PARAMEDIC CLINICAL PRACTICE REFRESHER

COVID-19 and PPE Best Practices

WE ARE IN IT.

The second wave of COVID-19 is certainly here, and statistics in Ontario are creeping to the level our neighbouring countries experienced during the first wave. Positive case numbers are exponentially higher in London then the first wave and 16% of which are now amongst health care providers making close contact with confirmed cases (MLHU, Dec 1st, 2020).

- Ontario continues to reach new highs everyday, with roughly 1700 new cases per day (Public Health Ontario, Dec, 1st, 2020).
- Hospitalizations are increasing at a rate of nearly 30 patients per day, about 2/3 of which end up in the ICU (https://covid-19.ontario.ca/data).
- In Middlesex County, the city of London by far surpasses smaller municipalities with a total of 1490 case (127 active as of Dec 1st) in comparison to Strathroy's total of 38.
- In our Long-Term care homes, staff account for roughly half the cases.

Now, more then ever, we need to be vigilant in our infection control practices. With all this in mind, it is time for a refresher on the use of our PPE and to reflect on our own individual practices. We have re-evaluated the efficiency of our policies and want to ensure we remain aware of exposure risks as we move through this next wave together.

It is not always possible to predict the clinical course of our patients or know what PPE we need without making patient contact. Changing PPE may be required at times, and all paramedics need to know that **they are supported** in making the incredibly difficult decision to step away from a seriously ill or dying patient in-order to **ensure we are protecting ourselves and our co-workers when necessary**. Aerosol generating procedures (AGMPs) remain the most high-risk procedures in our practice and mandate the use of airborne precaution PPE (respirator, goggles, face-shield, gown & gloves). Coughing patients put paramedics at risk of transmission through contact with droplets, and in the confined space of the ambulance (both patient compartment and cab), a small bathroom, or an elevator, this risk is even greater.

As a last note, it is important we continue to protect our co-workers and their families when not on calls by wearing a mask at base, in the cab of the ambulance, and in the ACR room of the hospital. During the first wave, COVID-19 Healthcare worker cases ranged from 4-42% across Ontario's 34 public health units with 8.1% presenting without symptoms (Schwartz et al., 2020).

We must work together and protect one another as we move through this pandemic as a part of the greater Middlesex Health Care Community.

Your MLPS Education and Quality Assurance Team

CONSIDERED TO BE AEROSOL GENERATING MEDICAL PROCEDURES (AGMPs) As per the OBHG as of May 2020

- Endotracheal intubation or SGA insertion including during cardiopulmonary resuscitation.
- Manual ventilation using the BVM (except following ETT placement with viral filter in place).
- CPAP
- Open system airway suctioning (excluding the oral cavity).
- Nebulized medication administration.

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After reviewing all exposures since the beginning of COVID, the following recommendations are being put forward to aid crews in communicating risk with each other, improve teamwork, and promote efficiency in our infection control practices:

1. Ensure the window between the patient compartment and the cab is closed when transporting any patient confirmed to have COVID-19, when transporting patients who are POSITIVE following the COVID-19 screen, and when any AGMP is being performed to minimize contamination in the cab.

2. Airborne precaution PPE should always be stored in the fracture board compartment for easy access and to ensure it is in proximity of hand sanitizer. Ensure you have several spare pairs of gloves and a gown as well. Store these items in the blue carry bag provided.

3. It is recommended that a paramedic does not enter the patient compartment of the ambulance if the patient is **actively coughing** (even if the patient has a mask on) without first donning their half-mask respirator and goggles OR a face shield. This step goes above the recommendations of the CDC. The confined space of the patient compartment makes it difficult to maintain a safe physical distance from a patient generating droplets. Pro-actively wearing a reusable respirator ensures the paramedic does not have to change PPE, should the patient deteriorate, and an airborne generating procedure be required. Wearing your goggles minimizes the risk of contamination through mucous membranes of the eyes if you are to contact cough droplets with your hands.

4. Before you enter the ambulance, attempt to determine the need for an AGMP during transport. If you think this may occur, change your PPE from contact to airborne before entering the ambulance. The paramedic attending in the patient compartment should follow theses steps to safely change over:
- Do not touch your gown if already wearing one.
- Remove gloves and dispose.
- Sanitize hands using dispenser in the fracture board compartment.
- Remove goggles or face shield (if already wearing one).
- Sanitize hands.
- Remove your procedural mask and dispose.
- Sanitize hands.
- Don your airborne PPE as per standard – gown (if not already on), respirator mask, goggles, face-shield, and gloves.

5. If you are required to change from droplet/contact precaution PPE to airborne PPE **during transport**, notify your partner immediately of the need to change. Have them safely stop the ambulance. Both paramedics should then safely exit the ambulance and follow the steps listed above. The driver **must don a gown and respirator at this point** but can put on their goggles and face shield once at the hospital to maintain good vision while driving.

6. It is important to note that the brand of sanitizer has changed based on your feedback. New sanitizers contain aloe, and do not have such a strong odour!

Please see the videos on the training portal or during parade for a review of these practices!

1 The SGA should be inserted as soon as possible in a cardiac arrest, and is the primary option for advanced airway management over intubation.
Don't forget to tape the suction port!
Withhold chest compressions during insertion. **USE A FILTER!**

2 DO NOT use nebulized salbutamol or epinephrine!
Use the MDI for salbutamol only in patients with SEVERE respiratory distress with NO COUGH. **If a COUGH and ASTHMA and SEVERE SOB, go to epinephrine.**

3 **When administering supplemental oxygen use a maximum of:**
- 6L/min with NC
- 15L/min with FLO2MAX
- 15L/min with the BVM

and **NO CPAP!**

4 Withhold manual ventilation in spontaneously breathing patients **unless SpO2 is <85% and not improving with other therapies.** Keep a tight seal!