Respiratory Management of Confirmed and Suspected Adult COVID-19 Patients

Context

This document was requested by the Emergency Coordination Centre and developed by the Respiratory Health/Medicine Strategic Clinical Network™; it is aligned with and informed by several sources with permission, including Care of the Critically Ill Adult and Care of the Adult COVID-19 Patient in Emergency Departments and Urgent Care Centres (both referenced in the ‘Purpose and Objectives’ section below), as well as guidance developed by Calgary and Edmonton Zones. Appreciation the many contributors for sharing their expertise, and with such quick turnaround.

Application of this document’s guidance should be considered within the context of each individual zone, site, and unit. It is not meant to be all-inclusive nor to replace the need for clinical judgment and diligent measures. Since evidence related to PPE and AGMP is ever-evolving, staff are encouraged to seek the newest information from AHS’ COVID website https://insite.albertahealthservices.ca/tools/Page24291.aspx or the provincial PPE Taskforce at ahs.ca/covidppe or by email PPE@ahs.ca.

Details not covered within are beyond the scope of this document. Guidance is based on best available current knowledge. Feedback can be directed to respiratoryhealth.scn@ahs.ca.

Purpose and Objectives

The purpose of this document is to synthesize both the published literature and clinical expertise of our provincial community, guiding a cohesive approach to respiratory management for adult patients with known or suspected COVID-19 infection.

This document should be used in addition to clinical judgment to determine the best approach to respiratory management for the adult patient with/suspected COVID-19. This guideline is intended for use in inpatient care, emergency departments, urgent care centres, and other settings as deemed useful, however is NOT intended for use in ICU/critical care departments.


*** Documents found at the links above are meant to be used only for critical care and emergency department settings and are not intended to be used for inpatient or outpatient settings.
Key Points

1. AHS' Point of Care Risk Assessment must be applied to all patients with suspected COVID-19, irrespective of location. [https://www.albertahealthservices.ca/ipc/hi-ipc-routine-practices-algorithm-cc.pdf](https://www.albertahealthservices.ca/ipc/hi-ipc-routine-practices-algorithm-cc.pdf)

2. Patients who may meet the evolving case definition for suspicion of COVID-19 or have laboratory confirmed COVID-19 will be cared for using Contact and Droplet precautions. Staff are encouraged to always err on the side of caution, and to follow both strict AHS Infection Protection and Control (IP&C) Guidelines and Contact and Droplet precautions at all times.

3. The World Health organization (WHO) suggests that all respiratory care poses a potential risk during the COVID-19 pandemic. Staff should strictly adhere to hand hygiene protocol and ensure they use optimal donning and doffing technique of all PPE to reduce risk. Use N95 and other appropriate PPE for aerosol generating medical procedures (AGMP) which are described within the link below.

**NOTE** this document doesn’t contain a full list of AGMP, and it will be updated as new evidence becomes available: [https://www.albertahealthservices.ca/assets/healthinfo/ipc/hi-ipc-respiratory-additional-precautions-assessment.pdf](https://www.albertahealthservices.ca/assets/healthinfo/ipc/hi-ipc-respiratory-additional-precautions-assessment.pdf)

4. A Rapid Review conducted by AHS aimed to answer: What is the risk for COVID-19 transmission associated with oxygen therapy (conventional and heated humidified high flow) and when is oxygen therapy considered an AGMP? This Rapid Review concluded that conventional oxygen therapy by nasal prongs up to 15 LPM is not considered to be an AGMP, while **heated humidified high flow therapy is considered to be an AGMP**. It also found that conventional oxygen therapy is considered to be an AGMP when it is humidified, and may possibly become an AGMP when delivered dry at flows between 15 to 60 LPM.

5. Due to the resource requirements of AGMP, clinical decision making should include consideration for patient requirements, as well as availability of staff, space and other resources as necessary.

