Interim Guidelines – SARS-CoV-2/Novel Coronavirus/COVID-19 Related

12 April 2020

To: All Personnel in the EMS System for Metropolitan Oklahoma City and Tulsa

This continues to be a decidedly dynamic time in our EMS system's preparedness and response to COVID-19. Although I will continue to endeavor to keep focused Updates from OMD to a digestible portion, in length and in frequency, I thought it best to now issue a more formal "Interim Guidelines" for the clinical parts contained within the previous Updates – COVID-19 - From OMD. Housekeeping, if you will, but important housekeeping for clarity's sake. This will also help the newest EMTs and Paramedics in our EMS system, those joining us since early March. <u>These clinical instructions are not new to this issuance (though do pay extra attention to the advisory text in red type) and should simply reflect what you are already incorporating into your respective scope of practice in patient care on suspected or confirmed COVID-19 patients.</u>

I anticipate further changes in clinical standards of care, to best serve patients while simultaneously reducing risk of COVID-19 transmission to you as much as we realistically can while doing what we are called to do in our missions of emergency medical care. If you can picture whatever apparatus, desk, or computer that is your "office" these days, put the following words foremost on such and in your mind: Vigilance, Safety, Evidence-Based Service to Others. Keep mashing the "accelerator" with all you got; we need your foot staying heavy on the figurative "gas pedal" for the prolonged, bumpy ride ahead. Thanks for being my heroes and the heroes of our communities. – Dr. Goodloe

<u>From Update 6 - COVID-19 – From Office of the Medical Director 06MAR2020 1200</u>

"If personnel are still enroute to the patient, communications personnel should advise "Respiratory PPE advised" via appropriate data and/or voice methods. Don PPE to protect from droplet and airborne pathogens if you will be directly treating the patient before you make patient contact.

If personnel are already on scene with a patient, don PPE to protect from droplet and airborne pathogens and minimize the number of personnel actively treating the patient to the smallest number clinically necessary for that patient's needs.

Minimize use of nebulized albuterol and ipratropium to those patients with serious dyspnea with bronchospasm. If nebulized therapy is needed, position yourself away from the exhalation stream of the nebulizer and patient. During transport, sit behind the patient, not to the patient's side unless ongoing clinical care needs demand being beside the patient.

Avoid use of endotracheal intubation. In patients that require invasive/advanced airway placement, pace an iGel airway instead.

Again, these measures will be for a presently unknown interim duration and will apply to patients with febrile respiratory illness. Cardiac-suspected cardiac arrest patients, non-febrile respiratory distress patients, traumatic injury patients, and all others should continue to receive our usual and customary treatment protocol-specified care."

*** Note should be taken that in the approximate month's interim since Update 6, we have better identified that not every COVID-19 patient, suspected or confirmed, has a present fever and caution should be extended to anyone with an influenza-like illness, predominant symptoms most typically are respiratory, but may include muscle aches (myalgias), fatigue, and gastrointestinal issues of nausea, vomiting, and/or diarrhea, febrile or not.***

From Update 8 - COVID-19 – From Office of the Medical Director 13MAR2020 1500

"Response Configurations

What does the term "response configuration" mean? It means who/what apparatus is sent on a 911 medical call. Also, effective today at 1700 hours, EMSA communications professionals, at my specifications, are using selective activation of fire departments in the following summarized options contained within MPDS Protocol 36:

Alpha Level Calls: NO FIRE DEPARTMENT RESPONSE INDICATED

Chest pain/discomfort, less than 35 years of age, single OR multiple flu symptoms
Flu symptoms only (cough, fever, chills, sore throat, vomiting/diarrhea, muscle aches, etc)

Of note, Fire Departments that have traditionally followed MCB/OMD recommended responses are already NOT responding on MPDS Protocol 26 Alpha 04 "Sick Person – Fever/Chills" calls.

Charlie Level Calls: NO FIRE DEPARTMENT RESPONSE INDICATED

Abnormal breathing with single OR multiple flu symptoms
Chest pain/discomfort, at or greater than 35 years of age, single OR multiple flu symptoms

Delta Level Calls: NO FIRE DEPARTMENT RESPONSE INDICATED

Ineffective breathing with flu symptoms

Delta Level Calls: FIRE DEPARTMENT RESPONSE WILL BE ACTIVATED

Difficulty speaking between breaths with flu symptoms
Not alert with flu symptoms
Changing color with flu symptoms

The careful and deliberate considerations, unanimous among the OMD team, strives to preserve ongoing availability of Fire Department EMTs and Paramedics for the most serious of medical conditions AND reduce clinically unnecessary patient contacts (potential exposures to COVID-19) to EMS personnel truly essential for the patient encounter at hand. The Delta level call described as "ineffective breathing" by MPDS is so vague as to what is meant by "ineffective" we are categorizing in as above for now. We will monitor all these MPDS-linked decisions and correlate with patient conditions, revising if indicating. We currently do the same in an ongoing manner for the over 1200+ MPDS call classifications. These new Protocol 36 determinants will simply join that process.

There will be instances when EMSA personnel arrive and due to either clinical assessment findings and/or logistical issues, Fire Department personnel will be requested. We're all in this together. The collective effort of helping one another and simultaneously protecting one another continues to apply in this new era of COVID-19.

Clinical Care Alterations:

As of today (Friday, 13 MARCH 2020, 1700 hours Central Time), I am directing the following specific precautions to be applied once it is known the patient has a febrile respiratory illness. **For emphasis these directives are meant to only apply to patients with febrile respiratory illness:**

HEPA filters are in the process of being ordered for placement in mechanical ventilator circuits to reduce potential for COVID-19 intake into the mechanical ventilators. Those are to be applied as soon as physically available in our EMS system and as educated at that time.

