EDUCATION BULLETIN 2020-010 **COVID-19 PROTOCOL UPDATES** **UPDATED 03-23-2021**	Issued (Date): March 23, 2021 Luke Bowen, MBA, EMT-P I/C MCA Operations Manager Luke.bowen@mcemsmca.org 586-792-1350

FOR DISTRIBUTION TO ALL LIFE SUPPORT AGENCIES AND EMS PROVIDERS

The following is guidance for:

- **THIS DISTRIBUTION IS DUE TO A REVISION TO PROTOCOL 14-11; Immunization Support**
- **Updated set of COVID-19 Protocols w/ new numbering**
- **CDC guidance for Healthcare Provider Return to Work**
- **Provider Wellness Resources**

IT IS IMPERETIVE THAT AS A CHIEF, TRAINING OFFICER, EMS COORDINATOR, DIRECTOR, MANAGER, OR EDUCATOR, THAT YOU FULLY READ AND UNDERSTAND THE CONTENT OF THE NEW PROTOCOL AND CDC GUIDANCE, SO YOU CAN EDUCATE AND IMPLEMENT WITH YOUR PROVIDERS AND ANSWER THEIR QUESTIONS.

ALL PROTOCOLS AND CDC GUIDANCE DOCUMENTS HAVE BEEN REVIEWED AND APPROVED BY DR. MIKE FELD, MCA MEDICAL DIRECTOR.

COVID-19 Protocols: New Section 14 Numbering

- A matrix has been provided to cross-reference old/new numbers, content changes, and to identify newly added protocols.

GUIDANCE FOR HEALTHCARE PROVIDERS:

- https://www.cdc.gov/coronavirus/2019-ncov/community/organizations/firefighter-EMS.html
- https://www.cdc.gov/coronavirus/2019-ncov/hcp/return-to-work.html

PROVIDER WELLNESS:

- https://www.cdc.gov/coronavirus/2019-ncov/daily-life-coping/managing-stress-anxiety.html
- https://www.usfa.fema.gov/coronavirus/behavioral_health/
- https://www.michigan.gov/coronavirus/0,9753,7-406-98178_99557---,00.html

AFTER YOU HAVE READ THIS BULLETIN AND THE PROTOCOL and you have questions; the MCA will assist in whatever way we can.

RESOURCES: Educating yourself, communities, families, and friends:
https://health.macombgov.org/Covid19
https://www.michigan.gov/Coronavirus
https://www.cdc.gov/coronavirus/2019-nCoV/index.html

Thank you,

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Macomb County EMS Medical Control Authority
COVID-19 Protocols
New Numbering System & Changes/Updates

NOTE: **All previous versions are rescinded due to new number and/or content changes.**

EFFECTIVE DATE: 03-23-2021

NUMBER	NAME	PREVIOUS NUMBER	CHANGES
14-01	Privileging & Participation	8-43	No content changes.
14-02	Staffing- UPDATED 11-12-20	8-45	NEW STATE VERSION Dated 11-10-20
14-03	Dispatch Screening	NEW	NEW
14-04	Conventional Response	8-32	REMOVE: fever. ADD: sore throat, loss of taste/smell. ADD: priority 2 clarification.
14-05	Personal Protection During Treatment of Patients During the Coronavirus Disease (COVID-19) Pandemic and Decontamination of Equipment after Use	8-31	NEW STATE VERSION updated on 08-28-20
14-06	Clinical Treatment	10-20	ADD: MDI dosing. ADD: indications for licensure level for interventions. ADD: epinephrine IM for respiratory distress.
14-07	Nasopharyngeal Specimen Collections	8-42	NAME CHANGE ADD: clarification in procedure.
14-08	Resuscitation	10-21	NAME CHANGE ADD: updated wording for symptom types
14-10	Destination & Transport	8-30	ADD: bypass of hospitals without critical care or isolation capacity. ADD: source control language. REMOVE: precautions language.
14-11	Immunization Support During COVID-19 Outbreak- MACOMB	NEW VERSION	NEW MACOMB VERSION Dated 03-23-2021
14-12	Decision to Transport (MCMCA)	8-44	No content changes.

Initial Date: 03/23/2020
Revised Date: 04/24/2020 Section: 14-01

Privileging and Participating Facilities Release During COVID-19 Response

Purpose: Establish a mechanism allowing EMS agencies/Medical Control Authorities (MCA) to give prehospital care across jurisdictional boundaries during the COVID-19 response.

1. During the COVID-19 response all MCA, EMS Agencies, and Emergency Departments assist and support each other. This provides an approved/authorized process allowing EMS agencies to function within an MCA during the COVID-19 response.

2. Requests for support may be made to the MCA or EMS agencies within the state through each MCA's local Healthcare Coalition. Response is dependent on the availability of equipment and personnel.