6. Establishment of Goals of Care (GOC) designation should be pursued as early as possible; where GOC designation isn’t available, use clinical judgment and facility practice.
A. Oxygen Therapy for Patients with Confirmed or Suspected COVID-19

- Oxygen therapy may be necessary for patients with COVID-19. The primary goal is to provide supportive care.

- The WHO recommends preparing to provide advanced respiratory support to all COVID-19 patients. The guidelines endorse giving supplemental conventional oxygen therapy immediately to patients with severe acute respiratory illness and respiratory distress, hypoxaemia (as defined below) or shock.

- The provision of oxygen therapy for patients with confirmed or suspected COVID-19 follows standard practices with the exception:
  - Avoid humidification as much as possible to reduce the risk of aerosolization and microbial spread.

- Start oxygen in an adult with suspected COVID-19 if SpO₂ is less than 95%, in a patient with normal cardio-pulmonary function. Oxygen initiation in patients with chronic cardio-pulmonary disease will need to be individualized based on individual patient characteristics. In cardio-pulmonary patients, consider applying oxygen if SpO₂ is less than 92%.

- Adults with emergency signs (e.g., obstructed or absent breathing, severe respiratory distress, central cyanosis, shock, coma or convulsions) should receive airway management and oxygen therapy during resuscitation.²
  - Initiate oxygen therapy at 5 LPM and titrate to reach target SpO₂ at least 93% during resuscitation; or use Non-rebreather mask/high concentration face mask with reservoir bag (at 10 to 15 LPM) if patient in critical condition.
  - Once patient is stable, the target is at least 95% SpO₂ in non-pregnant adults and at least 98% SpO₂ in pregnant patients of any age.
  - If severe respiratory distress persists despite initiation and stabilization with adequate oxygen therapy, intubation may be required (if concordant with the GOC of the patient).

- Unless an adult patient has emergency signs, maintain target SpO₂ range at 92 to 96%¹

- For adult patients requiring oxygen therapy, currently available evidence supports maintaining SpO₂ no higher than 96%¹; it’s anticipated that this is also true in a COVID-19 patient, but clinical judgment should prevail.

- Patients should be cared for with head of bed elevated 30-45 degrees at all times.

- Patients receiving oxygen by any type of nasal cannula should also be given a procedure mask to wear, so to reduce others’ exposure to cough/sneeze droplet spread.

- Minimize use of sedative and analgesic therapies (other than for palliative care).
For patients with significant oxygen needs, consider use of toileting aids and urinary catheters to reduce the need to mobilize to washrooms.

### Oxygen Pathway for R3 Goals of Care or Less

1. Nasal prongs starting at 1 to 4 LPM dry aiming for oxygen SpO₂ target range of 92 to 96% except for cardiopulmonary patients (e.g. 88 to 92% for hypercapnia risk; 90 to 92% ACS)

2. If SpO₂ target not met over time, increase using nasal prongs 5 to 10 LPM of dry oxygen or use high flow nasal prongs with dry oxygen at 15 LPM*

3. If SpO₂ targets are still not met, convert to simple face mask being careful to remain above 6 LPM with dry oxygen; if required a non-rebreather mask may be used**

4. If SpO₂ targets are still not met with above measures, then survival becomes unlikely; consider palliative care measures

**NOTE:** NIV to support failing oxygenation and respiratory failure related to viral pneumonia is generally not efficacious³; clinical judgment and AGMP are needed. See additional guidance in Section B

*If dry oxygen isn’t used, be aware that heated humidified high flow oxygen is an AGMP which requires addition of N95 and a four walled room with a closed door.

**When using dry oxygen at flows below 15 LPM, use of simple face mask and non-rebreather mask requires only PPE for Contact and Droplet precaution per AHS protocol.

