Jackson County Fire EMS Agencies Standing Orders

July 2019 Update Proposals

Multiple Xs mean protocol in somewhat final form
__ Single X under Proposed means still under consideration or review

	Proposed	Written	Responsible Person
Separate HazMat section	X		
Administrative Rules			
G – Documentation – edit language	X		
J – Ambulance Response – edit language	X		
K- CQI – remove "radio"	X		
P – Equipment List ?	X		
R – EMS Abbreviations VAD – Ventricular Assist Device	X	X	
T – DEA Controlled Substances – Controlled Substances Act changes	X		
X – Error reporting & Tracking - NEW	X		
update index			
EMS Forms			
EMS-ED Report Form – remove "radio"	X		
update index			

Patient Care Protocols			
Anaphylaxis - nebulized epinephrine if severe?	X		
Cardiac Arrest with ROSC – remove "radio"	X		

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Cardiac Chest Pain & STEMI Cell phone transmission of PHI preferred over radio transmission	X		
DNR – update with 2012 NAEMSP/ACSCOT guidelines	X		
Inhalation Injury – CPAP for CO toxicity RAD 57	X		
ID-X Activation – remove "radio"	X		
ID-A Activation – airborne transmitted diseases	X		
ID-D Activation – droplet transmitted diseases	X		
ID-C Activation – contact transmitted diseases	X		
ID-E Activation – Ebola (and similar) transmission	X		
ID-S Activation – severe respiratory transmitted diseases	X		

Sex Trafficking – how to recognize and what to do	X		
Stroke Stroke Scale result to be either Positive or Negative Cincinnati vs Los Angles vs Portland Stroke Scale? Stroke Activation for posterior stroke signs/symptoms? Cell phone transmission of PHI preferred over radio transmission	X		
Termination of Resuscitation – clarify	X		
Trauma – add MARCH Massive hemorrhage Airway Respirations Cardiac Hypothermia	X		
Trauma Activation – remove "radio"	X		
Wide Complex Tachycardia – Sodium Bicarbonate if known TCA/Diphenydramine overdose	X		
update index			

Medications			

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Standardize & list concentrations where possible	X		
Weight-based dosing	X		
Amiodarone – lower age/weight limit for pediatric v.fib?	X		
dL instead of dl for deciliter	X		
Crystalloid – change to balanced salt solution	X		
Epinephrine Review pediatric infusion dose Pediatric IV dose for non-paramedic?	X		
Fentanyl Clarify contraindications	X		
LVAD – title changed to VAD Providence St. Vincent's Hospital is the Oregon VAD Center	X	X	
Ketamine Clarify contraindications Define "severe hypertension"	X		
Lorazepam - for anxiety or muscle spasm	X		
Morphine Clarify contraindications	X		
Naloxone Clarify maximum mg and ml maximum IM	X		
Rocuronium to replace Succinylcholine?	X		
Sodium Bicarbonate – add for known Diphenhydramine poisoning with wide complex	X		
TXA – remove?	X		
update index			

Procedures			
BVM – new protocol? Pediatric BVM for kids & adults + infants? Infant BVM for infants Metronome for timing vs refill limiting valve Capnometry for all BVM	X		
Bariatric Transport – request via Mercy Flights	X		
CBD – Criteria Based Dispatching by 911	X		

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Double Sequential Defibrillation?	X		
iGel to replace King LT?	X		
Intranasal Medication Administration – clarify maximum volume	X		
Nasogastric tube - remove	X		
On-site Physician procedure	X		
Pre-existing central line access	X		
RSI – Rocuronium as preferred paralytic?	X		
Transport Ventilators - update	X		
update index - create (Optional) explanations	X		
MCI			
Allow for radio, cell or data communication?	X		
2 point triage system Palpable radial pulse (1 or 0 points) Motor GCS = 6 (1 or 0 points)	X		
Dead/Expectant care – collection area & location tag before movement	X		
Pediatric triage system	X		
Triage tags – eliminate or revise?	X		
Review & update	X		
update index			

The next regular update will be on July 1, 2019.

Please let me know of any other suggested changes, as well as corrections or concerns. Thanks.

Paul S. Rostykus, MD, MPH, FAEMS - Jackson County EMS Fire Agencies Supervising Physician

R. Jackson County EMS Approved Abbreviations

A&A	Albuterol & Atrovent
AC	antecubital
A-fib	atrial fibrillation
AAA	abdominal aortic aneurysm
ABD	abdomen
AICD	automatic implantable cardioverter-defibrillator
AMA	against medical advice
ASA	aspirin
bm	bowel movement
BP	blood pressure
BS	breath sounds
BT	bowel tones
BVM	bag valve mask
°C	Celsius/centigrade
CA	carcinoma
CABG	coronary artery bypass graft
C/C	chief complaint
CHF	congestive heart failure
CHI	closed head injury
cm	centimeter
cms	circulation, movement & sensation
CO	carbon monoxide
C/O	complains of
CO_2	carbon dioxide
COA	conscious, oriented, alert
CBG	capillary blood glucose
COPD	chronic obstructive pulmonary disease
CPSS	Cincinnati Prehospital Stroke Scale
C-STAT	Cincinnati Prehospital Stroke Severity Scale
CSF	cerebral spinal fluid
CPR	cardiopulmonary resuscitation
CT	computerized tomography
CVA	cerebral vascular accident
D/C	discontinue
Defib	defibrillation
DM	diabetes mellitus
DNR	Do Not Attempt Resuscitation
DOE	dyspnea on exertion
DTs	delirium tremens
Dx	diagnosis
EBL	estimated blood loss
ECG	electrocardiogram
EJ	external jugular
Epi	epinephrine
ET	endotracheal
$ETCO_2$	end tidal CO_2
ETA	estimated time of arrival
ETOH	ethyl alcohol
♀	female
°F	Fahrenheit
FB	foreign body
Fe	iron
FHT	fetal heart tones
fib	fibrillation
Fr	French
Fx	fracture
ga	gauge
GCS	Glasgow coma score
G_P_	gravida/para = # pregnancies/# deliveries > 20 weeks
GI	gastrointestinal
gm	gram
GSW	gunshot wound
GU	genitourinary
GYN	gynecological
HEENT	Head, Eyes, Ears, Nose, Throat
H_2O	water
H&P	history & physical
HTN	hypertension
Hx	history
IDDM	insulin dependent diabetes mellitus