3. For the purpose of load balancing hospitals during the COVID-19 pandemic, personnel and agencies from different MCAs will be allowed to operate in any MCA for the duration of the response.

    a. Personnel should function according to the protocols of their home MCA.
    b. When need diminishes, previously approved privileging protocols will be immediately reinstated.
    c. Agencies operating under this protocol during the COVID-19 response will return to their normal approved response areas when the need for cross-MCA function has lapsed.

MCA Name: Macomb County
MCA Board Approval Date: 05/04/20 Dr. Feld, Medical Director
MCA Implementation Date: 05/06/2020
Protocol Source/References:

Staffing During the COVID-19 Pandemic

Purpose: To provide direction for staffing alterations and vehicle usage during the COVID-19 Pandemic.

I. Ambulance Staffing
   A. Advanced life support (ALS) vehicles operate with the minimum staffing of a paramedic and a medical first responder (MFR), or higher.
   B. Limited ALS (LALS) vehicles operate with the minimum staffing of an advanced emergency medical technician specialist (AEMT-S) and an MFR, or higher.
   C. Basic Life Support (BLS) vehicles operate with the minimum staffing of an emergency medical technician and an MFR, or higher.

II. Vehicle Status
   A. Life support agencies (LSA), when staffing is not available for vehicles as they are currently licensed may staff them at a lower level to respond to requests for service.
   B. A vehicle that is licensed as an ALS vehicle may respond without a paramedic, if equipment that is outside the currently staffed personnel's scope of practice is secured in a way that it is not accessible.
   C. A vehicle that is licensed as an LALS vehicle may respond without an AEMT-S, if equipment that is outside the currently staffed personnel's scope of practice is secured in a way that it is not accessible.
   D. A vehicle that is licensed as a BLS vehicle may respond without an EMT, if equipment that is outside the currently staffed personnel's scope of practice is secured in a way that it is not accessible. A BLS ambulance must have an EMT in order to transport.

III. Equipment and Medications
   A. Equipment and medications that are accessible at any time, must be within the scope of practice of the personnel currently staffing the vehicle.
   B. It is acceptable to utilize ALS equipment in their BLS functionality (e.g. monitors set to AED mode)

IV. Scope of practice
   A. Personnel continue to be limited to their licensed scope of practice.
   B. This protocol does not preclude Healthcare providers who maintain current Michigan health professional licenses outside of EMS (e.g. RN, MD, PA) and that continuously work in emergency services, from practicing at their scope of practice in an ambulance with MCA approval. This scope is not covered by the level of license of an LSA vehicle.

V. Reporting
   If an agency finds that they need to alter their staff in accordance with this protocol and the executive order, they should report the status to the MCA in which the altered staffing occurred.

Dispatch Screening Guidelines for COVID-19 Outbreak

Purpose: To outline screening criteria for PSAPs and EMD centers.

I. Caller Inquiries/COVID-19 Screening:
   A. PSAPs who perform EMD services and EMS agency EMD centers should perform modified caller inquires/focused screening.
   B. Through the normal EMD caller interrogation process, patients should be considered as **screening for COVID-19** who report symptoms of:
      1. Fever or chills,
      2. cough,
      3. sore throat,
      4. shortness of breath,
      5. muscle pain,
      6. headache,
      7. loss of sense of taste/smell, OR
      8. that report a diagnosis or have suspected COVID-19
   C. All callers should be inquired as to these symptoms or considerations for **ALL** members of the household, regardless of the nature of the initial call or who the patient in question is at the time. This may occur after standard EMD caller interrogation
   D. Any indication for the above symptoms or considerations for any member of the residence will be relayed to responding personnel to don appropriate COVID-19 PPE.

II. For PSAPs not currently performing EMD services (or transferring callers to secondary EMD Centers), when information is volunteered by the caller indicating the patient may have the above symptoms advise responders to don PPE. This should be done in accordance with local PSAP policies and should not delay EMS dispatch.