### Oxygen Pathway for R1/R2 Goals of Care

1. Nasal prongs starting at 1 to 4 LPM dry oxygen aiming for SpO₂ target range of 92 to 96% except for cardiopulmonary patients (e.g. 88 to 92% for hypercapnia risk; 90 to 92% ACS)

2. If SpO₂ target not met over time, increase using nasal prongs 5 to 10 LPM of dry oxygen or use high flow nasal prongs with dry oxygen at 15 LPM*

3. If SpO₂ targets are still not met, convert to simple face mask being careful to remain above 6 LPM with dry oxygen; if required a non-rebreather mask may be used**

4. If oxygen requirements are rapidly escalating and/or patient is evolving into progressive respiratory distress despite escalating oxygen requirements, then consult critical care team for advice and/or assessment (see section below)

**NOTE:** NIV to support failing oxygenation and respiratory failure related to viral pneumonia is generally not efficacious³; clinical judgment and AGMP are needed. See additional guidance in Section B

### B. Non-Invasive Ventilation (CPAP or BIPAP)

- Non-invasive positive pressure ventilation (NIV) may result in aerosolization of respiratory secretions and infectious spread; NIV is considered an AGMP which must be delivered with extra precautions per AHS protocol.

- Recommendations are based on the considered balance of likely benefit of NIV to the patient versus risk of AGMP and the resources consumed by the intervention (PPE, staff, and isolation rooms).
1) **GOC = M1-2 with Acute Respiratory Failure** (regardless of COVID-19 status)

   CONSULT Pulmonary Medicine for advice where available

   a. **Hypoxemic respiratory failure** with persistent hypoxemia despite Nasal prongs (NP) and Non rebreather (NRB) is generally not a candidate for NIV during the COVID pandemic. Due to the risks of AGMP and the lack of evidence for effectiveness, this applies to all causes of hypoxemic respiratory failure, except “acute pulmonary edema”, in which a short trial of NIV can allow for other medical therapies (diuretics) to work.

   b. **Acute hypercapnic respiratory failure**\(^1\) in a patient with known COPD, meeting criteria based on the AHS protocol - *AHS Non-invasive ventilation in the management of acute respiratory failure*. In the current COVID pandemic, the “trigger” for AECOPD could be COVID-19 (regardless of history of ILI); accordingly a short BiPAP trial (If indicated) can be undertaken ONLY in a private closed room with full PPE precautions (including N-95 and eye protection). As per AHS protocol, if after **two (2) hours of optimized NIV** (well-sealed interface, reasonable tidal volumes & minute ventilation), an ABG reveals pH <7.25, and/or clinical parameters are not improving, then it would be recommended to reassess the patient, their goals of care, risks and benefits of continued NIV, and then if indicated, discontinue NIV and provide appropriate palliation. This recommendation is based on data from Confalonieri et al \(^1\) where the 2 hour post BiPAP status is predictive of NIV success.

2) **GOC= R with Acute Respiratory Failure** (regardless of COVID status)

   The patient with acute respiratory failure who is a candidate for intubation/ventilation should be seen by critical care physicians for decisions regarding NIV/OptiFlow\(^\text{TM}/AIRVO\text{TM}/intubation.

3) **GOC= C** There is no role for NIV in management of patient with C-GOC.

4) **ANY GOC** Chronic use of NIV (COVID – confirmed, probable, or under investigation)

   a. **Chronic use of home nocturnal NIV** (e.g. Obesity Hypoventilation, COPD): As per *AHS Chronic Non-Invasive Ventilation for the Adult Hospitalized Patient* practice support document, consult pulmonary medicine regarding continuation of home therapy. If NIV/BiPAP is **life-sustaining** then the patient must be cared for in a private room with Contact and Droplet precautions for AGMP per AHS protocol, whenever the therapy is being used (for many patients it may only be during sleep).

   b. **Neuromuscular Disease**: In the event that a patient with a new diagnosis or a known diagnosis of neuromuscular disease presents with new hypercapnic respiratory failure, NIV can be initiated in a private room with Contact and Droplet precautions for AGMP per AHS protocol. **Urgent consultation** with the neuromuscular service is required (pager available in ROCA). During the COVID pandemic, deterioration in respiratory status will be suspected COVID. Clearance and recruitment techniques

