA):
      i. Wearing gloves when collecting and/or accepting mail or packages
      ii. Wipe the exterior of every box delivered entirely with a paper towel and soap and water solution or sanitizing wipes
iii. Leave boxes untouched for 15 minutes prior to opening them
iv. Clean all surfaces that were touched by deliveries with soap and water or sanitizing wipes

Refer to the COVID-19 Pre-Appointment Screening Student Script (Appendix 1), COVID-19 Pre-Screening Questionnaire (Appendix 2) and AGP and NAGP Protocols.

C. Safe Work Protective Practices for DHCWs

Safe work protective practices have been developed for College of Dentistry DHCWs with the goal of providing the safest dental care to our patients based on guidance from, but not limited to, the College of Dental Surgeons of Saskatchewan (CDSS), Saskatchewan Health Authority (SHA), Health Canada, Canadian Dental Association (CDA), Occupational Health and Safety Administration (OHSA), and the Centre for Disease Control (CDC).

Emerging, rapidly evolving, outbreak conditions may cause these IPAC measures to change accordingly. As a result, DHCWs employed by the College of Dentistry must consult these guidelines often, noting any changes that may occur. College of Dentistry administration and the IPAC Committee will provide regular COVID-19 Pandemic Strategy updates to all students, staff and faculty.

INFECTION PREVENTION AND CONTROL (IPAC) COMMITTEE

1. ROLE
   a. To ensure that the IPAC protocols and procedures used in the College of Dentistry follow best practices for maintaining patient, student, staff, and faculty safety
   b. Ensure policies and procedures are in compliance with legal and accreditation standards
   c. To ensure that students, staff and faculty are properly trained to safely follow the new IPAC protocols
   d. To ensure ongoing effective implementation and ongoing surveillance of College of Dentistry IPAC protocols and procedures
   e. To ensure that IPAC practices are kept up to date with the rapidly changing evidence

2. RESPONSIBILITIES
   a. Develop and implement policies, procedures and practices related to IPAC, to be reviewed and updated as required on a regular basis that, when successfully implemented, will minimize risk of transmission of pathogenic microorganisms
   b. Educate students, staff and faculty on policies and procedures related to IPAC
   c. Communicate IPAC-related information to students, staff and faculty
   d. Develop and implement surveillance systems for monitoring and improving student, staff and faculty compliance
   e. Develop systems to ensure IPAC safety
   f. Champion IPAC culture and safety in the College of Dentistry
   g. Lead IPAC related review of equipment and reprocessing
   h. Lead IPAC product selection (i.e. agents for hand hygiene, disinfection, etc.)
   i. Participate in facility design, maintenance and construction/renovation projects
   j. Assist in the management of outbreaks

3. MEMBERSHIP
   The IPAC Committee will be comprised of the following members:

   Three (3) IPAC Officers:
   Assistant Dean, Clinics: Dr. A. Heinrichs
   Comprehensive Care Coordinator: Dr. M. Siqueira
   Infection Control Officer: Ms. E. Ferwerda

   IPAC Simulation Officer: Mr. R. Kroener

   Dean: Dr. D. Brothwell

   Associate Dean, Academic: Dr. W. Siqueira

   Dental Clinic Manager: Michelle Knaus
Dental Assistant Representative: Melonie Custer
Student Representative: TBD
Faculty Representative: TBD
Dental Assisting Program Representative: TBD

4. MEETINGS
Held weekly or more often, as necessary.

5. TERM
Until disbanded by the Dean, at which time, the three Infection Control Officers will continue their roles while reporting to the Clinic Operations & Administration Committee.

1. **GENERAL GUIDELINES**

1. At least one IPAC Officer will be on duty during every patient clinic to ensure activities related to IPAC procedures are properly carried out.
   a. The IPAC Simulation Officer will monitor and enforce the application of IPAC Protocols in the College of Dentistry Preclinical simulation labs.

2. IPAC Officers have the role of educating, monitoring, remediating and reviewing infractions related to IPAC.

3. The College of Dentistry and all of its students, staff and faculty are expected to diligently follow all IPAC protocols and procedure and will take appropriate corrective measures against all infractions according to the degree of risk involved.

For further information on protocol breaches and the remediation procedure for students, refer to Clinic Remediation for COVID-19 Pandemic Infection Control.
AEROSOL-GENERATING PROCEDURES AND NON-AEROSOL-GENERATING PROCEDURES PROTOCOLS

1. GENERAL

This section outlines the general screening procedures for students, faculty, staff and patients for both Aerosol-Generating Procedures (AGP) and Non-Aerosol Generating Procedures (NAGP). These procedures and protocols were developed by the College of Dentistry at the University of Saskatchewan to be used during the COVID-19 pandemic and must be followed indefinitely until public health officials declare that physical distancing and other measures are no longer required. The College of Dentistry will strictly follow CDSS guidelines for the Dental Clinic re-opening. The re-opening will take place in phases with dental procedures being allowed to be executed using varying levels of PPE and operatory requirements depending on current risk levels. Re-opening phases may move forward to the next phase by loosening regulations as the COVID-19 pandemic is better controlled, or may move back to prior phases with stricter regulations if the number of COVID-19 cases increase or there are new ways of infections in the province (Source: CDSS).

1.1 Student, Faculty and Staff Screening

Communication will be sent by email to students, faculty and staff before the beginning of Term I 2020/2021 stating that anyone experiencing any symptoms from the following list must remain home and contact the Saskatchewan Health Authority phone line at 811.

Faculty and Staff staying home due to symptoms must communicate their decision by phone or email with their supervisor. Students staying at home due to symptoms must communicate their decision by phone or email with the Academic & Student Affairs office, and must also call any booked patients and cancel or postpone the appointment(s).

Students, faculty and staff working in the clinic or preclinic will have their temperature measured once a day upon entering the building.

Staff and faculty returning to work after taking time off for illness must complete the Clinic Return to Work Screening Form found in Appendix 14.


- Fever of at least 38.0 degrees Celsius
- Feeling feverish in the last two (2) weeks
- New onset of shortness of breath and/or difficulty breathing
- Sudden onset of new cough or change to existing cough
- Chills
- Fatigue or weakness
- Muscle or body aches
- New loss of smell or taste
- Headache
- Gastrointestinal symptoms (abdominal pain, diarrhea, vomiting)
- Feeling very unwell
- Sore throat
- Runny nose
- Nasal congestion
- Conjunctivitis
- Dizziness
- Loss of appetite
- Close (within 2 meters) or prolonged contact with confirmed or probable case of COVID-19 without proper PPE in the last 14 days
- Attended a mass gathering with over 30 people in the last 14 days
- Attended a private gathering with over 5 people in the last 14 days
- Instructed to self-isolate by any health regulator in the last 14 days

Year 3 and Year 4 students, faculty and staff are to enter the College of Dentistry through the Wiggins Road or E-Wing door between 7:30-8:00 am and must sanitize their hands, don the provided Level 1 mask, answer the COVID-19 screening questions and have their temperature measured. Those screening positive will be asked to go home and call the Saskatchewan Health Authority phone line at 811.

Year 1 and Year 2 students are to enter the College of Dentistry through the Health Sciences Building, and must sanitize their hands, don the provided Level 1 mask, answer the COVID-19 screening questions and have their temperature measured. Those screening positive will be asked to go home and call the Saskatchewan Health Authority phone line at 811.

1.2 Patient Screening

When patient appointments are booked by students or the Front Office, patients should be asked the COVID-19 screening questions to determine if they should attend their dental appointment the next day. Patients answering negatively to all questions will be asked to attend their scheduled appointment time. Patients answering positively to any of the seven COVID-19 screening questions will be advised that their appointment will be postponed, with no penalty to the patient.

When booking or confirming appointments for patients, please refer to the Schedule Restorative/Endodontic and Routine Hygiene Appointment Decision Trees, located in Appendix 12 and Appendix 13, respectively.

