Fertility care during the COVID-19 pandemic: Guiding principles to assist Canadian ART clinics to resume services and care

Bissonnette, F., Buckett, W., Case, A., Dixon, M., Feyles, V., Hitkari, J., Librach, C., McGeer, A., Pirwany, I., Seethram, K., (Chair), Sierra, S., Soliman, S., Victory, R., and Yuzpe, A.

Canadian Fertility and Andrology Society - UPDATED June 3rd, 2020

PURPOSE

This document is to assist clinics which are restarting services with broad measures intended to reduce ongoing transmission of COVID-19. Each ART clinic will make an independent decision about when to re-open based upon the prevailing regulatory environments in their jurisdiction, including Provincial Colleges of Physicians, and Provincial Health Officers, Public Health and Provincial Ministries of Health recommendations. This document was developed with experts in fertility, infectious disease and Public Health, and represents the best available evidence to date. If local directives exist, they would supersede these guiding principles. The content of this document contains suggestions and methods which will require independent decisions from each clinic, reflecting their environment and Provincial advisories and recommendations.

BACKGROUND

Coronavirus Disease (COVID-19) is the infection caused by a virus known as SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) which emerged in China in late 2019, and was declared a pandemic on March 11, 2020 by the World Health Organization. Due to Canadian public health measures, national, and international guidelines, all Canadian fertility centres diminished and closed treatments in late March 2020 as part of a global effort to reduce disease transmission and keep our patients and staff safe. As is the experience in other countries, we expect that the current states of emergency will eventually be lifted. However, as fertility providers, we have an ongoing duty to ensure that both urgent and elective treatments are conducted in an environment which still engages infection prevention and control measures in order to ensure the health and safety of our patients and teams.

Current guidelines are permissive of achieving pregnancy during COVID-19. As new knowledge emerges, these recommendations may be altered. Consideration may be given to delay of pregnancy in patients with complex pulmonary or other medical conditions which put them at increased risk for COVID-19 complications.
GENERAL PRINCIPLES

A. REDUCE FACE TO FACE INTERACTIONS TO SUPPORT SOCIAL/PHYSICAL DISTANCING
   a. Use virtual or telephone consultations whenever possible
   b. Postpone any non-essential face-to-face appointments

B. PRE-SCREEN ALL PATIENTS WITHIN 48 HOURS OF INTENDED APPOINTMENT
   a. With patient consent and in adherence to privacy principles, options include telephone, text/email messaging to address below screening criteria

C. ALL PEOPLE ENTERING THE CLINIC MUST BE SCREENED
   a. Those providing screening must be protected from droplet/contact by ensuring there is either:
      i. A barrier (i.e. Plexi-screen) between screener and person being screened or;
      ii. A 2-metre distance between screener and person being screened or;
      iii. Protective face and eye protection (i.e. mask with visor, or face shield and mask) for the screener. Gloves are only indicated for those handling blood and body fluids and are therefore not required for screening.

D. INFORM PATIENTS OF RISKS AND CHANGES IN CLINIC POLICY BECAUSE OF COVID-19
   a. All patients should be informed of the potential risks of treatment and/or pregnancy related to COVID-19 as early as possible before treatment begins
   b. All patients should be informed of clinic policies around COVID-19 as early as possible before treatment begins
   c. Patients should have the opportunity to ask questions and confirm their understanding of the risks and policies in writing
   d. Patients should be provided with local Public Health contact information

E. CONTINUE FERTILITY TREATMENT IF PATIENT AND STAFF SAFETY IS MAINTAINED
   a. If Public Health directives allow, clinics should make every effort to continue treatment cycles when risks associated with cancelling cycles due to COVID-19 are significant
      i. To continue the cycle, the clinic must be able to maintain isolation procedures necessary for staff and patient safety. It may be that physical structures or PPE unavailability will preclude this.
      ii. Thus, patients with positive COVID-19 testing may require discontinuation of treatment until they have completely recovered or until 4 weeks after onset, whichever is longer

F. DEFER TREATMENT WHEN NECESSARY
   a. Patients who are either under investigation for COVID-19 or who have had contact with a patient with COVID-19 should be considered on a case by case basis including the possibility of having fertility care deferred
   b. In cases such as those set out in the point above, we recommend contacting your local Public Health Department for further instructions
G. **ALL STAFF MUST BE SCREENED FOR SYMPTOMS AND RISK FACTORS EACH DAY WHEN THEY ARRIVE AT WORK**

H. **PREVENT INFECTION:**
   a. All required infection prevention and control measures must continue with addition of physical distancing, appropriate personal protective equipment for the procedure as well as enhanced cleaning and disinfection protocols
   b. Staff should maintain a 2-metre distance from other staff at all times
   c. Staff and patients should wear a mask at all times when physical distancing cannot be assured, consistent with current Public Health recommendations