COVID-19 Guide Card

PSAP/EMD Scripted Questions and Responder Alerts

All Callers	
Any Caller Reports that Patient Has Fever, Chills, Cough, Shortness of Breath, Sore Throat, or Loss of Sense of Taste/Smell, Muscle Pain, Headache	
No	Call Prioritization as Usual and Inquire about other members of the residence with these symptoms
Yes	**Alert Responders:** *"Patient screens for COVID-19 risk and reports infectious symptoms, don appropriate PPE*."*
Any Caller Reports that Any Member of the Residence Has Fever, Chills, Cough, Shortness of Breath, Sore Throat, or Loss of Sense of Taste/Smell, Muscle Pain, Headache	
No	Call Prioritization as Usual
Yes	**Alert Responders:** *"Person in residence screens for COVID-19 risk and reports infectious symptoms, don appropriate PPE*."* Advise Caller: *"Individuals with these symptoms should remain as far away from EMS personnel as possible*."
Other Caller Concerns or Suspicion for COVID-19	
For any patient expressing concerns or suspicion for COVID-19 but not under public health monitoring and negative for COVID-19 screening questions, **Alert Responders** that "*The patient expresses concern for COVID-19 but is not reportedly under public health monitoring and COVID-19 screening questions are negative, don PPE as appropriate*."	
NOTE: The query process should never supersede the provision of pre-arrival instructions to the caller when immediate lifesaving interventions (e.g., CPR or the Heimlich maneuver) are indicated. * Appropriate PPE includes standard, contact, airborne precautions, and eye protection.	
Revised: 4/27/2020	

Initial Date: 03/11/2020
Revised Date: 04/27/2020

Section 14-04

Conventional Response to Potential COVID-19 Outbreak

Purpose: To reduce risk of exposure of EMS personnel during the conventional response phase of a COVID-19 outbreak.

I. Requests for EMS should be screened for risks for COVID-19 according to **Dispatch Screening Guidelines for COVID-19 Outbreak.**

II. Priority one and two responses* who screen for potential COVID-19:
   a. Normal agency response
   b. First unit on scene:
      i. Initial responder(s) enter at minimum level of personnel (if non-transporting and transporting units arrive at the same time, transporting personnel enter scene wearing appropriate PPE, while non-transporting personnel provide support as needed).
      ii. After initial assessment, personnel who have made patient contact request additional (specific) resources, as indicated.

III. Priority three** patients who screen for possible COVID-19:
   a. Initial response by transporting agency ONLY, unless transporting agency delayed by more than 30 minutes.
   b. Transporting personnel make contact wearing appropriate PPE.
   c. After initial assessment, if more resources are needed, personnel request specific necessary resources (e.g., lift assist).

IV. Responses to health facilities (those with licensed health care staff present) with a patient who screens positive for possible COVID-19:
   a. Initial response by transporting agency only unless information indicting clear need for additional personnel (e.g., patient being ventilated).
   b. Minimal personnel enter the scene and assess the patient.
   c. After initial assessment, if more resources are needed, personnel request specific necessary resources.

*Priority one includes patients with potential life-threatening emergencies including, but not limited to, shortness of breath, chest pain, and/or altered mental status. Priority two includes patients with serious illness or injury without immediate life-threatening conditions listed as priority one patients.

**Priority three includes patients with cough and/or sore throat but without other Priority one symptoms.

MCA Name: Macomb County
MCA Board Approval Date: 05/04/20 Dr. Feld, Medical Director
MCA Implementation Date: 05/06/2020

Protocol Source/References: https://icsw.nhtsa.gov/people/injury/ems/PandemicInfluenzaGuidelines/

Personal Protection During Treatment of Patients During the Coronavirus Disease (COVID-19) Pandemic and Decontamination of Equipment after Use

Purpose: To outline infection prevention and personal protection when providing treatments during the COVID-19 pandemic. To outline the appropriate decontamination for people, equipment, and vehicles utilized in treatment and transport of patients at risk for COVID-19.

I. Applicable patients – Due to community spread and the risk of asymptomatic and pre-symptomatic patients, all patients should be considered at risk for COVID-19.

II. Personal Protection –
   a. Standard, contact, and airborne precautions must be observed if within six feet of patient.
      i. Standard precautions - The principle that all blood, body fluids, secretions, excretions except sweat, nonintact skin, and mucous membranes may contain transmissible infectious agents. Standard Precautions include a group of infection prevention practices that apply to all patients, regardless of suspected or confirmed infection status, in any setting in which healthcare is delivered.
      ii. Contact precautions - intended to prevent transmission of infectious agents, including epidemiologically important microorganisms, which are spread by direct or indirect contact with the patient or the patient's environment. Healthcare personnel caring for patients on Contact Precautions wear a gown and gloves for all interactions that may involve contact with the patient or potentially contaminated areas in the patient's environment. Strict hand hygiene must be performed after each patient encounter and after doffing gloves.
      iii. Airborne precautions – intended to prevent transmission of infectious agents that remain infectious over long distances when suspended in the air. EMS personnel caring for patients on Airborne Precautions wear an N95 or higher-level respirator or mask that is donned prior to room entry. Personnel who are not providing aerosolized treatments and not in close proximity (in the closed compartment of the ambulance) with a patient with active respiratory symptoms may use a surgical mask in lieu of an N95 respirator.
   b. Contact with patients should include the use of eye protection/face shield.
   c. Respirators are considered to be N95 rated or above. Surgical facemasks offer more protection than a sewn face covering but not as much as a respirator. Sewn facemasks offer some protection but not as much as surgical facemasks or respirators.
   d. All patient contacts should include universal source control:
      i. A surgical mask should be applied to all patients, especially prior to being placed in an ambulance, unless they are receiving oxygen by mask.
      ii. A cloth or sewn face covering or surgical mask should be applied to anyone accompanying patient in ambulance regardless of COVID-19 symptoms.