All patients will undergo screening prior to their appointment. This screening is outlined below.
Patient Screening Protocol

- The day before the appointment, patients will be contacted by phone or text to confirm the appointment. Patients must be taken through the questionnaire found in Appendix 1. Patients will also be informed that these questions will be asked again at the College of Dentistry, prior to their appointment, and that they will be required to wear a mask (provided by the College of Dentistry) before and after their treatment. (Source: SHA, CDSS, CDC, Wiley Online Library: Association of chemosensory dysfunction and Covid-19 in patients presenting with influenza-like symptoms)

- Patients will be informed that admission to the building will be granted between 8-8:30 am for morning appointments, and between 12-12:30 pm for afternoon appointments. Patient access will be limited to the Wiggins Road door. Patients are required to enter the building alone, exceptions will be made for minors, patients with disabilities, and patients that require a translator. In these cases, only one person will be permitted to accompany the patient. (Source: CDSS)

- Signage will be placed outside the Wiggins Road entrance stating that everyone must respect and maintain social distancing and leave two (2) meters distance while waiting to enter the building. Patients will be escorted into the clinic as they arrive. (Source: CDSS, SHA)

- Upon entering the building patients will perform hand hygiene with 70% alcohol-based sanitizer and will be given a Level 1 mask. Temperature will be measured and recorded by Front Office staff, and the screening questions will be asked again (Appendix 2). If the patient is negative on all of the screening criteria patient will gain access to the clinic. Masks must be worn until their treatment starts. (Source: CDSS)

- Upon entering the clinic, the patient and student will perform hand hygiene with 70% alcohol-based sanitizer. (Source: CDSS)

- Once in the operatory, patients will be asked to read, complete and sign a computer-based form that combines the screening questions from Appendix 2 and the CDSS patient consent form, where the patient agrees to receive dental treatment in the College of Dentistry and understands the risks involved with the transmission of SARS-CoV-2 (Appendix 4). (Source: CDSS)

- When the student, properly wearing all PPE (refer to AGP Personal Protective Equipment (2.2.1)), is ready to start the clinical procedure, patients will remove their masks and store them in a provided zip-lock bag. Patients will receive a disposable cup containing a 1% peroxide-based mouth rinse and will be asked to rinse for at least 60-seconds and then expectorate back into the same cup which will be disposed of in the garbage by the student. (Source: CDSS)

- If a patient is required to leave the operatory for any reason during an appointment, a mask must be worn, including cases where a rubber dam is being used (masks are to be worn over the rubber dam).

- At the end of the appointment, patients should don the provided Level 1 mask and perform hand hygiene upon leaving the clinic.
2. AEROSOL-GENERATING PROCEDURES PROTOCOL

The Aerosol-Generating Procedures (AGP) Standard Operating Procedure (SOP) was developed by the College of Dentistry at the University of Saskatchewan to be used during the COVID-19 pandemic and must be followed indefinitely until public health officials declare that physical distancing and other measures are no longer required. This SOP is a live document that should be frequently checked as changes and updates will likely occur as scientists acquire greater knowledge of the SARS-CoV-2 and new guidelines are created by health care regulators.

2.1 Phase One of the Dental Clinic Re-opening

AGP will NOT be performed in the College of Dentistry.

2.2 Phase Two of the Dental Clinic Re-opening

2.2.1 AGP Personal Protective Equipment (PPE)

Student operator and chair-side assistant are required to wear the following PPE at all times inside the operatory, please refer to the Different Levels of Personal Protective Equipment in Appendix 10.

- Clean set of scrubs (provided by the College of Dentistry) and a clean pair of indoor shoes to be worn exclusively in the College of Dentistry
- One pair of Nitrile Gloves
- NIOSH approved N95 (or KN95) respirator mask
  - Mask must be fit tested
  - No facial hair is allowed
- Safety glasses or prescription glasses
- Face-shield
- Cloth gown
- Bonnet

Notes:

- No loupes allowed
- PPE donning and doffing locations are separate and will be labelled and specified for the different clinical areas
- Doffing must be performed immediately upon patient dismissal

2.2.2 Donning of PPE for AGP:

PPE donning will be performed in a separate designated area. Students need to ensure that all pre-procedure Start Checks are completed prior to entering the CLEAN donning area, including the display of patient’s radiographs on the operatory computer screen. Refer to the College of Dentistry Clinic Manual.
Donning PPE must follow the sequence below (Appendix 5)

1. Perform hand hygiene using 70% alcohol-based sanitizer
2. Don the bonnet
3. Don the gown
   a. Slide each arm into sleeves
   b. Tie the back straps
4. Don the N95 (or KN95) respirator mask in the following sequence:
   a. Secure straps
   b. Mold metal nose piece to bridge of nose
   c. Perform seal check
5. Don appropriate eye protection – face-shield
6. Perform hand hygiene using 70% alcohol-based sanitizer
7. Don the gloves ensuring that the gloves are covering the cuffs of the sleeves
8. Enter AGP operatory
9. Once inside the AGP operatory (with doors remaining closed), perform hand hygiene using 70% alcohol-based sanitizer
10. Do not exit the enclosed operatory until the procedure is finished

Note: Repeat hand hygiene at any time if hands become contaminated.

2.2.3 Dental Treatment

Students will be working in the following groups of three (3) with all students wearing PPE appropriate to their role (AGP Personal Protective Equipment 2.2.1):

- **Operator**: Student performing the treatment (follows AGP PPE Protocol)
- **Chair-side Assistant**: Student responsible for controlling high-volume suction and minimizing aerosol generation (follows AGP PPE Protocol)
- **Circulating Assistant**: Student located outside the operatory (follows NAGP PPE Protocol), responsible for:
  o Calling an instructor
  o Retrieving additional materials
  o Escorting the patient to the washroom when necessary
  o Escorting patients to the Front Office at the end of the session

All normal College of Dentistry intra-operative operating procedures and IPAC requirements remain in effect as per the Clinic Manual and IPAC requirements. In addition, the following intra-operative COVID-19 protocols are in place and must be strictly adhered to.
Intra-operative COVID-19 Protocols

- AGP will be performed in a total of 14 dental operatories distributed in a block of eight (8) dental operatories located on the 1st floor and a block of six (6) dental operatories located on the 2nd floor of the dental clinic building. Morning clinics will run from 8:30 am to 11:30 am and afternoon clinics will run from 2:00 pm to 5:00 pm.
  - All AGP operatories will be enclosed, will exchange the air at least six (6) times per hour (refer to Appendix 11), and portable NOMAD X-ray units will be available for occasional use.

- The use of high-volume suction is required as aerosols are being produced, and a second high-volume dental evacuation suction will be activated for the entire duration of the dental appointment to assist with aerosol removal. *(Source: https://pubmed.ncbi.nlm.nih.gov/32661521/)*

- Rubber dam with rubber dam sealer must be used in every possible procedure. *(Source: CDSS)* Soak the exposed procedure area with H₂O₂ prior to beginning treatment. *(Source: CDA)*

- Endodontic treatment will only be performed in the AGP operatories located on the first floor (the former Faculty Practice Clinic).

- When possible, an increased number of dental procedures should be performed per appointment to make more efficient use of available patient and operatory time.

- Student supervision methods will be modified. Instructors will not be able to enter the operatories multiple times. Start Checks are mandatory and will be performed before treatment is initiated. Full AGP PPE must be used by the instructor.

- Intra-operatory access to computers will be permitted during treatment; appropriate radiographic views must be projected on the computer screen before PPE is donned.

- The use of dental loupes under the face-shield is permitted.

- If a patient needs access to the washroom during treatment, the Circulating Assistant will escort the patient (wearing a Level 1 mask) to the washroom and remind the patient to perform hand hygiene with 70% alcohol-based sanitizer before escorting the patient back to the operatory.

- At the end of the session, students should instruct patients to wear the provided Level 1 mask that was stored in the zip-lock bag. Hand hygiene with 70% alcohol-based sanitizer must be performed immediately upon leaving the clinic.

- The Circulating Assistant will escort the patient to the Front Office for payment and dismissal keeping social distance. *(Source: CDSS)*
• All used instruments must be kept in a closed container within the operatory for the required quarantine time which will be prominently posted on the operatory door. Enzymatic solution should be sprayed on instruments with visible debris before closing the container.

