

METRO REGIONAL EMS CONSORTIUM

**PATIENT TREATMENT
PROTOCOLS**

2022

ON LINE MEDICAL CONTROL		
MRH	503-494-7333	
Mental Health Crisis Line	503-291-9111	
AMBULANCE		
AMR Ambulance	503-239-0389	
AMR Supervisor-Multnomah County	503-736-3425	
AMR Supervisor-Clackamas County	503-659-1294	
Life Flight	503-678-4364	
Metro West Ambulance	503-648-6658	
Metro West Ambulance Supervisor	503-648-6658	
DISPATCH		
AMR Dispatch	503-231-6300	
BOEC (Portland)	503-823-0911	
CCOM Dispatch	503-655-8911	
WCCCA (FireCom)	503-531-0175	
Life Flight	800-232-0911	
LO Comm Dispatch	503-635-0238	503-636-5601
Metro West Ambulance Dispatch	503-648-6656	
HOSPITALS		
Kaiser Sunnyside ED	503-571-9516	
Kaiser Westside ED	971-310-4509	
Legacy Emanuel ED	503-413-4121	
Legacy Good Sam ED	503-413-7260	
Legacy Meridian Park	503-692-7467	
Mt Hood Medical Center ED	503-674-1400	
OHSU ED	503-494-7551	
Poison Control	800-222-1222	
Portland Adventist Medical Center ED	503-251-6168	
Providence St Vincent ED	503-216-2444	
Providence Milwaukie ED	503-513-8311	
Providence Newberg ED	503-537-1785	
Providence Portland ED	503-215-6000	
Salmon Creek ED	360-487-1400	
SW Washington ED	360-514-2464	
Tuality Hospital – Hillsboro	503-681-4190	
Unity Center for Behavioral Health	503-944-7711	
VA Portland ED	503-721-7803	
Willamette Falls ED	503-657-6702	

2022 SUMMARY OF PROTOCOL UPDATES AND CHANGES

PROTOCOL TITLE	PAGE	SECTION	DESCRIPTION OF CHANGE
Table of contents		Forward	Added esmolol, diabetic emergencies, and Modified Valsalva Maneuver. Removed Vasopressin.
Scope of Practice	0.010	Preface	Updated scope of practice language for the EMT and Paramedic.
Medical control for Medication & Procedure	0.040	Preface	Added esmolol to the list of category A medications. Added Modified Valsalva Maneuver to list of category A procedures. Removed the OLMC requirement for Albuterol for hyperkalemia, sodium bicarbonate for crush injuries and hyperkalemia, Calcium Gluconate for calcium channel blocker OD, and magnesium sulfate for asthma in adults. Removed Glucagon from the list of category B medications for beta blocker overdose as this is no longer indicated.
Universal Patient Care	10.005	Treatment	Added language about repeating the BP manually if NIBP seems inaccurate.
Altered Mental Status & Coma	10.020	Treatment	Added a reference to the new diabetic emergencies protocol in regards to hyperglycemia and diabetic patients who refuse transport. Condensed the notes and precautions section and added key considerations. Updated pediatric naloxone dosing.
Burns	10.040	Treatment	Clarified fluid administration table to state that fluid amounts are based on age. Clarified that fluid administration rates are for patients not in shock. Added back in language regarding transport to a hyperbaric facility.
Cardiac Arrest Guidelines	10.050	Treatment	Added time guidelines for the administration of epinephrine for both shockable and nonshockable rhythms. Added preferred vascular access sites for children.
Cardiac Arrest (Asystole)	10.050	Treatment	Removed vasopressin. Added dosing language for sodium bicarbonate and calcium gluconate in the notes section. Changed calcium gluconate dosing to 3 grams.