Protocol Source/References: https://www.cdc.gov/coronavirus/2019-ncov/hcp/guidance-for-ems.html, https://www.cdc.gov/coronavirus/2019-ncov/php/risk-assessment.html, https://www.cdc.gov/infectioncontrol/guidelines/isolation/precautions.html

III. Guidance for respiratory protection utilization based on situation

Situation	Appropriate Respiratory Protection
Greater than 6 feet from any patient (excluding patient compartment of ambulance)	Unnecessary personnel should not enter patient care area, no respirator required. All personnel should always have at least a sewn facemask in place.
Between 3 and 6 feet of any patient	If personnel must be in this area, surgical facemask required
Within 3 feet, including direct patient care	Surgical Facemask acceptable, Respirator recommended
Present within 6 feet (or in the same room) when patient receives aerosol generating procedure.	Respirator required
Patient with respiratory symptoms or distress (cough, shortness of breath) or confirmed COVID-19 positive in patient compartment of ambulance)	Respirator required
Patient unable to wear a mask	Respirator required
Within 6 feet of any person, including the cab of a vehicle	At least sewn facemask required

IV. During Treatment

a. The number of responders within six feet of the patient should be limited to the fewest number to provide essential patient care.
b. A (surgical type) facemask should be placed on the patient for source control. Do not place N-95 or similar masks on patients as these increase the work of breathing.
c. Any family or bystanders should not be within six feet of responders, and if they are should wear a cloth facemask.
d. Aerosol Generating Procedures
    i. In addition to PPE, there should be increased caution in aerosol-generating procedures (BVM, suctioning, emergency airways, nebulizers, etc)
    ii. Perform aerosol-generating procedures only when clinically indicated.

Protocol Source/References: https://www.cdc.gov/coronavirus/2019-ncov/hcp/guidance-for-ems.html, https://www.cdc.gov/coronavirus/2019-ncov/php/risk-assessment.html, https://www.cdc.gov/infectioncontrol/guidelines/isolation/precautions.html

iii. Keep patient and aerosolization away from others without PPE (e.g., bystanders, EMS personnel not in PPE, etc).
iv. Preferably, aerosolized procedures should be done OUTSIDE of the ambulance. When treating patient in the ambulance, activate patient compartment exhaust fan at maximum level.
v. When possible, consider using HEPA filtration to expired air from the patient. (Ventilators, CPAP, biPAP, BVM)

V. Patient Compartment –
a. When practical, utilize a vehicle with an isolated driver and patient compartment.
b. Seal any openings between the driver and patient compartment.
c. Only necessary personnel should be in the patient compartment with the patient.
d. All compartments should have ventilation maintained, with outside air vents open and set to non-recirculated mode.

VI. Patient Transfer
a. Friends and family of the patient should not ride in the transport vehicle with the patient. If they must accompany the patient, they should have a cloth facemask applied.
b. Personnel driving the transport vehicle should doff PPE (with the exception of respirator) and perform hand hygiene before entering the driver's compartment. Respirator (N95) or surgical facemask should be maintained throughout.
c. Ventilation in the driver's compartment should be set to bring in outside air and on maximum speed.
d. Notification of infectious risk should be made to receiving facility as soon as feasible.
e. Upon arrival at receiving facility, open patient compartment doors BEFORE opening driver's compartment doors.
f. Maintain mask on patient and filtered exhaust while transporting patient to room.
g. Patients should never be transported into a hospital with a nebulizer treatment in progress.
h. If patient care requires CPAP, contact receiving hospital to coordinate hand-off in a manner that minimizes hospital environmental risk.
i. Avoid transporting the patient within 6 feet of others (e.g., unprotected hospital staff, patients, bystanders, etc.)
j. Transfer patient care via verbal report.
k. Doff PPE after leaving patient room and perform hand hygiene before touching documentation tools.

VII. Cleaning of Transport Vehicle and Equipment
a. Personnel should wear disposable gown and gloves for decontamination of the vehicle. A face shield or facemask and goggles should be worn if there is a potential for splashing or sprays.
b. Maintain doors open during cleaning.