• Operator and chair-side assistant PPE must be removed as per the guidelines discussed under Doffing of PPE for AGP (see 2.2.5) (Source: CDSS)

2.2.4 Dental Operatory Cleaning

Operatories will be in quarantine for a period of time specific to the air exchange rate in the operatory (maximum of two (2) hours) to allow aerosol to settle before students are allowed to clean (See Appendix 11). A quarantine sign specifying when the operatory will be safe to enter must be placed on the operatory door to advise clinic personnel not to enter. (Source: CDSS)

• Students must wear PPE following the NAGP protocol during cleaning. See Non-Aerosol Generating Procedure Protocols. (Source: CDSS)

• Operators used during morning clinic are to be cleaned at 1:00 pm, or after the posted quarantine period for the operatory has elapsed, whichever is longer.

• Cleaning of the operators used during afternoon clinic will be performed at 8:00 am the following morning before morning clinics.

• Operatory disinfection:
  o All surfaces should be cleaned and disinfected according to normal College of Dentistry procedures as described in the College of Dentistry Clinic Manual.
  o After disinfecting all surfaces of the container housing the used instruments for the quarantine period (maximum of two (2) hours), the container can be placed on a trolley cart and transported to CSR for sterilization.

• Operatory cleaning must be checked and approved by another student, faculty or staff. An Operatory Cleaning Log Sheet will be posted on the operatory door.

• Operatory disinfection will be finalized by a Registered Dental Assistant with the use of a disinfecting fogger.

2.2.5 Doffing of PPE for AGP

Doffing starts inside the enclosed dental operatory and should be performed as followed (see Appendix 6).

1. Perform hand hygiene (wearing gloves) using 70% alcohol-based sanitizer
2. One student is to untie the back straps of the gown of the other students. Keeping hands in sleeves, remove gloves and gown inside out in same motion
   a. Dispose the gown in the laundry receptacle and gloves into trash located in operatory
3. Perform hand hygiene using 70% alcohol-based sanitizer
4. Remove face-shield and eye protection (safety glasses or prescription glasses)
   a. Handle face-shield and eye protection only by headband or ear pieces
   b. Carefully pull away from face, avoiding contact with face or hair
   c. Place re-usable items in appropriate area for cleaning
   d. Place disposable items into the garbage
5. Exit the enclosed dental operatory and close the door

In a separate designated doffing area outside the operatory:

6. Perform hand hygiene using 70% alcohol-based sanitizer
7. Remove N95 (or KN95) respirator
   a. Bend forward slightly and carefully remove the mask from face, touching only the ties or elastic bands
   b. Start with the bottom tie, then remove the top
8. Perform hand hygiene using 70% alcohol-based sanitizer
9. Close the operatory door, and record the “quarantine-until” time on the form attached to the door
10. Leave the clinic area and proceed directly to the locker room area, change out of the scrubs placing them carefully into the laundry to avoid contact with any surfaces

2.3 Phase Three of the Dental Clinic Re-opening:

AGP will be carried out as follows:

- High Risk AGP: Treatments expected to generate large amounts of aerosol where a dental dam cannot be used, endodontic treatment and complicated extractions, must be performed in enclosed operatories, following the same guidelines as Phase Two.
- Low and Moderate Risk AGP: Treatments with a moderate generation of aerosol such as restorative work and with the use of a dental dam, can be performed in the main clinic operatories by DMD students assisted by a chair-side assistant wearing an intermediate level of PPE.

2.3.1 Personal Protective Equipment (PPE)

Student operator and chair-side assistant are required to wear the following PPE at all times inside the operatory, please refer to the Different Levels of Personal Protective Equipment in Appendix 10.

- Clean set of scrubs (provided by the College of Dentistry) and a clean pair of indoor shoes to be worn exclusively in the College of Dentistry
- One pair of Nitrile Gloves
- Level Level 3 mask
- Face-shield
- Cloth gown

Notes:
- PPE donning and doffing can be performed in the operatory
- Doffing must be performed immediately upon operatory cleaning

2.3.2 Donning of PPE for AGP – Phase 3

PPE donning will be performed in the operatory. Students need to ensure that all pre-procedure Start Checks are completed prior to the initiation of treatment, including the display of patient’s radiographs on the operatory computer screen. Refer to the College of Dentistry Clinic Manual.
Donning PPE must follow the below sequence (Appendix 7).

1. Perform hand hygiene using 70% alcohol-based sanitizer
2. Don the gown  
   a. Slide each arm into sleeves  
   b. Tie the back straps  
3. Don the mask. Secure all ties, loops or straps  
   a. Pull bottom of mask down under the chin  
   b. Place middle fingers on bridge of nose and “walk” index fingers down sides of nose, pressing and molding wire to face  
4. Don the face-shield  
5. Perform hand hygiene using 70% alcohol-based sanitizer  
6. Don the gloves ensuring that the gloves are covering the cuffs of the sleeves  
7. Do not exit the enclosed operatory until the procedure is finished  

Note: Repeat hand hygiene at any time if hands become contaminated.

2.3.3 Dental Treatment

Students will be working in the following groups of three (3) with all students wearing PPE appropriate to their role (AGP Personal Protective Equipment 2.2.1)

- **Operator**: Student performing the treatment (follows AGP PPE Protocol)
- **Chair-side Assistant**: Student responsible for controlling high-volume suction and minimizing aerosol generation (follows AGP PPE Protocol)
- **Circulating Assistant**: Student located outside the operatory (follows NAGP PPE Protocol), responsible for:
  - Retrieving additional materials
  - Escorting the patient to the washroom when necessary
  - Escorting patients to the Front Office at the end of the session

All normal College of Dentistry intra-operative operating procedures and IPAC requirements remain in effect as per the Clinic Manual and IPAC requirements. In addition, the following intra-operative COVID-19 protocols are in place and must be strictly adhered to.

**Intra-operative COVID-19 Protocols**

- Low and Moderate aerosol-generating procedures will be performed in the 2nd floor main clinic. Clinic will run from 8:30 am to 2:30 pm.
- The use of high-volume suction is required as aerosols are being produced, and a second high-volume dental evacuation suction will be activated for the entire duration of the dental appointment to assist with aerosol removal. *(Source: [https://pubmed.ncbi.nlm.nih.gov/32661521/](https://pubmed.ncbi.nlm.nih.gov/32661521/)))*
• Rubber dam must be used in every procedure *(Source CDSS).* Soak the exposed procedure area with H₂O₂ prior to beginning treatment *(Source: CDA).*

• The air-water syringe is to be used with either air or water, not a combination of both *(Source: CDSS).*

• When possible, an increased number of dental procedures should be performed per appointment to make more efficient use of available patient and operatory time.

• Access to a computer will be permitted during the treatment, following normal IPAC procedures.

• Students must send axiUrn notifications to signal a Clinical Instructor or Registered Dental Assistant when required. Students are not to leave the operatory during the clinic. Refer to the College of Dentistry Clinic Manual.

• If a patient needs access to the washroom during treatment, the Circulating Assistant will escort the patient (wearing a Level 1 mask) to the washroom and remind the patient to perform hand hygiene with 70% alcohol-based sanitizer before escorting the patient back to the operatory.

• At the end of the session, students should instruct patients to wear the provided Level 1 mask that was stored in the zip-lock bag. Hand hygiene with 70% alcohol-based sanitizer must be performed immediately upon leaving the clinic.

• The Circulating Assistant will escort the patient to the Front Office for payment and dismissal keeping social distance *(Source: CDSS).*

### 2.3.4 Dental Operatory Cleaning

Operatories will be in quarantine for a period of 15 minutes *(Source: CDSS).* Students must remain in the operatory during the quarantine period to preserve PPE. Students are to use the quarantine period to complete the patient’s chart in axiUrn.

• Operatory disinfection:
  - All surfaces should be cleaned and disinfected according to normal College of Dentistry procedures as described in the College of Dentistry Clinic Manual. In addition, if a disinfection spraying or fogging system is not available, walls must be cleaned and disinfected using the disinfection Optim 33B wipes.
  - After disinfecting all surfaces of the container housing the used instruments, the container can be transported to CSR for sterilization.

• Operatory cleaning must be checked and approved by another student, faculty or staff. An Operatory Cleaning Log Sheet will be posted in the operatory.
2.3.5 Doffing of PPE for AGP – Phase 3

Doffing will take place in the dental operatory as soon as cleaning and disinfection of the operatory is finalized, and should be performed as followed (see Appendix 8).