2022 SUMMARY OF PROTOCOL UPDATES AND CHANGES

PROTOCOL TITLE	PAGE	SECTION	DESCRIPTION OF CHANGE
Cardiac Arrest (PEA)	10.050	Treatment	Removed vasopressin. Added dosing language for sodium bicarbonate and calcium gluconate in the notes section. Changed calcium gluconate dosing to 3 grams.
Cardiac Arrest (V-Fib/Pulseless VT)	10.050	Treatment	Removed vasopressin. Added esmolol to algorithm. Eliminated second antidysrhythmic. Added language regarding the administration of calcium gluconate in suspected hyperkalemia patients.
Cardiac Arrest Post Resuscitation	10.050	Treatment	Added post-ROSC 12-lead time standards. Clarified the use of anti-dysrhythmic medications with ROSC.
Cardiac Arrest (Bradycardia)	10.060	Treatment	Updated atropine dosing language for adults to 1.0 mg. Added language for TCP in pediatric patients.
Cardiac Arrest (Tachycardia-Stable)	10.060	Treatment	Added language for the Modified Valsalva Manuver.
Chest Pain/Acute Coronary Syndrome	10.070	Treatment	Added the requirement to place defibrillation pads on suspected STEMI patients (this was a mid-year change in 2021).
Diabetic Emergencies	10.072	Treatment	New protocol for the treatment of both hyperglycemia and hypoglycemia.
Hyperkalemia	10.078	Treatment	Changed the dosing for calcium gluconate. Removed the OLMC requirement for high dose albuterol and sodium bicarbonate. Removed glucose and insulin as a treatment option.

2022 SUMMARY OF PROTOCOL UPDATES AND CHANGES

PROTOCOL TITLE	PAGE	SECTION	DESCRIPTION OF CHANGE
Neonatal Resuscitation	10.120	Treatment	Added neonate ventilation/compression CPR ratio to the notes section.
Pain Management	10.135	Treatment	Adjusted ketamine dosing to allow for a dosing range. Added specific timed administration language.
Poisoning and Overdose	10.140	Treatment	Added language to specify that treatment of specific poisons/overdoses is for symptomatic patients. Updated ASA language. Added CPAP for CO poisoning. Added language to address transport to a hyperbaric facility. Added chlorine inhalation, cyanide poisoning, and hydrofluoric acid exposure treatments. Increased calcium gluconate dosing for calcium channel blocker OD. Added language for push-dose epi and epi infusions for beta blocker OD. Removed Glucagon from beta blocker OD treatment. Updated treatment language and atropine dosing for organophosphate poisoning. Added methemoglobinemia (nitrite/nitrate) poisoning to the toxidrome table.
Respiratory distress	10.160	Treatment	Added the use of CPAP for asthma. Removed the OLMC requirement for magnesium sulfate in adult asthma . Added precautionary language regarding the risk of pneumothorax with CPAP use in asthma and COPD patients.
Seizures	10.170	Treatment	Added language to address preferred hospital destination for both pediatric and adult patients.
Shock	10.180	Treatment	Added push-dose epi to the pediatric flow chart for obstructive shock.
Albuterol	20.030	Medications	Removed all OLMC requirements. Added chlorine inhalation as an indication. Added dosing for crush injury.
Atropine	20.060	Medications	Updated dosing for organophosphate poisoning for both adults and pediatrics. Updated adult dosing for symptomatic bradycardia.

2022 SUMMARY OF PROTOCOL UPDATES AND CHANGES

PROTOCOL TITLE	PAGE	SECTION	DESCRIPTION OF CHANGE
Calcium Gluconate	20.070	Medications	Changed the dosing for hyperkalemia, CCB OD, and cardiac arrest. Removed the OLMC requirement for treatment of hyperkalemia. Changed the pediatric dose.
Dexamethasone	20.075	Medications	Added an indication for chlorine inhalation.
Epinephrine	20.110	Medications	Added dosing for push-dose epi in pediatrics.
Esmolol	20.112	Medications	New protocol for the treatment of refractory VF/pVT.
Glucagon	20.130	Medications	Removed the indication for beta blocker overdose.
Hydroxocobalamin	20.145	Medications	Changed dosing language to allow for a repeat dose in adults without OLMC contact. Added language to specify that use in cardiac arrest should be a rapid fluid bolus.
Ketamine	20.155	Medications	Adjusted the dosing of ketamine for pain management to include a dosing range.
Ketorolac	20.157	Medications	Added multi-system trauma as a contraindication.

