

## Calgary Zone Department of Emergency Medicine COVID GR

### Q&A - April 2nd

1. Neil, I'm very concerned that we have to doff masks to speak on the phone, we could easily blow through > 10 masks per shift. Is anyone working on alternative communication strategies, such as using our own cell phones in baggies which have been wiped down. I especially worry that if we have just donned an n95 for an AGP, we cannot wear it through most of our shift.  
Answer: live answered

Great point Rhonda - a new policy on face to face consultations as a PPE prevention strategy is being developed and it is thanks to your prompt last week

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2. I've seen mixed messaging re: wearing goggles ± a mask between rooms without touching / doffing them. Can we wear eye protection full time as long as we don't touch it / assume it's contaminated?

Answer: yes

Are we predicted to run out of PPE/N95 with the current most likely modelling?

Answer: So many variables...

Infection rate, how sick they will get, and most importantly IF PPE IS USED PROPERLY.

If it is, they tell us N95 supply will last.

If not...

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3. A note that April 9 COVID update will include updates and info on PPE

Answer: thx

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4. Consider calling the patient on their cell phone for history. Only enter room for quick physical. time matters. Clean your phone frequently. Remove plastic protective cover.

Answer: thanks Joe.

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5. I'm speaking of talking to consultants on the phone.

Answer: Exactly - all on site consultants will be asked to come down for a F2F discussion

Eddy wrote a memo for all department heads to consider coming down to the ED instead of phoning. Will have variable uptake and I don't think we should attempt to enforce it.

In reality, I don't think it is going to amount to much increase in PPE use. I wouldn't doff full PPE in an isolation zone to answer the phone, but frequently changing your mask shouldn't be too impactful

6. Question for Neil. Your message about point of care risk assessment is well heard. What recommendation would you give for isolated GI symptoms. Should we consider patient as "Covid19 likely" and perform Droplet and contact as opposed to just contact isolation precautions.

Answer: Hi Garth!

Yes I would. I think anything that could be infection...

Altered LOC, resp, GI ...

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7. Question for Neil. at urgent care we are considering organizing two "COVID19 likely" areas: those that are likely needing transport and admission, and those that likely will be discharged (the "worried well with infectious symptoms"). Is ER doing the same? if yes, what direction are you given to triage nurses to make this distinction? are triage nurses applying the CURB65 score (minus the BUN)?

Answer: No Clear decision rule.

Worried well in a cohorted area.

Older, poor CV reserve, hypoxia, get their own iso bed in anticipation of admission.

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8. Lol. I'm actually climbing on my wall as I'm listening to Fareen.

Answer: thx

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9. Meme that you make, or one that has been made and circulated?
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10. Has anybody been called in as "extra" yet?

Do you mean on a surge response Carrie?

Answer: I think that some have been picked up but none have been used yet. Surge calls down. Record low volumes. EMS down 20-30%. We are not unique.

[https://nationalpost.com/news/eerily-quiet-ers-before-covid-19-surge-could-mean-problems-down-the-road-doctors-say?utm\\_term=Autofeed&utm\\_medium=Social&utm\\_source=Twitter#Echobox=1585784078](https://nationalpost.com/news/eerily-quiet-ers-before-covid-19-surge-could-mean-problems-down-the-road-doctors-say?utm_term=Autofeed&utm_medium=Social&utm_source=Twitter#Echobox=1585784078)

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11. I know some of our colleagues working on this already — any resources for the disposition of patients who are presenting from shelters and have ILI symptoms?

Answer: Guidance coming shortly. SW may have the latest guidance.

<https://www.cbc.ca/news/canada/calgary/telus-convention-centre-drop-in-centre-covid-19-shelter-1.5518263>

"Isolation "Hotel" coming in the next few days. Standby for details.

Shelters have been decanting a bit so may have room to isolate ILI patients. If a patient is known to a shelter, get social work to call to see if they will take them. Within the next 48 hours the isohotel should be up and taking a few of these patients"

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12. I was told by an RT recently that when oxygen is being delivered by a NRB, that they are to place a procedural mask under the mask (ie. between the face and mask)...this doesn't seem like an effective way to provide oxygen. Can someone speak to if this is a true policy?

Answer: I have never seen or heard this Kat but will find out and get back to you and the group if needed.