1. Perform hand hygiene (wearing gloves) using 70% alcohol-based sanitizer
2. One student is to untie the back straps of the gown of the other students. Keeping hands in sleeves, remove gloves and gown inside out in the same motion
   a. Dispose the gown in the laundry receptacle and gloves into trach located in operatory
3. Perform hand hygiene using 70% alcohol-based sanitizer
4. Remove face-shield
   a. Handle face-shield and eye protection only by headband or ear pieces
   b. Carefully pull away from face, avoiding contact with face or hair
   c. Place re-usable items in appropriate area for cleaning
5. Perform hand hygiene using 70% alcohol-based sanitizer
6. Remove the mask
7. Perform hand hygiene using 70% alcohol-based sanitizer

2.4 Phase Four of the Dental Clinic Re-opening

AGP will be carried out as follows:

- High Risk AGP: Treatments expected to generate large amounts of aerosol where a dental dam cannot be used, must be performed in enclosed operatories, following Phase Two guidelines with some modifications.

2.4.1 Personal Protective Equipment (PPE)

Student operator and chair-side assistant are required to wear the following PPE at all times inside the operatory, please refer to the Different Levels of Personal Protective Equipment in Appendix 10.

- Clean set of scrubs (provided by the College of Dentistry) and a clean pair of indoor shoes to be worn exclusively in the College of Dentistry
- One pair of Nitrile Gloves
- NIOSH approved N95 (or KN95) respirator mask
  o Mask must be fit tested
  o No facial hair is allowed
- Level 3 mask
- Face-shield
- Cloth gown
- Bonnet

Note:

- Loupes are allowed
- Students will be able to choose if they prefer to wear a Level 3 mask or N95 respirator mask
- Doffing is to be performed in the AGP operatory after cleaning
2.4.2 Donning of PPE for High Risk AGP

PPE donning will be performed in the AGP Room. Students need to ensure that all pre-procedure Start Checks must be completed before any treatment is initiated. Refer to the College of Dentistry Clinic Manual.

Donning PPE must follow the sequence below (Appendix 5)

1. Perform hand hygiene using 70% alcohol-based sanitizer
2. Don the bonnet
3. Don the gown
   a. Slide each arm into sleeves
   b. Tie the back straps
4. Don the Level 3 mask or N95 (or KN95) respirator mask, if preferred. If wearing the N95 mask it must be done in the following sequence:
   a. Secure straps
   b. Mold metal nose piece to bridge of nose
   c. Perform seal check
5. Don safety or prescription glasses if needed
6. Don the face shield
7. Perform hand-hygiene using 70% alcohol-based sanitizer
8. Don the gloves ensuring that the gloves are covering the cuffs of the sleeves
9. Do not exit the enclosed operatory until the procedure is finished

Note:
- Repeat hand hygiene at any time if hands become contaminated.

2.4.3 Dental Treatment

Students will be working in the following groups of three (3) with all students wearing PPE appropriate to their role (AGP Personal Protective Equipment 2.2.1):

- **Operator**: Student performing the treatment (follows AGP PPE Protocol)
- **Chair-side Assistant**: Student responsible for controlling high-volume suction and minimizing aerosol generation (follows AGP PPE Protocol)
- **Circulating Assistant**: Student located outside the operatory (follows NAGP PPE Protocol), responsible for:
  o Calling an instructor
  o Retrieving additional materials
  o Escorting the patient to the washroom when necessary
  o Escorting patients to the Front Office at the end of the session

All normal College of Dentistry intra-operative operating procedures and IPAC requirements remain in effect as per the Clinic Manual and IPAC requirements. In addition, the following intra-operative COVID-19 protocols are in place and must be strictly adhered to.
Intra-operative COVID-19 Protocols

- AGP will be performed in a total of 14 dental operatories distributed in one (1) block of eight (8) dental operatories located on the 1st floor and another block of six (6) operatories located in the 2nd floor of the dental clinic building. Clinic will run from 8:30 am to 2:30 pm.
  - All High Risk AGP operatories will be enclosed, will exchange the air at least six (6) times per hour (refer to Appendix 11), and portable NOMAD X-ray units will be available for occasional use.

- The use of high-volume suction is required as aerosols are being produced, and a second high-volume dental evacuation suction will be activated for the entire duration of the dental appointment to assist with aerosol removal. (Source: https://pubmed.ncbi.nlm.nih.gov/32661521/)

- Patients are to be covered with barrier. (Source: CDA)

- Rubber dam must be used in every possible procedure. (Source: CDSS) Soak the exposed procedure area with H₂O₂ prior to beginning treatment. (Source: CDA)

- When possible, an increased number of dental procedures should be performed per appointment to make more efficient use of available patient and operatory time.

- Start Checks with the clinical instructor are mandatory. Refer to College of Dentistry Clinic Manual.

- Access to a computer will be permitted during the treatment, following normal IPAC procedures.

- Students must send axiUrn notifications to signal a Clinical Instructor, Registered Dental Assistant or a Circulating Assistant when required. Students are not to leave the operatory during the clinic. Refer to College of Dentistry Clinic Manual.

- If a patient needs access to the washroom during treatment, the Circulating Assistant will escort the patient (wearing a Level 1 mask) to the washroom and remind the patient to perform hand hygiene with 70% alcohol-based sanitizer before escorting the patient back to the operatory.

- At the end of the session, students should instruct patients to wear the provided Level 1 mask that was stored in the zip-lock bag. Hand hygiene with 70% alcohol-based sanitizer must be performed immediately upon leaving the clinic.

- The Circulating Assistant will escort the patient to the Front Office for payment and dismissal keeping social distance. (Source: CDSS)

Operator and chair-side assistant PPE must be removed as per the guidelines discussed under Doffing of PPE for AGP (see 2.2.5) (Source: CDSS)
2.4.4 Dental Operatory Cleaning

Operators will be in quarantine for a period of time of 15 minutes, which is specific to the air exchange rate in the operatory to allow aerosol to settle before students are allowed to clean (see Appendix 11) (Source: arXiv:2008.10998). A quarantine sign specifying when the operatory will be safe to enter must be placed on the operatory door to advise clinic personnel not to enter (Source: CDSS). During the quarantine period students still wearing PPE are to work on patient charting.

- Students must wear PPE following the NAGP Protocol during cleaning. (Source: CDSS).
- Operatory disinfection:
  - All surfaces should be cleaned and disinfected according to normal College of Dentistry procedures as described in the College of Dentistry Clinic Manual.
  - After disinfecting all surfaces of the container housing the used instruments for the quarantine period, the container can be placed on a trolley cart and transported to CSR for sterilization.
- Operatory cleaning must be checked and approved by another student, faculty or staff. An Operatory Cleaning Log Sheet will be posted on the operatory door.
- Operatory disinfection will be finalized by a College of Dentistry staff with the use of a disinfecting fogger.

2.4.5 Doffing of PPE for AGP

Doffing is to be performed inside the enclosed dental operatory after cleaning is finalized and should be carried out as followed (see Appendix 6).

1. Perform hand hygiene (wearing gloves) using 70% alcohol-based sanitizer
2. One student is to untie the back straps of the gown of the other students. Keeping hands in sleeves, remove gloves and gown inside out in same motion
   a. Dispose the gown in the laundry receptacle and gloves into trash located in operatory
3. Perform hand hygiene using 70% alcohol-based sanitizer
4. Remove face-shield
   a. Handle face-shield only by headband or ear pieces
   b. Carefully pull away from face, avoiding contact with face or hair
   c. Place re-usable items in appropriate area for cleaning
   d. Place disposable items into the garbage
5. Perform hand hygiene using 70% alcohol-based sanitizer
6. Remove Level 3 mask or N95 (or KN95) respirator
   a. Bend forward slightly and carefully remove the mask from face, touching only the ties or elastic bands
   b. Start with the bottom tie, then remove the top
7. Perform hand hygiene using 70% alcohol-based sanitizer
8. Don level 1 mask for non-procedural clinic wear
2.4.6 Moderate and Low Risk AGP

Treatments with a moderate or low generation of aerosol such as restorative and endodontic work with the use of a dental dam, can be performed in the main clinic operatories by DMD students working alone or assisted by a chair-side assistant, wearing an intermediate level of PPE and loupes, following the same guidelines as Phase 3.