Protocol Source/References: https://www.cdc.gov/coronavirus/2019-ncov/hcp/guidance-for-ems.html, https://www.cdc.gov/coronavirus/2019-ncov/php/risk-assessment.html, https://www.cdc.gov/infectioncontrol/guidelines/isolation/precautions.html

c. Disinfect after cleaning using EPA-registered, hospital-grade disinfectant to all surfaces that were touched, or all surfaces if aerosol-generating procedures were performed. Products with statements for emerging viral pathogens should be used.
d. All equipment that was involved in patient care and equipment that was inside of patient compartment of ambulance should be cleaned.
e. Ambulances should be thoroughly cleaned (including door/compartment handles and ambulance cab) at the beginning and end of each shift in which patient transport occurred, regardless of COVID-19 patient status.

Protocol Source/References: https://www.cdc.gov/coronavirus/2019-ncov/hcp/guidance-for-ems.html, https://www.cdc.gov/coronavirus/2019-ncov/php/risk-assessment.html, https://www.cdc.gov/infectioncontrol/guidelines/isolation/precautions.html

Initial Date: 03/23/2020
Revised Date: 04/27/2020
Section 14-06

Clinical Treatment for Patient with Suspected or Confirmed COVID-19

I. Applicable patients:

Patients prescreened or encountered by EMS personnel who may or may not have been pre-identified by 911/EMD as a potential COVID-19 patient:

A. Have signs and symptoms of respiratory illness (cough, shortness of breath)
B. Have signs and symptoms of respiratory illness (cough, shortness of breath) AND known exposure to patient with suspected COVID-19
C. Have other signs or symptoms associated with COVID-19 (fever, chills, shaking with chills, sore throat, loss of sense of taste/smell, muscle pain, headache, profound fatigue).

II. Personal Protective Equipment:

A. Standard, contact, and airborne precautions
B. Surgical masks for personnel may be substituted for N95 masks when no aerosolized procedures are taking place and when not in an enclosed area (e.g. ambulance patient compartment) with actively coughing patient.
C. Surgical masks or non-rebreather masks with supplemental oxygen for patients in respiratory distress should be applied to the patient whenever possible to perform source control. All patients regardless of COVID-19 suspicion should have surgical mask applied for source control.

III. Treatment:

A. Follow **General Prehospital Care Protocol and other applicable protocols modified as below**
B. Patients should receive oxygen to maintain SPO2 ≥94%
    i. Nasal cannula should be applied under a surgical mask.
    ii. Non-rebreather masks, for patients with hypoxia or respiratory distress should be used in lieu of surgical masks.
    iii. Combined nasal cannula at 6 LPM and non-rebreather mask at 12-15 LPM may be considered in patients remaining hypoxic after non-rebreather alone.
C. Assess breath sounds
    i. For patients with clear breath sounds, continue supportive oxygenation.
    ii. For patients with wheezing
        1. Preferred mechanism for pharmacological intervention is albuterol by metered dose inhaler (MDI) with spacer (including assisting patient with personal inhaler of albuterol), if available.
            a. Administer 4 puffs over 30-60 seconds (equivalent to 2.5 mg of albuterol)
            b. Dose may be repeated as needed every 5 minutes.
        2. If patient has wheezing with moderate to severe dyspnea and there is not access to MDI and the patient has a known history of asthma/COPD
            a. Administer bronchodilator via nebulizer in open area with maximum air ventilation, with N95 or greater respirator applied to personnel, and single rescuer monitoring patient from maximal distance possible. Contact medical control for direction, as needed.

Protocol Source/References: https://www.cdc.gov/infectioncontrol/guidelines/isolation/precautions.html

b. **DO NOT** administer nebulized medication in closed ambulance.
c. For patients with known history of asthma/COPD and in moderate to severe dyspnea WITH wheezing, may administer: epinephrine (1 mg per mL) 0.3 mL IM. (Skill may be BLS or MFR, depending on MCA selection.)

iii. For patients with severe respiratory distress AND a history of CHF or COPD and positioning, oxygenation, and other treatments (e.g. nitroglycerin 0.4 mg SL q 3 minutes for CHF) are not effective:
1. Apply CPAP per protocol.
2. Use HEPA filter for exhalation port, if available.
3. CPAP being utilized in the patient compartment should be limited to necessity and only when all providers in the patient compartment have N95 respirators in place.
4. Contact receiving hospital as early as possible to advise them of patient requiring CPAP to allow for appropriate transition of care upon arrival.

D. Hypotensive patients – those with SBP <90mmHg with signs and symptoms of shock
i. Administer normal saline 250 mL bolus.
ii. Reassess BP and signs and symptoms of shock prior to administering more fluid
iii. Normal saline boluses of 250 mL may be repeated to a maximum of one liter as signs/symptoms persist before contacting medical control.

E. Airway management
i. **DO NOT** Intubate or perform (mouth to mask/mouth) rescue breathing on patients with suspected COVID-19.
ii. Utilize supraglottic airways with ETCO2 if an advanced airway needs to be placed.
iii. Place filter inline for ventilations or utilize a BVM with filtration capability, if available.