\(^1\) pH < 7.3 on an ABG (not a VBG) and elevated PCO\(_2\)
in **neuromuscular patients** are essential. Lung Volume Recruitment and Cough Assist procedures are considered AGMP and should be performed per AHS protocol in a private room with appropriate PPE (including N95 and eye protection) in consultation with the neuromuscular consult service.

c. CPAP for OSA: During the COVID pandemic, nocturnal CPAP will **not** be routinely used for hospitalized patients with OSA due to the fact that this is an AGMP. Pulmonary consultation is advised if there is concern that the therapy is essential to current medical care. If deemed essential, then the patient must be cared for in a private room with Contact and Droplet precautions for AGMP per AHS protocol, whenever the therapy is being used (for almost all patients it would only be used during sleep).

C. **When to Consider Intubation (R1 or R2 Goals of Care)**

- Rapidly progressive oxygen needs and/or progressive respiratory distress, despite adequate oxygen.
- Clinical judgment is paramount.
- If time and situation permits, consult critical care for participation in patient management prior to intubation.

D. **Intubation Procedure**

- In a patient whose goals of care include possible intubation, involvement of critical care in decision making is advised when oxygen requirements exceed 6 LPM or if there is rapid clinical deterioration. See also ‘When to Contact Critical Care’ in Section E below.

- **Appendix A** includes a sample intubation procedure.

- **Appendix B** includes a sample intubation checklist.

E. **When to Contact Critical Care**

Patients with COVID-19 **may decline rapidly** and require careful monitoring. Intubation in a crisis is best avoided. Clinicians should consider consulting critical care service if ANY of the following criteria are met:

- Patients exhibiting increasing difficulty with oxygenation; or
- Patients with emergency signs (e.g. obstructed or absent breathing, severe respiratory distress, rapid deterioration in their status, central cyanosis, shock, coma or convulsions); or
- Severe hypoxemic respiratory failure (e.g. patients may continue to have increased work of breathing or hypoxemia, even when oxygen is delivered via a face mask with reservoir bag).
F. Nebulized Medication

- **Use MDI with spacer** for delivery of respiratory medicines whenever possible. Nebulized medication is not recommended for individuals with suspect or confirmed COVID-19, and should be avoided for all patients. For additional information regarding its use, please refer to: [https://insite.albertahealthservices.ca/main/assets/tls/ep/tls-ep-2019-covid-nebulizer-memo.pdf](https://insite.albertahealthservices.ca/main/assets/tls/ep/tls-ep-2019-covid-nebulizer-memo.pdf)

- **Nebulized therapy is considered an AGMP** and should only be used per AHS protocol using PPE with additional precautions (including N95) and when no alternative exists.

- MDI with spacer may be delivered using routine Contact and Droplet precautions as per AHS policy, even in a COVID-19 patient; when administered by mouth, this is not an AGMP.

G. Heated Humidified High Flow Oxygen Therapy

- The use of heated humidified high flow oxygen therapy during the COVID-19 pandemic is controversial. There is some indication that it may offer value to individuals with early hypoxemia using appropriate PPE with inclusion of N95, but is a very limited resource and creates the need for AGMP precautions where they would not otherwise be required.

- Heated humidified high flow oxygen therapy may also be used in the event that ventilator care is not available, or is delayed, so guidelines may need to be adjusted for future resource limitations.

H. Home Oxygen Therapy

For individuals with COVID-19 that are clinically eligible to receive care at home (whether after discharge or to avoid admission), home oxygen therapy may be implemented. From the Alberta Aids to Daily Living (AADL) memorandum dated March 17, 2020:

“As workload may change at AHS Acute Care and Community sites, AADL does not want to add to the burden of testing for Respiratory Benefits.