**SCREENING**

I. **ENTRY TO CLINIC**
   a. If possible, there should be a single point of entry into the clinic for staff and patient screening. Alternately, each point of entry should have a screening station
   b. Clinics may use systems to track screening of patients and staff, for example sticker labels to identify those who have been screened that day to track patients and staff who are screen negative, including the date in which screening was passed.
   c. Patients and staff should be screened each day they access the clinic
   d. There must be documentation of all people entering; various methods are acceptable
   e. The record should be kept for a minimum of 2 months

II. **ACTIVE DISEASE SCREENING**
   a. Clinics must keep records of all patients and staff screened
   b. Some clinics use the Government of Canada COVID-19 App and Self-Assessment Tool for staff screening [https://ca.thrive.health/](https://ca.thrive.health/) while others actively screen or require self-report of staff

<table>
<thead>
<tr>
<th>QUESTION</th>
<th>RESULT</th>
<th>ACTION</th>
</tr>
</thead>
</table>
| Screener asks patient or staff whether they have any of the following new or worsening signs or symptoms or if they are awaiting COVID-19 swab results: | □ Fever, chills, repeated shaking with chills, or feel feverish  
□ Cough (new or chronic exacerbation)  
□ Difficulty breathing or shortness of breath  
□ Runny nose/congestion (new or chronic exacerbation)  
□ New onset loss of sense of smell/taste  
□ Muscle/body aches or pain  
□ Sore throat  
□ Fatigue  
□ Loss of appetite  
□ Diarrhea | If symptom(s) present and/or they are awaiting swab results:  
**POSITIVE SCREEN**  
- Provide local Public Health information  
- Inform the patient of the clinic policy in this situation  
- Recommend individuals contact their primary care provider or COVID-19 Assessment Centre |
### III. RISK ASSESSMENT

<table>
<thead>
<tr>
<th>QUESTION</th>
<th>RESULT</th>
<th>ACTION</th>
</tr>
</thead>
</table>
| Screener asks patient or staff whether they have: | □ Had close contact with COVID-19 positive case or somebody awaiting test results with a suspicion of being positive  
□ Traveled from any country or province with a travel restriction within the last 14 days | If answered yes to contact:  
POSSIBLY POSITIVE SCREEN  
- Further inquire whether patient is a front line worker and if so, whether they were wearing recommended PPE according to the type of duties performed when in close contact with COVID-19 positive care or somebody awaiting test results  
- If appropriate PPE worn, NEGATIVE SCREEN  
- If appropriate PPE NOT worn, POSITIVE SCREEN  
| | If answered yes to travel to restricted area:  
POSITIVE SCREEN |
IV. PASSIVE SCREENING

Provide visible written reminders and icons

To inform staff and patients of risk-reduction strategies including screening and transmission risk

Signage should be present at all points of entry into clinic

V. TESTING

a. Nasopharyngeal PCR swab is the preferred test when swabs are available
b. Testing guidance including who is eligible, under which circumstances, and what the associated turnaround times are, is provincially mandated

HOW TO ACHIEVE ACCEPTABLE PHYSICAL DISTANCING

<table>
<thead>
<tr>
<th>Limiting Patient Volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use virtual appointments unless testing or intervention requires in person visit</td>
</tr>
<tr>
<td>There must be discrete appointment times for patients so not to overload the physical space</td>
</tr>
<tr>
<td>Contingency plans to accommodate emergencies (i.e. allergic reactions, post-procedure complications, OHSS, bleeding in pregnancy) must be developed</td>
</tr>
<tr>
<td>Upon admission, consider placing patients directly into examination rooms to permit distancing and isolation in addition to having waiting room chairs separated by 2 metres</td>
</tr>
</tbody>
</table>
Consider excluding support people and children from the clinic

Use text messaging or phone calls to patients waiting in vehicles, other open spaces, or in secondary waiting rooms where physical distancing can be maintained

Increase spacing between patients in the recovery room to maintain minimum 2-metre distance between patients/staff

Consider one-way traffic flow to reduce patients/staff passing each other in hallways

**Infrastructure Changes**

Consider plexiglass barriers at reception or other patient facing areas (i.e. Pharmacy, ART Lab)

Consider removal of fabric chairs and replacing with wipeable surface chairs

To decrease door handle usage, prop doors open when possible paying attention to security, positive pressure environments, and fire hazard risk

### INFECTION PREVENTION AND CONTROL (IPAC)

**Staff Personal Protective Equipment (PPE)**

All staff must have access to required PPE for the procedure

A point of care risk assessment must be performed and includes assessment of:
- a) the task
- b) the patient
- c) the environment