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13. Bryan, do we know if proning a patient with niv will increase aerosolization risk in the ED? Intuitively this would make mask leak worse, sounds like some of this concept was from places with different ways of providing CPAP and BIPAP. See below answers, but in general, at this stage, we are minimizing the use of BIPAP for COVID patients, this may change going forward

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14. An RT the other day showed me a nebulizer with a viral filter attached - what are your thoughts on using this? I had no idea we had them.

Answer: live answered

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15. It will be hard for our consultants to come to the ED in person. Any chance we can somehow type a brief consultation request note into SCM and have them read this? Would eliminate the need for a phone call for many standard type cases?

Answer: Great idea, I will look into it.

True but department heads are supportive. Just MTU and hospitalist would be good as they spend a lot of time with us. Memo may specify that if F2F is preferred this will be messaged through the unit clerk. I don't think we can build / program into SCM on the timeline required.

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16. Are there concerns re: O2 supply?

Answer: I don't think so - daily ZEOC meetings review a wide range of supply issues - this is not a concern and access to home oxygen is actually increasing

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17. I'm not sure why intubation which takes minutes with patient paralyzed is considered high risk AGMP procedure that needs neg pressure room but NIV that we are trying for 2h is not.

Answer: you do not need a negative pressure room for intubation/AGMP (hence still able to intubate at PLC)- it's just preferable.

ANSWER - the data for AGMP's gives some direction but is not watertight. Intubation involves being much closer to the airway and instrumenting mucosal surfaces and potential complications such as PPV and reoxygenation etc. BIPAP with a good seal, no leak, etc can be less risk. Although all of this data (in my opinion) was when PPE has not as highly emphasized or adhered to

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18. Can you clarify the role/appropriateness of PEEP in the spontaneously breathing COVID patient for pre-oxygenation prior to intubation? (As per recent PLP Video)

Answer: I think this was addressed in Bryan's presentation. if not - please email us.

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19. An RT the other day showed me a nebulizer with a viral filter attached - what are your thoughts on using this? I had no idea we had them.

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20. "What about CPAP, and some news from Italy and effectiveness, and intubation maybe not ideal. Specifically regarding Scott Weingart latest emcrit <https://emcrit.org/emcrit/stop-kneejerk-intubation/>"  
See below ANSWER

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21. Thinking about the patient that is hypoxic but not tired. Info coming from NYC regarding successfully using HFNC, even with awake proning, and avoidance of need for intubation. This would be considered AGMP, but could you see a role for this?  
ANSWER - lots of different opinions and local experiences out there, becoming hard to know what the one best way is for all patients (probably that does not exist). Current approach is to provide O2 therapy and identify those that might benefit from mechanical ventilation (before they are so hypoxemic as to expose them to additional risk during ET intubation) while limiting the use of NIV as per guidelines. This may very well change going forward and as things are evolving.

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22. Is all the airway equipment we/RT bring into the room thrown away if we don't utilize it with that particular patient?  
Answer: Battison: if equipment is kept in their bags, then bags are wiped and saved. If equipment is disposable and the packaging has a paper (non wipeable), then it is tossed

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23. Yes, the 5 available MDs per shift in Medevision  
Answer: thx

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24. '@srrezaie on twitter has been a very valuable resource on proning and conservative management of asymptomatic or minimally asymptomatic hypoxia.

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25. I have no understanding of our wall O2 system other than when I turn the nobe, oxygen comes out. So....can we safely assume our O2 wall delivery system can accommodate simultaneous O2 delivery for numerous patients? can the system handle 50% of rooms simultaneously, 75%?, 100%? is this capacity site specific (age of the system) or is it universal to the design of the O2 system?  
ANSWER - our wall o2 systems if cranked will provide flow that is dramatically higher than the 15lpm that it is labelled at, you can get upwards of 30 to 50 lpm. Using two sources at the rates we are describing will be no problem.

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26. Interesting to hear any suggestions on quickest steps to contain a cuff leak in these patients as I had one Sunday for the first time in 5yrs... luckily patient wasn't COVID in the end

ANSWER - Quickest way would be pulling out ET tube and quickly re-intubating providing it was relatively easy to place in the first place and patient is still well oxygenated. A little slower would be to leave the laryngoscope in the mouth (create space) and put the bougie down and being careful of length pull out the old ET tube and re-railroad another. Consider this if tube

was technically more challenging to place. Tube exchanges (longer and stiffer) are on the DAM cart and work better, consider this if timing allows.