*If arterial blood gases are unavailable, oximetry showing hypoxemia will now be accepted.*

*Pulmonary Function Tests, Spirometry, and PSG’s will not be required for funding, at this time. We have reviewed exertional oxygen requirements and are making the following funding exceptions:*

- **Client is not hypoxic at rest (no change from current policy)**
- **Funding is given for 3 months:**
  - If client desaturates to <80% on exertion and desaturation is not due to artifact
  - If client is being discharged from hospital or respirologist clinic
These funding periods will be reassessed continually and will be adjusted accordingly, based on Medical Health Officer and AHS recommendations and facility availability.”
For more information:

- [https://open.alberta.ca/dataset/1442d933-14e5-407e-afb3-0c9f0d2b73bb/resource/0f73227b-49b7-4e3b-8364-aaedd6817bf7/download/health-aadl-bulletin-80-2020-03.pdf](https://open.alberta.ca/dataset/1442d933-14e5-407e-afb3-0c9f0d2b73bb/resource/0f73227b-49b7-4e3b-8364-aaedd6817bf7/download/health-aadl-bulletin-80-2020-03.pdf) (If link doesn’t work, paste it into your web browser)

- The Respiratory Home Care Association of Alberta (RHCAA) has developed a central intake process for all home oxygen (and respiratory home care) needs in the province. The intake number 780-603-7315 and intake form (Appendix C) can be used to access service for patients in the community, secondary assessment sites, and other non-acute care centres.

I. Surge Capacity

If the number of patients with COVID related disease approaches maximum Surge Capacity, this document may evolve to provide updated guidance in response to changing patient and resource conditions and circumstances. Please check AHS’ COVID website for any updated versions that may become available. [https://insite.albertahealthservices.ca/tools/Page24291.aspx](https://insite.albertahealthservices.ca/tools/Page24291.aspx)

Strategies may include:

1) In the event that an isolation room is not available, then NIV should not be used if the patient is a possible, probable or confirmed COVID positive because of the unacceptable risk of this AGMP to others.

2) If COVID positive patients are cohorted together in larger rooms, then IP&C guidelines for AGMP should be followed whenever possible, regardless of the procedures or therapies being provided.

3) If the system’s ventilator capacity were to be overwhelmed by demand at any time during the COVID pandemic, it is possible that NIV could be considered for an R-GOC patient.

As per our colleagues in emergency medicine, the following table outlines four phases of ED/UCC COVID-19 pandemic surge. Below is a summary of how respiratory management may be impacted by the four phases.
In the event of a PPE (specifically N95) shortage – additional limitations regarding AGMPs may be required.

In the event skilled staff is limited– additional limitations regarding AGMPs may be required.

References
3. M. Confalonieri, G. Garuti, M. S. Cattaruzza. A chart of failure risk for noninvasive ventilation in patients with COPD exacerbation. ERJ Feb 2005, 25 (2) 348-355; DOI: 10.1183/09031936.05.00085304
Appendix A- Sample Intubation Procedure

ILI / COVID-19 Airway Management Best Practice Considerations

Preparation
1. PPE: Don full PPE including N95 respirator, goggles, face shield, gown and gloves. Proper application of PPE should be verified by an observer prior to patient contact
2. Early airway assessment for predictors of difficulty and consultation as necessary
3. Consider early, controlled intubation and avoid NIV, HHHFO and other AGMP as able
4. Minimize staff exposure:
   a. Minimize personnel in the room as able
   b. Negative pressure room with anteroom if available (or neutral pressure room with door closed)
   c. Ensure HMEF is between the mask/ETT and BVM at all times
5. Intubation should ideally be performed by most experienced practitioner to optimize first pass success
6. Prepare necessary equipment and drugs outside of room

Suggested Roles and Organization

Patient Room
- Nurse
- MD Intubator
- Airway Equipment
- Ventilator
- RT 1

Outside Room
- Recorder/PPE monitor
- DAM Cart
- RT 2 / Runner
- Backup Intubator / Runner
- Anteroom