2. NON-AEROSOL GENERATING PROCEDURES

The Non-Aerosol-Generating Procedures (NAGP) Standard Operating Procedure (SOP) was developed by the College of Dentistry at the University of Saskatchewan to be used during the COVID-19 pandemic and must be followed indefinitely until public health officials declare that physical distancing and other measures are no longer required. This SOP is a live document that should be frequently checked as changes and updates will likely occur as scientists acquire greater knowledge of the SARS-CoV-2 and new guidelines are created by health care regulators.

3.1 Phase One of the Dental Clinic Re-opening

NAGP urgent/emergency treatment will be performed in the College of Dentistry. Treatment is to be conducted exclusively by faculty assisted by registered dental assistants in enclosed operatories, following the same guidelines and PPE required for AGP Phase Two of Dental Clinic Re-opening.

3.2 Phase Two, Phase Three and Phase Four of Dental Clinic Re-opening

3.2.1 NAGP Personal Protective Equipment (PPE)

Student operator and chair-side assistant are required to wear the following PPE during all times please refer to the Different Levels of Personal Protective Equipment in Appendix 10.

- Clean set of scrubs (provided by the College of Dentistry) and a clean pair of indoor shoes to be worn exclusively in the College of Dentistry
- One pair of Nitrile Gloves
- Level 2 or Level 3 surgical mask
- Face-shield
- Cloth gown

Notes:

- Donning and doffing location will be performed in the operatory
- Doffing should be performed immediately after operatory cleaning

3.2.2 Donning of PPE for NAGP

PPE donning will be performed in the operatory. Students must ensure that all appropriate PPE is available in the operatory and all pre-procedure Start Checks are completed. Patient’s radiographs are to be displayed on the cubicle computer screen.
Donning PPE MUST follow the sequence below (Appendix 7)

1. Perform hand hygiene using 70% alcohol-based sanitizer
2. Don the gown
   a. Place each arm into the sleeves
   b. Tie the back straps
3. Don surgical mask (with or without the face-shield)
   a. Secure all ties, loops or straps
   b. Pull bottom of mask down under the chin
   c. Place middle fingers on bridge of nose and “walk” index finger down sides of nose, pressing and molding wire to face
4. Don the face-shield
   a. Place over eyes
   b. Adjust to fit
5. Perform hand hygiene using 70% alcohol-based sanitizer
6. Don gloves
   a. Take care not to tear or puncture
   b. Ensure that gloves cover cuff of gown

Note: Repeat hand hygiene at any time if hands become contaminated.

3.2.3 Dental Treatment

Students will be working alone or with a chair-side assistant with all students wearing NAGP Protocol PPE.

- **Operator**: Student performing treatment
- **Chair-side Assistant**: When present, the chair-side assistant is responsible for:
  o Assisting the operator with suctioning
- **Circulating Assistant**: Student located outside the operatory responsible for:
  o Retrieving additional materials
  o Escorting patient to the washroom when necessary
  o Escorting patients to the Front Office at the end of the session

All normal operating procedures and IPAC requirements remain in effect. In addition, the following intra-operative COVID protocols are in place and must be strictly adhered to.

**Intra-operative COVID Protocols**

- Non-aerosol generating procedures will be performed in the 2nd floor main clinic. Clinic will run from 8:30 am to 2:30 pm.

- Only hand instruments (i.e. scalers and curettes, not cavitron) will be permitted. *(Source: CDSS)*

- Start Checks with the clinical instructor are mandatory. Refer to College of Dentistry Clinic Manual.
• Access to a computer will be permitted during the treatment, following normal IPAC procedures.

• Students must send axiUm notifications to signal a Clinical Instructor, Registered Dental Assistant or Circulating Assistant when required. Students are not to leave the operatory during the clinic. Refer to College of Dentistry Clinic Manual.

• If a patient needs access to the washroom during treatment, the Circulating Assistant will escort the patient (wearing a Level 1 mask provided by the College of Dentistry) to the washroom and remind the patient to perform hand hygiene with soap and water or 70% alcohol-based sanitizer before escorting the patient back to the operatory. 70% alcohol-based sanitizer must be used upon reentering the operatory. At the end of the session, students should instruct patients to wear the provided Level 1 mask that was stored in the zip-lock bag. Hand hygiene with 70% alcohol-based sanitizer must be performed upon leaving the clinic.

• The Circulating Assistant will escort the patient to the Front Office for payment and dismissal keeping social distance. (Source: SHA)

3.2.4 Dental Operatory Cleaning

• Operatories will be cleaned by students immediately after patient dismissal, there is no quarantine period required. (Source: CDSS)

• Students must wear non-aerosol PPE during cleaning, refer to NAGP Personal Protective Equipment (3.2.1). (Source: CDSS)

• All surfaces must be cleaned and disinfected according to regular college procedures as described in the College of Dentistry Clinic Manual. In addition, walls must be disinfected using the disinfecting Optim 33B wipes.

• All used instruments must be transported immediately to CSR in a closed container for sterilization. Refer to College of Dentistry Clinic Manual.

• Operatory cleaning must be checked and approved by another student, faculty or staff. An Operatory Cleaning Log Sheet will be posted in the operatory.

3.2.5 Doffing of PPE for NAGP

Doffing is performed in the operatory, and should be performed as follows (Appendix 8). (Source: CDSS)

1. One student is to untie the back straps of the gown of the other student. If student is working alone, the Circulating Assistant is to be called to untie the back straps. Keeping hands in sleeves, remove gloves and gown inside out in same motion.
a. Dispose the gown in the laundry receptacle and gloves into trash located in operatory
2. Perform hand hygiene using 70% alcohol-based sanitizer
3. Remove face-shield
   a. Handle by headband or ear pieces
   b. Carefully pull away from face
   c. Place face-shield in appropriate area for disinfection
4. Perform hand hygiene using 70% alcohol-based sanitizer
5. Remove surgical mask
   a. Bend forward slightly and carefully remove mask from face by touching on the ties or elastic bands
   b. Start with the bottom tie (if applicable), then remove top tie
6. Perform hand hygiene using 70% alcohol-based sanitizer
7. Don Level 1 mask for non-procedural clinic wear

From Phase Three and forward the Dental Clinic will have morning and afternoon sessions back to back without breaks to minimize travel time for students, as students will not be permitted to remain in the building when not working in the clinic. Didactic classes and exams will be held online. The combined clinic session will be six (6) hours long. Morning clinic will run from 8:30-11:30 am, and afternoon clinic will run from 12-2:30 pm. After procedure is completed, students are expected to remain in clinic assisting classmates, circulating or working in the lab until 11 am for morning sessions and 2 pm for afternoon sessions. Refer to Clinic Manual attendance policy.

Face-shields will be replaced by the College of Dentistry once if damaged. The damaged face-shields must be handed in to be replaced.
CLINIC REMEDIATION FOR COVID-19 PANDEMIC INFECTION CONTROL

Students that breach the COVID-19 Pandemic Infection Control Protocols in the clinic of the College of Dentistry will be required to participate in remediation training and testing.