IV. Time sensitive patients:
A. Patients in need of immediate intervention will be treated with a minimum of gloves, eye protection, and mask

V. Transport:
A. Interventions should be performed **PRIOR** to loading into or closing patient compartment of the ambulance.
B. Only one provider will remain with patient for transport, if possible.
C. Follow COVID-19 Destination and Transport Protocol

VI. Cardiac arrest- Follow CARDIAC ARREST IN A PATIENT WITH SUSPECTED COVID-19

Nasopharyngeal Specimen Collection for COVID-19

I. Applicable patients: Patients who have received a referral or order from a clinician (primary care, local health department, medical control physician) for specimen collection.

II. Collection Procedure for Nasal Pharyngeal Sampling:
- A. Don appropriate PPE
  - i. N95 Mask
  - ii. Gown
  - iii. Gloves
  - iv. Eye protection
- B. Place patient in seated position
- C. Tilt patient's head back slightly to visualize nasal passages
- D. Ask patient to remove face mask and close eyes
- **E. Gently insert swab along nasal septum, just above the floor of the nasal passage, to the nasopharynx**
  - i. Stop when resistance is met
  - ii. Do not force swab further
  - iii. If you detect resistance to the passage of the swab, back off and try reinserting it at a different angle, closer to the floor of the nasal canal.
  - iv. The swab should reach a depth equal to the distance from the nostrils to the outer opening of the ear.
- F. Rotate swab several times (keep in passage 10 seconds)
- G. Gently remove swab while rotating
- H. Place swab into collection tube according to directions
  - i. Place swab into tube before breaking stick
  - ii. Tighten cap securely
- I. Have patient reapply face mask

III. Packaging procedure:
- A. Label tube
  - i. Patient name
  - ii. Patient DOB
  - iii. Source
- B. Place tube in plastic bag with absorbent material
- C. Place sample in 95kPa bag
- D. Place bagged sample on ice pack
- E. Follow instructions according to referral source or ordering physician for shipping or delivery.

IV. Key Information:
- A. Uncomfortable procedure, be gentle with patient
- B. Questions or issues with packaging should be handled by referral source, according to directions on collection materials provided

Additional Information and Video: https://www.nejm.org/doi/full/10.1056/NEJMvcm2010260

Cardiac Arrest in a Patient with Suspected or Confirmed COVID-19

I. Applicable patients are patients in cardiac arrest with known previous symptoms or known diagnosis of COVID-19 (coronavirus disease). Concerning pre-arrest symptoms include:
   A. respiratory illness (cough, shortness of breath, sore throat)
   B. fever (all patients with fever prior to arrest should be suspected as having COVID-19)
   C. loss of sense of taste/smell
   D. muscle pain (myalgias)
   E. headaches
   F. chills with or without repeated shaking 9rigors)

II. Personal Protective Equipment:
   A. Standard, contact, and airborne precautions
   B. CPR and assisting ventilations are aerosolized procedures. N95 masks or equivalent are required. Do not perform CPR without respiratory precautions in place.

III. Treatment:
   A. For patients with NO pre-arrest symptoms as noted above and not known to be COVID-19 positive, follow **General Cardiac Arrest Protocol.**
   B. For arrests of patients with known pre-arrest symptoms noted above or known COVID-19 infection treat according to **General Cardiac Arrest Protocol** EXCEPT:
      i. Airway interventions will be limited to BLS procedures, including supraglottic airway. DO NOT INTUBATE.
      ii. When CPR is being performed, only necessary personnel should be next to the patient. Personnel should remain at least 6 feet from patient when not performing interventions, as able.
      
      iii. If no return of spontaneous circulation (ROSC) within 10 minutes of ALS resuscitation, contact medical control for possible termination orders.
      iv. Patients in continuous cardiac arrest **WILL NOT BE TRANSPORTED**, regardless of mechanical CPR device. Resuscitation will either be terminated on scene or ROSC sustained (continued palpable pulse and systolic BP ≥60 mmHg for >5 minutes) **BEFORE** moving the patient to the patient compartment of a vehicle.
   C. For witnessed arrests inside the patient care compartment of known or suspected COVID-19 patients:
      i. Pull vehicle to the side of the road and perform resuscitation in full PPE, with doors **OPEN**.
      ii. If patient has mechanical CPR device in place and has lost ROSC, the device may be resumed with continued transport to the hospital, as long as all personnel in the patient compartment have sufficient respiratory PPE in place.

MCA Name: Macomb County
MCA Board Approval Date: 05/04/20 Dr. Feld, Medical Director
MCA Implementation Date: 05/06/2020

Protocol Source/References: https://www.cdc.gov/infectioncontrol/guidelines/isolation/precautions.html

Destination and Transport for Patients at Risk for Coronavirus Disease (COVID-19)

Purpose: To direct patient transport and destination for patients with confirmed or suspected Coronavirus Disease (COVID-19).