Intubation Plan
- Optimize pre-oxygenation using nasal prongs 5L/min O2 & tight fitting BVM with 15L/min O2 and PEEP valve = 5 cm H2O; reserving 2 person 2 handed BVM manual ventilation for when non-invasive O2 delivery is failing and SpO2 < 70%
- Video laryngoscopy recommended as Plan A.
- Best pharmacotherapy determined by MRHP on case-by-case basis to minimize chance of cough and aerosol generation
- If no contraindications, Modified RSI (avoid coughing and facilitate first pass success) and apneic oxygenation with 5L/min O2:
  - Use higher mg/kg dose of muscle relaxants to ensure rapid onset of optimal intubating conditions (Allow 1 minute for adequate muscle relaxation):
    - Rocuronium 1.2-1.6 mg/kg (IBW)
    - Succinylcholine 1.5-2 mg/kg (TBW)
  - Avoid ventilation during apneic period unless life threatening hypoxemia (SpO2 < 70%)
- Wait until cuff up post-intubation to ventilate

Post-Intubation
- Confirm ETT position with ETCO2 and CXR
- Closed suction system; avoid circuit disconnections and clamp ETT for planned disconnections
- Lung protective ventilation strategy (6-8 mL/kg Vt IBW; Pplat < 30 cm H2O; Optimal PEEP)
- Strategies for failing gas exchange: deep sedation and paralysis; permissive hypercapnia; prone positioning
- Maintain Droplet + Contact Isolation + N95 mask as per IP&C

Draft provided by Calgary Zone, Apr. 2, 2020
### INTUBATION CHECKLIST FOR RESPIRATORY DISTRESS

#### URGENT INTUBATION CHECKLIST

**PREPARATION**
- Is the patient stable enough to allow time for the pause?
- Are Goals of Care R1 or R2?
- Assign Roles: __primary intubator__, __airway assistance__, __med RN__, __clean runner__, __backup intubator__, __c-spine__
- Is everyone is wearing full PPE CORRECTLY (goggles/faceshield, N95 mask, gown, gloves)?
- Has communication with the clean runner been established?

**PATIENT**
- Predicted anatomical difficulties? *(and mitigation strategies)*
- Predicted physiological difficulties? *(anticipate hypoxia; mitigation strategies)*
- Patient position optimized
- Oxygenation maximized
- Monitor on end read out current vitals
- Who will read out O2 sets? *(determine threshold for action)*

**DRUGS**
- Functional vascular access
- Premedication required? *(for acidosis, blood pressure)*
- Intubation medications and doses *(any contraindications?)*
- Hemodynamic compromise plan
- Post-intubation medications
- Crash cart and IO equipment located and ready

**RESPIRATORY**
- Bagger, FILTER, PEEP valve, suction, oxygen sources, oral airway, bougie
- Laryngoscopes ready and operational *(video laryngoscope, direct laryngoscopy)*
- What sizes of blades and ETTs are prepared?
- End-tidal CO2 ready?
- Post intubation equipment ready *(syringe, tube holder, ETT clamp, tape)*?
- Difficult intubation cart located and on standby *(including cricothyrotomy kit)*?
- Surgical cric kit located *(taped to wall)*?
- Critical ventilation/oxygenation consideration
  - 2 person and 2 hand BVM ventilation with OPA only if oxygen saturation <70%
  - Ensure FILTER is between the mask/ETT and bagger
  - No bagging until ETT cuff is inflated
  - Clamp ETT before disconnecting from bagger or ventilator unless spontaneous resps

**PLAN (please verbalize)**
- **PLAN A**
- **PLAN B**
- **When to call backup**
- **EMERGENCY PLAN**

---

Department of Emergency Medicine, Edmonton Zone, Alberta Health Services (March 29th 2020 edition)
INTUBATION CHECKLIST FOR RESPIRATORY DISTRESS