Avoid use of non-invasive positive pressure ventilation (NIPPV = CPAP or Bi-Level PAP) unless absolutely clinically necessary for that patient's needs. This therapy greatly increases ambient droplets and airborne particles from the patient. If NIPPV is required, position yourself away from the exhalation stream of the patient. During transport, sit behind the patient, not to the patient's side unless ongoing clinical care needs demand being beside the patient.

Again, these measures, like those announced in Update 6, will be for a presently unknown interim duration and will apply to patients with febrile respiratory illness. Cardiac-suspected cardiac arrest patients, non-febrile respiratory distress patients, traumatic injury patients, and all others should continue to receive our usual and customary treatment protocol-specified care."

*** Note should be taken that in the approximate month's interim since Update 8, we have better identified that not every COVID-19 patient, suspected or confirmed, has a present fever and caution should be extended to anyone with an influenza-like illness, predominant symptoms most typically are respiratory, but may include muscle aches (myalgias), fatigue, and gastrointestinal issues of nausea, vomiting, and/or diarrhea, febrile or not.***

From Update 12 - COVID-19 – From Office of the Medical Director 27 MAR2020 1600

"Clinical Care Standards – Respiratory Illness-Related Actions

Patient Prescribed Inhalers

We are accustomed to leaving all patient medications in the patient's home, workplace, or vehicle that we encounter the patient. We have historically done this to help the patient avoid any unintentional loss of medication in transport and/or at hospital. We need you to change this usual and customary practice immediately. Until otherwise notified, bring all inhalers and spacers - if the patient utilizes a spacer tube with their inhaler(s) – with the patient to hospital. In many circumstances, hospitals are running low on respiratory medications and can safely utilize the patient's home medications as part of their treatment plan.

Inhalers may be used in place of nebulized therapy both during our EMS care of the patient pre-hospital as well as in hospital. The following chart converts the number of puffs of a metered dose inhaler to mg for albuterol:

2 puffs = 1.25 mg nebulized
4 puffs = 2.5 mg nebulized
8 puffs = 5 mg nebulized
16 puffs = 10 mg nebulized

The additional advantage of metered dose inhaler albuterol is with a good mouth seal on the inhaler or spacer tube, there should be less aerosolized "spray" of potential viral particles from the patient. Remember that any use of inhalers

or nebulizers can induce cough and you should be positioned to the side or rear of the patient during such therapies. Minimize, frankly avoiding if possible, use of inhalers or nebulizers in confined spaces, such as within the ambulance.

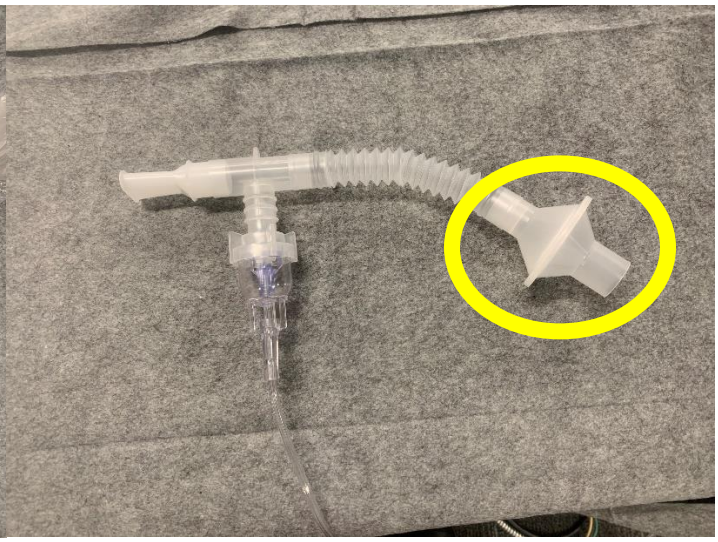
Continue to minimize use of nebulizers if at all clinically able and safe for the patient.

Patients on Home Ventilators

While a very small percentage of patients we encounter are on home ventilators, this represents a particularly vulnerable set of patients in this era of COVID-19, caused by the SARS-CoV-2 coronavirus. You already know the implications for the challenges ahead in scientifically estimated need for ventilators compared to typical availabilities of ventilators within the metropolitan Oklahoma City and Tulsa areas. Any home ventilator that size permits, bring that patient's home ventilator with them to hospital. Likely, during hospital care, that will prove the patient's ventilator used. There may be home ventilators of a size that logistics do not permit transport in an EMS system vehicle. If so, simply inform the treatment team at hospital that all best efforts were expended in bringing such device.

Filter Vents on Mechanical Ventilators – used in ventilator or NIPPV mode – in bag-valve-mask/airway circuits and on nebulizers.

Utilize filter vents when at all possible to reduce possible viral load in any respiratory treatment circuit. EMSA materials management has recently ordered what was termed a significant quantity of these. Correct usage involves three on the mechanical ventilator as detailed per EMSA Clinical Services training recently. See also pictures below for placement in BVM and on nebulizer tubes:



The manufacturer specifies 99.7% viral particle filtering and 99.9% bacterial particle filtering with these devices. We are currently awaiting in writing a response from the manufacturer to confirm they believe based upon the known size of the SARS-CoV-2 intact virus that it is filtered or "caught" by the filter to avoid it in the exhalation stream. We do believe these filters will increase your safety when working with patients requiring airway management."

End of Interim Guidelines Document 12 April 2020