2022 SUMMARY OF PROTOCOL UPDATES AND CHANGES

PROTOCOL TITLE	PAGE	SECTION	DESCRIPTION OF CHANGE
Magnesium Sulfate	20.170	Medications	Removed OLMC requirement for use in asthma in adults.
Naloxone	20.210	Medications	Changed dose for pediatrics to allow for up to 2 mg per dose.
Sodium Bicarbonate	20.260	Medications	Added dosing for suspected chlorine inhalation injuries. Removed OLMC requirement for hyperkalemia and crush injuries. Added dosing for crush injuries.
Succinylcholine	20.270	Medications	Cleaned up adult and pediatric dosing language for clarification (no change to dosing).
Vasopressin	20.280	Medications	Removed from protocols.
Behavioral Health Emergencies	30.025	Procedures	Changed letter D in the exclusion criteria to include IM droperidol as well as haloperidol. Add exclusionary criteria for CPAP or BiPap.
Continuous Positive Airway Pressure (CPAP)	30.032	Procedures	Added asthma as an indication for use. Added language about monitoring MAP.
Endotracheal intubation	30.040	Procedures	Changed dosing of pediatric atropine to match the atropine medication page.

2022 SUMMARY OF PROTOCOL UPDATES AND CHANGES

PROTOCOL TITLE	PAGE	SECTION	DESCRIPTION OF CHANGE
Modified Valsalva Manuever	30.110	Procedures	New protocol for treatment of stable tachycardia.
Patient restraint	30.120	Procedures	Added language to the notes section to address the monitoring of patients who have received pharmacological sedation.
Ambulance Diversion Guidelines	50.015	Operations	Removed Providence Newberg from the West Zone. Added Legacy Emanuel as providing hyperbaric services in the hospital services table.
Documentation	50.040	Operations	Added documentation of 12-lead interpretation.
Hydrogen Cyanide	70.020	Hazmat	Updated hydroxocobalamin dosing to match the poisoning and overdose protocol.
Hydrogen Flouride	70.030	Hazmat	Updated treatment of hydrofluoric acid to match the new revised poisoning and overdose protocol.
Organophosphates	70.040	Hazmat	Updated treatment of mild, moderate, and severe poisonings to match the new revised poisoning and overdose protocol.
Blood Draws		Washington County EMS Section	Updated protocol to match current equipment and standards.

2022 SUMMARY OF PROTOCOL UPDATES AND CHANGES

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Introduction to Protocols

These patient care protocols will go into effect January 3rd, 2022 for EMS providers of American Medical Response Clackamas, Banks Fire District #13, Bay City Fire Department, Boring Fire District #59, Clackamas Fire District #1, Confederated Tribes of Grand Ronde Department of Emergency Services, Cornelius Fire Department, Estacada Fire District #69, Forest Grove Fire & Rescue, Garibaldi Rural Fire District, Gaston Rural Fire District, Hillsboro Fire & Rescue, Hoodland Fire District #74, Lake Oswego Fire Department, McMinnville Fire Department, Metro West Ambulance, Nehalem Bay Fire & Rescue, Nestucca Rural Fire Protection District, Netarts-Oceanside Fire District, Rockaway Beach Volunteer Fire Department, Sandy Fire District #72, Sheridan Fire District, Southwest Polk Rural Fire Protection District, St. Paul Fire District, Tillamook Fire District, Tualatin Police, Tualatin Valley Fire & Rescue, Washington County Sheriff's Office, and West Valley Fire District.

These protocols, we believe, are the best of their type. Where evidence has been available, the Protocol Development Committee has diligently evaluated the material and drafted protocols that will assist us in providing excellent patient care. Where evidence is lacking, we have relied on best practices, expert advice and consensus to guide the development of the protocol or procedure. These protocols are reviewed on a regular basis and updated when necessary to reflect advances in the art and science pertaining to the care of the acutely ill and injured.

Remember that these protocols are guidelines. EMS is performed in a stressful environment with time-critical decisions and no specific patient care matrix can be developed that will cover every type of injury, illness, and complicating circumstance that EMT providers will encounter while providing on-scene care. It is our expectation that providers will use these protocols in conjunction with their training and experience to do what is best for each patient. From time to time, it is expected that circumstances will arise that are not covered within these protocols. In such instances, providers should function within their scope of practice and use all available resources (including On-Line Medical Control) to provide the best possible patient care.

Thanks to everyone who has aided in protocol development and review. Anything that is complex and includes detail is prone to errors. Please review these protocols carefully and route any potential errors, unclear directions, or suggestions for improvement to your agency's EMS Office.

Finally, we thank every one of you for your dedication and commitment every day to providing the best possible prehospital medical care to the citizens of our respective communities.

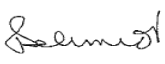
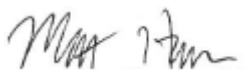
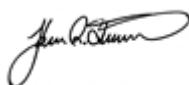
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