I. Applicable Patients –
   A. Symptomatic patients with confirmed COVID-19 (positive test)
   B. Patients who meet the current clinical criteria for suspected COVID-19

II. Patients Transported by Emergency Medical Services
   A. Transported by EMS, utilizing standard, contact, and airborne precautions, to the closest facility with inpatient critical care capabilities, if such a facility is within 60 minutes and patient is not in severe respiratory distress or continuing to deteriorate after initiation of supplemental oxygen.
   B. Medical control may have a specific facility designated for patients with known or suspected COVID-19.
   C. Patient may request a specific facility if:
      i. The facility has appropriate facilities and capabilities and
   D. Transport time is within 60 minutes. Treat patient according to **Clinical Treatment of a Patient with Suspected COVID-19** protocol.
   E. The receiving facility should be notified of the incoming patient as early as practical.
   F. Destination facilities may be facilities other than emergency departments or surgical centers per direction of medical control depending on current system capacity and clinical status of patient (e.g., low acuity).
   G. Hospitals may need to go on diversion (via emResource) if it is determined they have insufficient capacity or capability to admit COVID-19 patients.
   H. Patients presenting with potential COVID-19 are at risk for deterioration and may benefit from early, aggressive critical care services.
      i. Patients should bypass closer hospitals without critical care services and transport directly to hospitals with critical care services (as designated by local medical control) when the transport time to such hospitals is less than 60 minutes.
      ii. Patients remaining hypoxic after high-flow oxygen, those with significant respiratory distress despite oxygen, and those appearing in need of intubation should go to the closest hospital with emergency services.
   I. Final destination determination, if in question, will be from online medical control. 

MCA Name: Macomb County
MCA Board Approval Date: 05/04/20 Dr. Feld, Medical Director
MCA Implementation Date: 05/06/2020

Protocol Source/References: https://www.cdc.gov/coronavirus/2019-ncov/php/risk-assessment.html, https://www.cdc.gov/infectioncontrol/guidelines/isolation/precautions.html

Immunization Support During COVID-19 Outbreak

Purpose: To outline mechanisms for EMS to support immunization administration (influenza, COVID-19, and other routine vaccinations) and tracking during the COVID-19 Outbreak.

This protocol may be utilized by all EMS agencies and personnel that have been trained to administer IM injections per MCA selection.

MCA Selection for Immunization Administration

☐ **Paramedic**

☐ **EMT-Specialist**

☐ **EMT with IM Training* with supervision** (Paramedic/RN/etc.)

***EMT's must have completed the Macomb MCA "EMT's Injecting Epinephrine" training.**
***EMT's may administer the injection, but the reconstitution (if required) and drawing up of vaccine dose into the delivery syringe must be done by a Paramedic or nurse.**
***EMT's must be trained in immunization reactions and must be able to treat anaphylactic reactions. (Have access to epinephrine).**

I. Documentation
   A. Vaccine administration will be documented in the Michigan Care Improvement Registry (MCIR).
   B. When possible, EMS should inquire immunization status of patients and document their immunization status in the EPCR. Patients behind on vaccinations may have specific components noted in the narrative section of the EPCR.

II. Clinics
   A. Personnel may be utilized to administer vaccines at mass vaccinations clinic where their services are requested (local health department, hospital, etc).
   B. Agencies may host vaccination clinics at their facilities provided there is access to MCIR for documentation.

III. In Home Vaccinations
   A. May be administered when ordered by a physician.
   B. Documentation in MCIR must be coordinated prior to administration and must be completed after administration.
   C. A home visit for a vaccination requires documentation by EMS personnel in an electronic platform.

IV. Information on vaccine administrations (clinic, in-home, etc.) will be provided to the MCA (if not noted in the MI EMSIS system) on request.

April 03, 2020 Section 14-12

Decision to Transport During COVID-19 Protocol

Purpose: To reduce the number of patients transported to the hospital that are suspected or confirmed to have COVID-19 infection, who do not require immediate treatment and/or hospitalization.

I. Emergency medical calls related to COVID-19 will likely fit into one of the three following categories
   a. **Worried-well:** Those who have been exposed to a person suspected of having, or confirmed positive for COVID-19 infection.
   b. **Acutely ill patients with minor symptoms:** Suspected or confirmed to have COVID-19 infection.
   c. **Acutely ill patients with severe symptoms:** Suspected or confirmed to have COVID-19 infection.