1. PROTOCOL BREACHES

1.1 Infection Prevention and Control (IPAC) Protocol Breaches

IPAC Protocol breaches are assigned to one of the following three categories (*Source: Public Health Ontario)*:

1. **High-Risk Breaches:**
   a. Protocol errors or omissions with a *high probability* of pathogen transmission thus endangering the patient, operator, chair-side assistant, and/or others working in the area. A High-Risk breach of protocol will result in immediate termination of the clinical session, the student(s) involved will receive a mark of zero (0) and a clinical suspension until the remediation process has been successfully completed.
   b. Specific clinical procedures and activities must be halted immediately, and the infraction reported immediately, using the IPAC Incident Reporting Form, to the IPAC Officer, GPL and Assistant Dean, Clinics for further actions.
   c. Examples of High-Risk breaches include, but are not limited to:
      i. Improper use of PPE
      ii. Failure to disinfect items that have direct contact with patient body fluids
      iii. Using a high-speed hand-piece during a NAGP to adjust occlusion on a restoration

2. **Medium-Risk Breaches:**
   a. Protocol errors or omissions with a *moderate probability* of pathogen transmission. A Medium-Risk breach must be corrected prior to continuation of patient care. A single Medium-Risk breach will result in a one (1) point deduction of the clinical grade for the session with a second Medium-Risk breach during the term resulting in a clinical suspension.
   b. Infraction to be reported immediately, using the IPAC Incident Reporting Form, to the IPAC Officer and supervising instructor and specific infraction to be corrected at the time.
   c. Examples of Medium-Risk breaches include, but are not limited to:
      i. During AGP proceeding with treatment with a small tear in glove
      ii. Adjusting the fit of your mask, face-shield, or eyewear during a dental procedure
      iii. Touching a surface in the operatory that is not barrier-covered
      iv. Accessing any supplies or instruments from their storage locations after PPE has been donned.
3. **Low-Risk Breaches:**
   a. Protocol errors or omissions with a **low probability** of pathogen transmission. A Low-Risk breach can be corrected while patient care continues. A single Low-Risk breach will result in a half (0.5) point deduction of the clinical grade for the session. Three (3) Low-Risk violations during the term will result in a clinical suspension.
   b. Breach must be recognized and corrected in current and subsequent treatments.
   c. Examples of Low-Risk breaches include, but are not limited to:
      i. Proceeding with treatment without the patient rinsing for 60 seconds with a 1% peroxide-based mouth rinse
      ii. Opening a wrapped cassette before the patient is seated
      iii. Forgetting to drape the patient with a cover
      iv. Handling a cell phone during an appointment
      v. Failure to remove jewelry prior to donning PPE
      vi. Hand-shaking or physical contact
      vii. Brushing teeth in the clinic before an appointment (that is to be performed in a washroom)
      viii. Failing to remind patient to wear a mask when leaving the operatory

1.2 **Student Suspension Procedure**

Students with High-Risk IPAC breaches, or an accumulation of two (2) Medium-Risk breaches or three (3) Low-Risk breaches or a combination of one (1) Medium-Risk and two (2) Low-Risk breaches will be immediately suspended from clinic due to the risk of COVID-19 cross-infection. Students suspended from clinical activities will receive a mark of zero (0) for their clinical performance in that clinic session.

Suspended students will be required to successfully complete IPAC remediation before clinical privileges are reinstated.

1.3 **Remediation Procedure:**

- Suspended students will watch the COVID-19 Pandemic Infection Control video provided by the College of Dentistry. Student “time-on-task” will be monitored through the Learning Management System (LMS) to ensure an appropriate duration of interaction with the training video.
  - Suspended students must correctly answer **all (100%)** of the mastery questions provided following the video.
    - Students unable to correctly answer **all (100%)** of the mastery questions will be required to re-watch the COVID-19 Pandemic Infection Control video and re-challenge the mastery questions. Student “time-on-task” will again be monitored. Students will repeat the process until successful.

- Once the student has achieved 100% on the mastery questions, they will be required to successfully complete the practical COVID-19 Pandemic Infection Control Remediation Training in the clinic with one of the IPAC Officers, where the following will be considered:
  - Set up and take down of operatory for AGP and NAGP
  - Donning and doffing of PPE for AGP and NAGP
- Ability to discuss the steps and describe the rational for AGP and NAGP Protocols
- Students that successfully complete the practical COVID-19 Pandemic Infection Control Remediation will have their clinic privileges reinstated.
PRECLINIC AND DRY LAB PROCEDURES

The Preclinical and Dry Lab Standard Operating Procedure (SOP) was developed by the College of Dentistry at the University of Saskatchewan to be used during the COVID-19 pandemic and must be followed indefinitely until public health officials declare that physical distancing and other measures are no longer required. This SOP is a live document that should be frequently checked as changes and updates will likely occur as scientists acquire greater knowledge of the SARS-CoV-2 and new guidelines are created by health care regulators.

1. PRECLINIC AND DRY LAB PROTOCOLS

1.1 Personal Protective Equipment (PPE)

Students are required to wear the following PPE at all times:

- Clean set of scrubs (provided by the student)
- One pair of Nitrile Gloves
- Level 1 mask
- Eye protection: dental loupes and face-shield
- Clean white cloth lab coat

Notes:
- Donning and doffing will be performed at the preclinic operatory.

1.2 Donning of PPE

PPE donning will be performed at the preclinical operatory.

Donning PPE MUST follow the sequence below:

1. Perform hand hygiene using 70% alcohol-based sanitizer
2. Don white lab coat
3. Don the dental loupe and face-shield
   a. Place over eyes
   b. Adjust to fit
4. Perform hand hygiene using 70% alcohol-based sanitizer
5. Don gloves
   a. Take care not to tear or puncture
   b. Ensure that gloves cover cuff of white lab coat

1.3 Preclinic Simulation Lab or Dry Lab Sessions

- Students will be working alone wearing PPE.
• Students must clean and disinfect the operatory using the disinfecting wipes before starting session.
• Students must remain seated at all times unless required to move as part of the lab activity.
  o If required to move as part of the lab activity, (i.e. endodontic x-rays), students must continue to wear their PPE, except for gloves, that must be removed. Hand hygiene is to be performed using 70% alcohol-based sanitizer before leaving the operatory unit and upon returning to the operatory unit prior to donning new set of exam gloves.
• Students must raise their hand when assistance is required from a preclinical instructor.
• Access to dental material supply table will be granted to one student at the time.
• Students should respect the designated signs on the floor when coming to the dental material supply table.
• Students must clean and disinfect their operatory using disinfecting wipes after finishing session.
• All normal operating procedures and IPAC requirements remain in effect.
• No drinks or food are allowed in the preclinic lab and dry lab.

1.4 Preclinic Operatory and Dry Lab Bench Cleaning

Preclinic operatory and dry lab bench must be cleaned and disinfected by students before and after every session using the disinfecting wipes.

• Students must wear preclinic PPE during cleaning
• All surfaces should be cleaned and disinfected according to regular college IPAC procedures

1.5 Doffing of PPE

Doffing is performed in the preclinic operatory or designated area in the dry lab, and should be performed as follows

1. Remove gloves and dispose into trash located in the preclinic or dry lab area
2. Perform hand hygiene using 70% alcohol-based sanitizer
3. Remove face-shield and dental loupe. Spray 70% alcohol- into a tissue and wipe the face-shield and dental loupe.
4. Perform hand hygiene using 70% alcohol-based sanitizer
5. Perform hand hygiene using 70% alcohol-based sanitizer
2. PRECLINIC PROTOCOL BREACHES

2.1 Protocol Breach Levels

IPAC and non-IPAC breaches are assigned to one of the following:

1. **High-Risk Breaches:**
   a. Protocol errors or omissions with a **high probability** of pathogen transmission thus endangering the student and/or others working in the area. A High-Risk breach of protocol will result in immediate termination of the preclinical session, the student(s) involved will receive a mark of zero (0) and a pre-clinical suspension until the remediation process has been successfully completed.
   b. Specific preclinical procedures and activities must be halted immediately, and the infraction reported immediately to the Academic Office.
   c. Examples of High-Risk breaches include, but are not limited to:
      i. Improper use of PPE
      ii. Consuming food and beverages in the preclinic
      iii. Exceeding the maximum capacity number in small rooms inside the preclinic as per University regulations

2. **Minor Risk Breaches:**
   a. Protocol errors or omissions with a **moderate or low probability** of pathogen transmission, or a non-IPAC related breaches. Minor breaches must be corrected prior to continuation of the session. A single Minor Risk breach will result in a warning. Three (3) Minor Risk violations during the term will result in a pre-clinical suspension. The student(s) involved will receive a mark of zero (0) and a pre-clinical suspension until the remediation process has been successfully completed.
   b. Infraction to be reported immediately to the Academic Office.
   c. Examples of Minor Risk breaches include, but are not limited to:
      i. Adjusting the fit of your mask, face-shield, or eyewear during a pre-clinical procedure
      ii. Accessing any supplies or instruments from their storage locations with exam gloves
      iii. Leaving the operatory wearing exam gloves
      iv. Failure to perform hand hygiene using 70% alcohol-based sanitizer before donning gloves or after removing gloves
      v. Failure to remove jewelry prior to donning PPE
      vi. Hand-shaking or physical contact
      vii. Disposing material in the wrong location
      viii. Using headphones during sessions
      ix. Using cell phones, computers or tablets for non-educational purposes during sessions
2.2 Student Suspension Procedure

Students with High-Risk IPAC breaches, or an accumulation of three (3) Minor Risk breaches will be immediately suspended from preclinic. Students suspended from pre-clinical activities will receive a mark of zero (0) for their pre-clinical performance in that pre-clinic session.