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27. Perhaps we can use text pages to our consultants, and skip the phone call: "U/S confirmed apy in A1 please see". "stable COVID 50M on 2L O2 in A3".

Answer: Great suggestion - as unit clerk's type the page content would we verbally dictate it to them?

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28. Bryan are you going to speak to rescue oxygenation strategies in these patients (i.e. failed 1st attempt balancing risks of aerosol generation w BVM vs hypoxic arrest)?

Answer: See response now - if you need more info - pls email Bryan or Art

ANSWER - First rescue should be good 2 person 2 hand BVM and positive pressure (balancing risk of hypoxemia vs risk of PPV). This should be adequate in the vast majority of patients and allow you to formulate a further plan or get help. If not able to oxygenate then you may need to move to other rescue or emergency strategies.

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29. Is the ATSSL open right now for us to practice different tools? They've been very to us coming in to practice rarely used techniques in the past?

Answer: Can you explore this Paul - this would be great. connect with Wishart/Chad

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30. Battison: if equipment is kept in their bags, then bags are wiped and saved. If equipment is disposable and the packaging has a paper (non wipeable), then it is tossed

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31. "I notice in the airway pathway that 2 person BVM is present. Previously BVM was discouraged. This is back on the table now?

Would that be the case in an arrest situation as well? CPR and BVM until airway can be obtained vs securing airway first before starting compression to minimize AGMP?"

Answer: BVM is only recommended for critical hypoxia. Use it sparingly but if it's needed it can be done.

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32. Regarding total O2 supply for the facility, this is centrally limited but the hospitals compressors. I have flagged this for site command post, and have to heard back. It is usually measured in the thousands of Lpm at most facilities. At the peak in Bergamo, they apparently approached their max capacity but never exceeded it. If we hear that this is becoming an issue, we will communicate that out to front line clinicians immediately.

Answer: Thanks Ian!

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33. Hannah: 2 person BVM with positive pressure ventilation as a rescue mechanism in the critically hypoxemic patient who is not spontaneously breathing (ie. failed ETTi) is an option. It's a question of risk management (mask seal, lower pressures etc)

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34. Bryan—is there a role for using an NIV mask with the BVM setup? The straps might help with the seal.

ANSWER - This might be tough on resources during high volume times. Agree that the straps are nice, some places have masks with straps for this reason. I would argue that the skills of

mask ventilation with a good seal will become useful if you need to re-oxygenate the patient. Less desirable to be fiddling with straps after an unsuccessful intubation attempt in a rapidly desaturating patient.

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35. We did a session for glidescope training with the Staff Simulation program at PLC on Tuesday with good turnout. Is there interest for the Staff Simulation program to continue with these sessions at the 4 sites. Easy for us to set up if interest is there.

Answer: yes

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36. Paul: not exploring the Weingart method at this time. lots of new and novel (expert opinion) methods that deviate significantly from our baseline operations opening us to significant CRM hazard

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37. Thoughts on using LMA as a way to re-oxygenate after failed first attempt at intubation? Can always pull and try laryngoscopes again. May provide better seal than BVM.  
ANSWER - Good two person BVM with a mask and seal will be the fastest and safest, it really depends on the seal and adequacy, nothing wrong in moving to the LMA early to reoxygenate. A poor seal with facemask and difficulty providing adequate volume of air would make me move to the LMA faster.

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38. I think we should create a culture T-ABC to emphasize safety for our RN and RT colleagues. Team = protected, prepared. Then ABCs.

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39. Can you speak to length of CPR in a Suspected COVID pt. It is my understanding that these are supposed to be minimal as these pt's are likely not to survive and the risk of contamination is high. However, some physicians are running these arrests for a lengthy period of time. Is there a guideline as to how long we should be actively resuscitating these patients?  
ANSWER - At this stage of pandemic planning our guidance is to resuscitate as you would normally given clinical situation and GOC. More direction will be coming when resources have changed.