Gloves recommended if hands will be exposed to body fluids* or blood

Gown recommended if clothing or skin could become soiled from splashes/sprays or contact with items contaminated with body fluids* or blood
Facial protection (surgical mask and goggles or face shield) recommended if eyes or face or mucous membranes could be splashed or sprayed with body fluids* or blood or within 2 metres of coughing or vomiting patient

* Body Fluids include: urine, feces, saliva, vomit, sputum, nasal secretions, semen, vaginal secretions

When physical distancing cannot be achieved between staff members or between staff and patients, staff should wear a surgical mask

Clinics must provide education for their staff for the proper PPE donning and doffing process

PPE recommendations vary depending on local conditions, however, consideration should be given to the following:

<table>
<thead>
<tr>
<th>PROCEDURE</th>
<th>STAFF PPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ultrasound</td>
<td>Surgical Mask, Gloves</td>
</tr>
<tr>
<td>Blood draw</td>
<td>Surgical Mask, Face Shield, Gloves</td>
</tr>
<tr>
<td>IUI</td>
<td>Surgical Mask, Gloves</td>
</tr>
<tr>
<td>FET/ET</td>
<td>Surgical Mask, Gloves</td>
</tr>
<tr>
<td>Sonohysterogram, Hysteroscopy</td>
<td>Surgical Mask, Face Shield, Gloves</td>
</tr>
<tr>
<td>Egg Retrieval</td>
<td>Surgical Mask, Face Shield, Gloves, Isolation Gown</td>
</tr>
</tbody>
</table>

Surgical masks are available in Level 1, 2, 3:

Level 1 - for low fluid risk exposure, i.e. velocity of a fluid spray from a vein

Level 2 - for moderate risk of fluid exposure, i.e. velocity of a fluid spray from an artery

Level 3 - for high risk of fluid exposure, i.e. velocity of a fluid spray from surgical intervention

For any activity with low to moderate risk for fluid exposure or if face shield used:
- Recommend Level 1,2 surgical mask

If procedure high risk of fluid exposure and no face shield available:
- Recommend Level 3 surgical mask
### Hand Hygiene

- Required before and after contact with patient, their body substances, or their items
- Required before and after performing invasive procedures
- Required before putting on and after taking off gloves
- Required if hands come into contact with secretions, excretions, blood and body fluids
- Required before preparing, handling, or eating food
- Required after performing personal functions (e.g. using the toilet, blowing your nose)

**Hand sanitizing** with a 70 to 90% alcohol-based hand rub (ABHR) is the preferred method for cleaning hands, when hands are **not visibly soiled**

**Hand washing** with soap and running water must be performed when hands are **visibly soiled**

ABHR must not be used where volatile organic compounds (VOCs) can come in contact with human gametes and embryos due to detrimental effects on outcomes

### Patient Personal Protective Equipment (PPE)

It is recommended that all patients wear face masks (either cloth or surgical)

### Measures to Prevent and Control Infection

The clinic should have an IPAC policy which includes an identified leader responsible for developing and maintaining processes, including reporting
Clinics should have ABHR easily accessible for patients in non-embryo culture areas

All desks, door handles, chairs, beds, and any other high touch surface must be wiped with viricidal wipes after each patient encounter

Staff conducting cleaning should wear gloves, face masks, and isolation gowns

The clinic must train all staff, including cleaning staff, in appropriate PPE for the task

LABORATORY CONSIDERATIONS

a. Please refer to the CFAS Recommendations related to IVF Laboratory shutdowns and start-up during a Pandemic referenced below

b. Where possible, clinics should consider reciprocal agreements so that in the event of an emergency situation (i.e. ART lab team require quarantine/isolation) continuity of patient care with minimal disruption is maintained

RESOURCES

<table>
<thead>
<tr>
<th>COVID-19 case definition</th>
<th>Ontario Ministry of Health</th>
</tr>
</thead>
<tbody>
<tr>
<td>Case and Contact Management</td>
<td>BC Centres for Disease Control</td>
</tr>
<tr>
<td>IPAC for COVID-19</td>
<td>Government of Canada</td>
</tr>
<tr>
<td>Point of Care Risk Assessment</td>
<td>Alberta Health Services IPAC</td>
</tr>
<tr>
<td>Alcohol Based Hand Rub in the Clinical Assisted Reproductive Technologies (ART) Setting</td>
<td>CFAS</td>
</tr>
<tr>
<td>Guidance for Laboratories: Recommendations related to IVF Laboratory shutdowns and start-up during a Pandemic</td>
<td>CFAS</td>
</tr>
<tr>
<td>Revised SOGC Infectious Disease Committee Statement</td>
<td>SOGC</td>
</tr>
<tr>
<td>ACOG COVID-19 Practice Advisory</td>
<td>ACOG</td>
</tr>
</tbody>
</table>