Suspended students will be required to successfully complete remediation before pre-clinical privileges are reinstated.

2.3 Remediation Process

- Suspended students will watch the COVID-19 Pandemic Infection Control video provided by the College of Dentistry and will be lectured about pre-clinical rules and regulations. Student “time-on-task” will be monitored through the Learning Management System (LMS) to ensure an appropriate duration of interaction with the training video.
  - Suspended students must correctly answer all (100%) of the mastery questions provided following the video.
    - Students unable to correctly answer all (100%) of the mastery questions will be required to re-watch the COVID-19 Pandemic Infection Control video and re-challenge the mastery questions. Student “time-on-task” will again be monitored. Students will repeat the process until successful.

- Once the student has achieved 100% on the mastery questions, they will be required to successfully complete the practical COVID-19 Pandemic Infection Control Remediation Training in the clinic with one of the IPAC Officers, where the following will be considered:
  - Set up and take down of operatory for AGP and NAGP
  - Donning and doffing of PPE for AGP and NAGP
  - Ability to discuss the steps and describe the rational for AGP and NAGP Protocols
  - Students that successfully complete the practical COVID-19 Pandemic Infection Control Remediation will have their clinic privileges reinstated.
APPENDIX 1: STUDENT SCRIPT

COVID-19 Pre-Appointment Screening

All patients must be called the day prior to their appointment and screened for risk of COVID-19 infection. Before confirming any appointments, ensure you ask the patient all of the following questions.

**Student Script**

Hello, this is [Student Name]. I am calling to remind you of your dental appointment scheduled for [specify time] tomorrow at the College of Dentistry Student Clinic. As a part of our new COVID-19 protocols, I need to ask you a few questions before I am able to confirm your appointment.

Do you have ANY of the following symptoms: *(ask one at a time)*

- Felt feverish anytime in the last two weeks (14 days)?
- New cough or worsening cough?
- New loss of taste or smell?
- Sore throat?
- Shortness of breath or difficulty breathing?
- Temperature equal to or over 38 degrees Celsius?
- Chills?
- Fatigue or weakness?
- Muscle or body aches?
- Headaches?
- Gastrointestinal symptoms (abdominal pain, diarrhea, vomiting)?
- Feeling very unwell?
- Have you travelled outside of Canada in the last 14 days?
- Have you attended a gathering of over 5 people?

For pediatric patients, ask their guardians the following additional questions:

- Sudden onset of runny nose, cough or sneezing?
- Sudden onset of upset stomach or diarrhea?

If patient answers "NO" to ALL questions, confirm their appointment for the next day. Remind patients that these questions will be reviewed with them again tomorrow at the Dental College.

If patient answers "YES" to ANY questions, postpone their appointment and encourage them to contact 811 or visit the Government of Saskatchewan COVID-19 website.
APPENDIX 2: PRE-SCREENING QUESTIONNAIRE

COVID-19 Screening Questionnaire

Patient Name: ____________________________ Date: ____________

Before admitting patient into dental clinic, review the questions in Part I and II with patient and circle the appropriate responses for each question.

Within the past 14 days has the patient experience any of the following:

Yes No New or worsening cough?
Yes No Sore throat?
Yes No Shortness of breath/difficulty breathing?
Yes No Temperature equal to or over 38 degrees Celsius?
Yes No Feeling feverish?
Yes No Chills?
Yes No Fatigue or weakness?
Yes No Muscle or body aches?
Yes No New loss of taste or smell?
Yes No Headache?
Yes No Feeling very unwell?
Yes No Gastrointestinal symptoms (abdominal pain, diarrhea, vomiting)?
Yes No Attended a gathering of more than 5 people?
Yes No Travelled outside of Canada?
Yes No Been instructed to self-isolate?
Yes No Been in a workplace considered to be high risk?
Yes No Been within 2 metres of someone with a confirmed case of COVID-19?

Pediatric Patients:

Yes No Sudden onset of runny nose, cough, sneezing?
Yes No Sudden onset of GI symptoms (under the age of 5)?

If the patient answered "NO" to ALL of the above questions, admit the patient to the dental clinic and proceed with patient care.

If the patient answered "YES" to ANY of the above questions, postpone their procedure and encourage them to contact 811 or visit the Government of Saskatchewan COVID-19 website.

Patient Signature: ____________________________
# APPENDIX 3: IPAC INCIDENT FORM

## COVID-19 PROTOCOL BREACH REPORT

**Date (dd/mm/yy):**

<table>
<thead>
<tr>
<th>1. Location of COVID-19 Protocol Breach</th>
<th>2. Breach Committed By</th>
</tr>
</thead>
<tbody>
<tr>
<td>College Clinic:</td>
<td>Name:</td>
</tr>
<tr>
<td>□ 2nd Floor</td>
<td></td>
</tr>
<tr>
<td>□ Other</td>
<td></td>
</tr>
<tr>
<td>Outreach Clinic:</td>
<td></td>
</tr>
<tr>
<td>□ SWD</td>
<td></td>
</tr>
<tr>
<td>□ Other</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3. Primary Person Affected (select one)</th>
<th>4. Persons Notified</th>
<th>5. Witness?</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ Dental Student</td>
<td>□ Supervising Dentist/Assistant</td>
<td>□ Yes</td>
</tr>
<tr>
<td>□ DA Student</td>
<td>□ GPL</td>
<td>□ No</td>
</tr>
<tr>
<td>□ Staff</td>
<td>□ Assistant Dean (Clinics)</td>
<td></td>
</tr>
<tr>
<td>□ Dentist</td>
<td>□ IPAC Officers</td>
<td></td>
</tr>
<tr>
<td>□ Other</td>
<td>□ Name of notified:</td>
<td></td>
</tr>
</tbody>
</table>

5. **Reported Initially By (please print):**

<table>
<thead>
<tr>
<th>Name &amp; Title:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program:</td>
</tr>
<tr>
<td>Date:</td>
</tr>
<tr>
<td>Sign:</td>
</tr>
</tbody>
</table>

6. **Risk Level**

| □ High |
| □ Medium |
| □ Low |

7. **Description of the Protocol Breach**

---

**OFFICE USE ONLY:**

Breach Report #:  
Date: 
Reviewed by:  
Required Follow up:
APPENDIX 4: CDSS ALERT


APPENDIX 5: DONNING AGP PPE – HIGH RISK PHASE 2, 3 AND 4

Donning PPE for AGP

- Bonnet
- Gown
- N95 (or KN95) Mask
- Face-shield
- Gloves

1) Perform hand hygiene using 70% alcohol-based sanitizer
2) Don bonnet
3) Don the gown
4) Don N95 (or KN95) respirator mask. Secure strap, mold metal nose piece to bridge of nose, and perform seal check
5) Don face-shield
6) Perform hand hygiene using 70% alcohol-based sanitizer
7) Don the gloves
8) Enter the AGP operatory
9) Perform hand hygiene using 70% alcohol-based sanitizer
APPENDIX 6: DOFFING AGP ROOM PPE – HIGH RISK PHASE 2, 3 AND 4

Doffing PPE for AGP

1) Perform hand hygiene using 70% alcohol-based sanitizer

2) Remove gown, keeping hands in sleeves, remove coat inside out and remove the gloves in the same motion

3) Perform hand hygiene using 70% alcohol-based sanitizer

4) Remove face-shield

5) Exit the enclosed operatory and close the door if on Phase 2 or 3.