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40. Is there any common language that UCC and ED / EMS should be using for "rating" severity of patients (given that UCC doesn't have ABGs) like CXR severity + O2 requirements, like they're doing in Italy?

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41. The whole issue of use of NIV in M GOC AECOPD (particularly with the potential of COVID 19 as a precipitant) with hypercarbic respiratory failure is an area of much discussion/anxiety/dispute with RTs/other staff - benefits vs risks. Can you comment further?  
ANSWER - the other way to look at his argument is withholding potential life saving treatment from people who do not have COVID (M GOC COPDE). Trying to ensure that harm is not done to those people, while still maintaining safety for HCW, hence the trial of therapy and in the appropriate space.

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42. Has ICU given any guidance on these reports of very well looking patients with significant hypoxemia? Can we hold off on patients with sats in the 70s/80s if they look well and are minimally symptomatic?  
ANSWER - Escalating O2 requirements will identify those patients that could use mechanical ventilation, continue to titrate O2 needs, we hope to avoid having people with sats of 70 or 80 and on maximum O2 flows as they will have little reserve for tolerating endotracheal intubation.

## Chat

1. Many documents and resources available at:  
<https://cumming.ucalgary.ca/departments/emergency-medicine/home>
2. The document Neil is referring to will be on the website mentioned above by Eddy
3. Great point Neil regarding the ability demonstrated to create inpatient capacity during this pandemic. I think this shows that, despite what was being said by medical leaders, the genuine will and effort to create inpatient capacity when the issue was critical and dangerous ED overcrowding was absent. Moving forward, when we go back to "normal", we should use this experience to back our collective refusal to accept ED overcrowding as ever again acceptable.
4. Great resource for PPE don / doff and indications  
[https://ahamms01.https.internapcdn.net/ahamms01/Content/AHS\\_Website/modules/ipc/pc-ppe-covid/story\\_html5.html](https://ahamms01.https.internapcdn.net/ahamms01/Content/AHS_Website/modules/ipc/pc-ppe-covid/story_html5.html)
5. Also abdo pain + fever I would consider donning
6. Great interview on CBC by Neil yesterday:  
<https://www.cbc.ca/news/canada/calgary/alberta-hospitals-covid-19-preparations-projections-1.5518474>
7. A note that April 9 COVID update will include updates and info on PPE
8. Great work from the Wellness Hub
9. video -  
[https://ahamms01.https.internapcdn.net/ahamms01/Content/AHS\\_Website/Information\\_For/if-hp-ipc-donning-and-doffing.mp4](https://ahamms01.https.internapcdn.net/ahamms01/Content/AHS_Website/Information_For/if-hp-ipc-donning-and-doffing.mp4)
10. <https://www.albertahealthservices.ca/assets/Infofor/hp/if-hp-ipc-donning-ppe-poster.pdf>
11. <https://www.albertahealthservices.ca/assets/Infofor/hp/if-hp-ipc-doffing-ppe-poster.pdf>
12. Carrie hiscosck asked - Meme that you make, or one that has been made and circulated?
13. [https://ahamms01.https.internapcdn.net/ahamms01/Content/AHS\\_Website/Information\\_For/if-hp-ipc-donning-and-doffing.mp4](https://ahamms01.https.internapcdn.net/ahamms01/Content/AHS_Website/Information_For/if-hp-ipc-donning-and-doffing.mp4)
14. <https://www.albertahealthservices.ca/assets/Infofor/hp/if-hp-ipc-donning-ppe-poster.pdf>

15. <https://www.albertahealthservices.ca/assets/Infofor/hp/if-hp-ipc-doffing-ppe-poster.pdf>
16. Meme that you make, or one that has been made and circulated?
17. A note that April 9 COVID update will include updates and info on PPE
18. NIV - isolation room with door closed- doesn't need to be a -ve pressure room
19. Good hand washing video. <https://youtu.be/eW-hmHFo4Oo>
20. SD—prone vent strategies are currently being used as a prone/supine combo around q8h at UAH. if the pt cannot tolerate prone ventilation (measured by decreasing Fio2) then ICU begins to consider ECMO. I haven't heard of prone NIV; to me that would be an indication for intubation (if appropriate)  
<https://www.youtube.com/watch?v=JgKOK4gznO0&feature=youtu.be>