II. Worried-well:
   a. Those patients who report an exposure consistent with high or medium risk of exposure should self-quarantine, assuring they avoid contact with at risk populations, and monitor for signs and symptoms of COVID-19 infection. Self-monitoring guidance and additional information is available at https://health.macombgov.org/Covid19. Advise the patient that if they have any further concerns they should contact their primary care physician, or they may contact the Macomb County Health Department Help Line at 586-463-3750. The Helpline is open 8:30 A.M. - 5:00 P.M, 7 days a week.

III. Acutely ill patients with minor symptoms:
   a. Suspected or confirmed to have COVID-19 infection, who lack risk factors for developing severe complications, should avoid transport to the hospital, if at all possible. The following signs and symptoms alone do not indicate the need for immediate medical attention and transport:
      i. Body aches
      ii. Sore throat
      iii. Headache
      iv. Fever
      v. Mild nausea/vomiting/diarrhea
   b. If the acutely ill patient complaining of minor symptoms possesses any of the following risk factors, immediate medical attention and transport are indicated due to their increased risk of developing severe complications:
      i. Age $\geq$ 65
      ii. Cardiovascular disease
      iii. COPD
      iv. Diabetes

v. Hypertension
vi. Immunosuppressed

c. **Sign-off Procedure:**
   i. Advise patients that your EMS Medical Director has issued a standing order that all patients suspected or confirmed to have COVID-19 infection, presenting with mild symptoms only, and lacking risk factors, should; stay home, isolate, rest, hydrate, take comfort measure as needed, and self-monitor. If serious symptoms develop, they should seek immediate medical attention and call 9- 1-1. Please leave the COVID-19 Sign off Guidance document with the patient. Advise the patient that they should warn the 9-1-1 dispatcher of the COVID-19 risk.
   ii. If the patient insists on being transported, they must be transported.
   iii. Advise the patient that by signing the "refusal signature" they are acknowledging that they have received and understand the instructions they have been given and will call 9-1-1 in the event that they develop serious symptoms.
      1. Obtain a witness signature. A signature of another healthcare provider will suffice as a witness signature.
   iv. EMS providers should note in their documentation narrative that the patient was given a complete description of the symptoms associated with severe infection, and that the patient was advised to call 9-1-1 if they developed any of these symptoms.
      1. A list of serious symptoms can be found in this protocol, see list below.

IV. Acutely ill patients with severe symptoms: Suspected or confirmed to have COVID-19 infection, should be transported to the closest appropriate hospital. The following signs and symptoms indicate the need for immediate medical attention and transport:

i. Hypoxia (< 94%)
ii. Respiratory distress/Shortness of breath
iii. Chest pain/tightness
iv. High fever (≥101)
v. Confusion/Altered mental status
vi. Severe nausea/Vomiting/Diarrhea
vii. Signs of severe dehydration or shock, including; syncope, severe dizziness, hypotension

MCMCA
Macomb County Medical Control Authority

COVID-19 SELF QUARANTINE SIGN OFF PATIENT GUIDANCE

Today, you have been evaluated for the coronavirus (COVID19). Based on our assessment, you do NOT need to go to the hospital at this time, however, you need to self-monitor. Information on self-monitoring may be found at https://health.macombgov.org/Covid19.

Self-monitoring means people should monitor themselves for fever by taking their temperature twice a day and remain alert for cough or difficulty breathing. If you have a fever, cough, or nausea and vomiting during the self-monitoring period, you should self-isolate, limit contact with others (stay at least 6 feet away from others), and seek advice by telephone from a healthcare provider or your local health department to determine whether medical evaluation is needed. **If you develop *any* of the following symptoms, call 911 immediately** and tell them you are a possible coronavirus patient:

- Respiratory Distress / Shortness of Breath / Sore throat
- Chest Pain / Tightness
- High Fever ≥ 101º
- Confusion / Altered Mental Status
- Severe Nausea, Vomiting, or Diarrhea
- Dizziness / Fainting / Low Blood Pressure / Loss of taste or smell

Recommendations to protect yourself and your family members include the following:

- **Wash your hands** often with soap and water for at least 20 seconds especially after you have been in a public place, or after blowing your nose, coughing, or sneezing.
- **Avoid touching your eyes, nose, and mouth** with unwashed hands.
- **Avoid close contact** with people who are sick.
- **Cover your mouth and nose** with a tissue when you cough or sneeze or use the inside of your elbow, as respiratory droplets are produced when you cough and sneeze.
- **Clean AND disinfect frequently touched surfaces daily**. This includes tables, doorknobs, light switches, countertops, handles, desks, cell phones, keyboards, toilets, faucets, and sinks.

Currently, there is no treatment or vaccine to prevent the coronavirus. If you have any further concerns contact your primary care physician, or the Macomb County Health Department Help Line at 586-463-3750. The Helpline is open 8:30 A.M. - 5:00 P.M, 7 days a week.