QUESTIONS or CONCERNS BEFORE PROCEEDING

CRASH INTUBATION CHECKLIST

☐ EVERYONE is wearing PPE CORRECTLY (goggles/faceshield, N-95, gown and gloves)
☐ Optimize patient position
☐ Optimize patient oxygenation (2 person 2 hand BVM with PEEP and FILTER)
☐ Functional IV access, if none then immediate IO access
☐ Prepare intubation equipment
☐ PLAN A (best technique: glidescope preferred)
☐ Use Paralytic only (succinylcholine 1.5mg/kg or Rocuronium 1.5mg/kg)
☐ Critical ventilation/oxygenation consideration
  ▪ 2 person and 2 hand BVM ventilation with OPA only if oxygen saturation <70%
  ▪ Ensure FILTER is between the mask/ETT and bagger
  ▪ No bagging until ETT cuff is inflated
  ▪ Clamp ETT before disconnecting from bagger or ventilator

☐ PLAN B ☐ CALL BACKUP INTUBATOR ☐ EMERGENCY PLAN

Plan D
Stab, Twist, Bougie, Tube

Scalpel size 10 blade, rotate, bougie, size 6.0 ETT
Ensure paralysis

laryngeal handshake  transverse stab incision  rotate 90°  coude tip vertically down blade  ETT 6.0

Department of Emergency Medicine, Edmonton Zone, Alberta Health Services (March 29th 2020 edition)
## POST INTUBATION CHECKLIST

- [ ] ETCO2 confirmed
- [ ] FILTER and PEEP valve in place and ETT/Vent tubing connection secured
- [ ] Clamp ETT when tubing is disconnected (unless patient spontaneously breathing)
- [ ] Optimize Oxygenation with ARDSnet protocol, PEEP
- [ ] Sedation and Paralytic
- [ ] Vasopressors as needed
- [ ] OG tube if gastric decompression is needed
- [ ] If ventilating and oxygenating well, routine post intubation CXR is not required

**DOFF PPE with Spotter**
## INTUBATION CHECKLIST FOR RESPIRATORY DISTRESS

<table>
<thead>
<tr>
<th>Steps for taking off PPE</th>
</tr>
</thead>
</table>
| 1                        | Gloves  
| 2                        | Clean hands  
| 3                        | Gown  
| 4                        | Clean hands  
| 5                        | Mask with visor or mask and eye protection  
| 6                        | Hand sanitizer or soap and water  

Department of Emergency Medicine, Edmonton Zone, Alberta Health Services (March 29th 2020 edition)
### Alberta Respiratory Emergency Plan

#### Home Oxygen Referral – COVID-19

<table>
<thead>
<tr>
<th>Home Oxygen Referral – COVID-19</th>
<th>Patient Name:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Phone:</strong> 780-603-7315</td>
<td>DOB: PHN:</td>
</tr>
<tr>
<td></td>
<td>Address (1):</td>
</tr>
<tr>
<td></td>
<td>Address (2):</td>
</tr>
<tr>
<td></td>
<td>Phone: (1) (2)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Referred by: (Print Name)</th>
<th>Phone #:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date:</td>
<td>Current Patient Location:</td>
</tr>
<tr>
<td>Alternate Contact Name:</td>
<td>Alternate Contact Phone:</td>
</tr>
<tr>
<td>Relationship:</td>
<td></td>
</tr>
<tr>
<td>Mobility (wheelchair, walker, etc.):</td>
<td></td>
</tr>
<tr>
<td>Infection Precautions:</td>
<td></td>
</tr>
<tr>
<td>Diagnosis:</td>
<td>COVID-19 ☐</td>
</tr>
<tr>
<td></td>
<td>COVID-19 Presumptive ☐</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Is client non-insured Health Benefit (NIHB) Y/N:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comments:</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Prescription for Home Oxygen:</th>
</tr>
</thead>
<tbody>
<tr>
<td>_____ Keep SaO2 greater than or equal to 89% or</td>
</tr>
<tr>
<td>_____ Oxygen _____ LPM</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Information attached: _____ ABG _____ Oximetry Printout _____ Discharge Summary</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Physician Name:</th>
<th>Physician Phone #:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Physician Signature:</th>
<th>Date:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>