6) Perform hand hygiene using 70% alcohol-based sanitizer

7) Remove N95 (or KN95) mask and bonnet

8) Perform hand hygiene using 70% alcohol-based sanitizer
APPENDIX 7 – DONNING PPE – PHASE 3 AND 4 – MODERATE AND LOW LEVEL AGP AND NAGP

Donning PPE for AGP - Phase 3

- Gown
- Level 2 or Level 3 mask
- Face-shield
- Gloves

1) Perform hand hygiene using 70% alcohol-based sanitizer

2) Don the gown

3) Don the mask

4) Don face-shield

5) Perform hand hygiene using 70% alcohol-based sanitizer

6) Don the gloves

7) Do not exit the enclosed operatory until the procedure is finished.
APPENDIX 8 – DOFFING PPE – PHASE 3 AND 4 – MODERATE AND LOW LEVEL AGP AND NAGP

Doffing PPE for AGP - Phase 3

1) Perform hand hygiene using 70% alcohol-based sanitizer
2) Pull apart gown, keeping hands in sleeves, remove coat inside out and remove the gloves in the same motion
2a) Dispose gown in laundry receptacle and gloves in trash
3) Perform hand hygiene using 70% alcohol-based sanitizer
4) Remove face-shield
5) Perform hand hygiene using 70% alcohol-based sanitizer
6) Remove the mask
7) Perform hand hygiene using 70% alcohol-based sanitizer
APPENDIX 9: DONNING AND DOFFING INSTRUCTION VIDEO

Refer to the link below for proper donning and doffing procedures. This link should be used in supplement with the instructions provided by the college in the following:

- Donning of PPE for AGP
- Doffing of PPE for AGP
- Donning of PPE for NAGP
- Doffing of PPE for NAGP
- Appendix 5
- Appendix 6
- Appendix 7
- Appendix 8

https://www.youtube.com/watch?v=t1lxq2OUy-U
## APPENDIX 10: DIFFERENT LEVELS OF PPE REQUIRED IN THE COLLEGE OF DENTISTRY

<table>
<thead>
<tr>
<th>Setting</th>
<th>Staff or Patients</th>
<th>Procedure/Activity</th>
<th>Suggested PPE Phase Two</th>
<th>Suggested PPE Phase Three</th>
<th>Suggested PPE Phase Four</th>
</tr>
</thead>
</table>
| Patient Room                 | Dentist/Dental Student/Assistant/Hygienist | Low Risk: Non-aerosol generating procedures (NAGP) | • Level 2 or 3 mask  
• Face-shield  
• Scrubs  
• Gloves  
• Lab coat or gown | • Level 2 or 3 mask  
• Face-shield  
• Scrubs  
• Gloves  
• Lab coat or gown | • Level 2 or 3 mask  
• Face-shield  
• Scrubs  
• Gloves  
• Lab coat or gown |
|                              |                                        | Moderate Risk AGP with rubber dam           | • N95 or equivalent respirator (fitted)  
• Face-shield  
• Bonnet  
• Scrubs  
• Lab coat or gown  
• Gloves | • Level 3 mask  
• Face-shield  
• Scrubs  
• Gloves  
• Lab coat or gown | • Level 3 mask  
• Face-shield  
• Scrubs  
• Lab coat or gown  
• Gloves |
|                              |                                        | High Risk: Aerosol-generating procedures (AGP) without rubber dam | • N95 or equivalent respirator (fitted)  
• Face-shield  
• Bonnet  
• Scrubs  
• Lab coat or gown  
• Gloves | • N95 or equivalent respirator (fitted)  
• Face-shield  
• Bonnet  
• Scrubs  
• Lab coat or gown  
• Gloves | • N95 or equivalent respirator (fitted) or Level 3 mask  
• Face-shield  
• Bonnet  
• Scrubs  
• Lab coat or gown  
• Gloves |
| Disinfecting treatment rooms for NAGP | Can disinfect immediately | Can disinfect immediately | Can disinfect immediately | • Level 1 mask minimum  
• Eye protection  
• Gloves |
| Disinfecting treatment for AGP | Wait to disinfect follow provincial guidelines | Wait to disinfect follow provincial guidelines | Wait to disinfect follow provincial guidelines | • Level 1 mask minimum  
• Eye protection  
• Gloves |
| Reception                    | Front office staff                      | Arrival screening                           | Level 1 mask minimum  
• Level 1 mask minimum  
• Level 1 mask minimum  
• Level 1 mask minimum |
APPENDIX 11: AIR CHANGES/HOUR REQUIRED FOR AIRBORNE-CONTAMINANT REMOVAL

<table>
<thead>
<tr>
<th>Air Changes/Hour</th>
<th>Time (minutes) required for removal 99% efficiency</th>
<th>Time (minutes) required for removal 99.9% efficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>138</td>
<td>207</td>
</tr>
<tr>
<td>4</td>
<td>69</td>
<td>104</td>
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<td>6</td>
<td>46</td>
<td>69</td>
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<td>8</td>
<td>35</td>
<td>52</td>
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<tr>
<td>10</td>
<td>28</td>
<td>41</td>
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<tr>
<td>12</td>
<td>23</td>
<td>35</td>
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<td>15</td>
<td>18</td>
<td>28</td>
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<tr>
<td>20</td>
<td>14</td>
<td>21</td>
</tr>
<tr>
<td>50</td>
<td>6</td>
<td>8</td>
</tr>
</tbody>
</table>

(Source: CDC)
APPENDIX 12: SCHEDULED RESTORATIVE/ENDODONTIC DECISION TREE

(Source: CDA Return to Practice Manual)
APPENDIX 13: ROUTINE HYGIENE APPOINTMENT DECISION TREE

(Source: CDA Return to Practice Manual)
APPENDIX 14: RETURN TO WORK SCREENING FORM

Name: ____________________  Signature: ____________________  Date: ______________

Within the past 14 days have you experienced the following:

Yes  No  New or worsening cough?
Yes  No  Sore throat?
Yes  No  Shortness of breath/difficulty breathing?
Yes  No  Temperature equal to or over 38 degrees Celsius?
Yes  No  Feeling feverish?
Yes  No  Chills?
Yes  No  Fatigue or weakness?
Yes  No  Muscle or body aches?
Yes  No  New loss of taste or smell?
Yes  No  Headache?
Yes  No  Feeling very unwell?
Yes  No  Gastrointestinal symptoms (abdominal pain, diarrhea, vomiting)?
Yes  No  Attended a gathering of more than 5 people?
Yes  No  Travelled outside of Canada?
Yes  No  Been instructed to self-isolate?
Yes  No  Been in a workplace considered to be high risk?
Yes  No  Been within 2 metres of someone with a confirmed case of COVID-19?
Yes  No  Close contact with a person who had acute respiratory illness that started within 14 days of their close contact* to someone with a probable** or confirmed case of COVID-19?
Yes  No  Close contact* with a person who had acute respiratory illness who returned from travel outside Canada in the 14 days before they became sick?
Yes  No  Laboratory exposure to biological material (i.e. primary clinical specimens, virus culture isolates) known to contain COVID-19?

If you answered "NO" to ALL of the above, you can proceed to work. If you develop symptoms, please complete a new questionnaire.

If the patient answered "YES" to ANY of the above, you are not permitted to attend work and you should contact 811 or visit the Government of Saskatchewan COVID-19 website.
Clinic Return to Work Screening Form

* Close contact includes providing care, living with or otherwise having close prolonged contact (within 2 meters) while the person was ill, or contact with infectious bodily fluids (i.e. from a cough or sneeze) while not wearing recommended personal protective equipment.

** Probably case is a person with clinical illness who had close contact to a lab-confirmed COVID-19 case, while not wearing appropriate personal protective equipment, OR a person with clinical illness who meets the COVID-19 exposure criteria, AND in whom laboratory diagnosis COVID-19 is inconclusive. Clinical illness of a probable case is new onset/exacerbation of following symptoms: fever (over 38 degrees Celsius), cough, shortness of breath (SOB)/difficulty breathing, sore throat or runny nose. Exposure criteria for a probable case is a person who, in the 14 days before onset of illness: had any history of travel outside of Canada, OR had close contact with a confirmed or probable case of COVID-19, OR is a close contact of a traveler with acute respiratory illness who returned from outside Canada in the previous 14 days, OR had a laboratory exposure to biological material (i.e. primary clinical specimens, virus culture isolates) known to contain COVID-19.

This form was adapted from the Canadian Dental Association Return to Practice Manual