IM	intramuscular
IN	intranasal
IO	intraosseous
irreg	irregular
IV	intravenous
J	joules
JVD	jugular venous distention
kg	kilogram
lb	pound
LBBB	left bundle branch block
LLQ	lower left quadrant
L/min	liters per minute
LMP	last menstrual period
LOC	level or loss of consciousness
Lt	left
LUQ	left upper quadrant
LVAD	left ventricular assist device
♂	male
MAE	moves all extremities
mcg	microgram
meq	milliequivalent
mg	milligram
$MgSO_4$	magnesium sulfate
MI	myocardial infarction
min	minute(s)
misc	miscellaneous
ml	milliliter
mm	millimeter
MOI	mechanism of injury
MS	multiple sclerosis
MVC	motor vehicle crash
N/A	not applicable
N&V	nausea and vomiting
Na	sodium
NaCl	sodium chloride
NC	nasal cannula
NG	nasogastric
NIBP	non-invasive blood pressure
NKDA	no known drug allergies
N/V/D	nausea, vomiting, diarrhea
neg	negative
NIDDM	non-insulin dependent diabetes mellitus
NPA	nasopharyngeal airway
NPO	nothing by mouth
NRB	non-rebreather
NS	normal saline
NSR	normal sinus rhythm
NTG	nitroglycerin
N_2O	nitrous oxide
OHCA	Out of Hospital Cardiac Arrest
OLMC	on-line medical control
OG	orogastric tube
OPA	oropharyngeal airway
oz	ounce
O_2	oxygen
P	pulse or heart rate
PAC	premature atrial contraction
PAT	paroxysmal atrial tachycardia
PCR	patient care report
PE	physical exam
peds	pediatrics
PERL	pupils equal & reactive to light
PMH	past medical history
po	by mouth
POLST	Physician Orders for Life Sustaining Treatment
PPE	personal protective equipment
pr	per rectal
prn	as needed
prox	proximal
PSVT	paroxysmal supraventricular tachycardia
pt	patient
PTA	prior to arrival
pulm	pulmonary
PVC	premature ventricular contractions
PVD	peripheral vascular disease
R	respirations

RBBB	right bundle branch block
RLQ	right lower quadrant
R/O	rule out
ROSC	Return of Spontaneous Circulation
RSI	rapid sequence intubation
Rt	right
RUQ	right upper quadrant
RX	prescription or treatment
rxn	reaction
SpO_2	oxygen saturation/pulse oximetry
SL	sublingual
S.O.A.P.	subjective, objective, assessment, plan
SOB	shortness of breath
SQ	subcutaneous
stat	at once, immediately
STEMI	ST elevation MI
ST	sinus tachycardia
SVT	supraventricular tachycardia
SZ	seizure
T	temperature
TKO	to keep open
TOR	Termination of Resuscitation
tsp	teaspoon
Tx	treatment
URI	upper respiratory infection
UTI	urinary tract infection
UV	umbilical vein
VAD	ventricular assist device
vag	vaginal
VF	ventricular fibrillation
vo	verbal order
VT	ventricular tachycardia
V/S	vital signs
WNL	within normal limits
WPD	warm, pink, dry
WPW	Wolff-Parkinson-White
x	multiplied by
y/o	years old
Δ	change
@	at
°C	Degrees Centigrade
°F	Degrees Fahrenheit
↑	increase
↓	decrease
1°	primary
2°	secondary
♀	female
♂	male
Ψ	psych
Ø	None or nothing
>	Greater than
<	Less than
≥	Greater than or equal to
≤	Less than or equal to

Agency Abbreviations

AVFD	Applegate Valley Fire Department
ACH	Ashland Community Hospital
APD	Ashland Police Department
AFR	Ashland Fire & Rescue
AMR	American Medical Response
ARFF	RVI/Medford Airport Fire Department
ECSO	Emergency Communications of Southern Oregon
FD3	Fire District 3
JCFD4	Jackson County Fire District #4
JCFD5	Jackson County Fire District #5
JCFD6	Jackson County Fire District #6
JCSO	Jackson County Sheriff Office
JFD	Jacksonville Fire Department
MFR	Medford Fire & Rescue
MPD	Medford Police Department
MFI	Mercy Flights, Inc.
OSP	Oregon State Police
PMMC	Providence Medford Medical Center
RRMC	Rogue Regional Medical Center
RRFD	Rogue River Fire District
TRMC	Three Rivers Medical Center

EMS Provider Abbreviations

EMR	Emergency Medical Responder
EMT	Emergency Medical Technician
AEMT	Advanced Emergency Medical Technician
EMT-I	Emergency Medical Technician - Intermediate

DOUBLE DEFIBRILLATION

EMT-I, Paramedic

INDICATIONS:

Adult patients in cardiac arrest with persistent ventricular fibrillation.

PRECAUTIONS:

Double defibrillation to be used only for persistent ventricular fibrillation.
Recurrent ventricular fibrillation should be treated in the same manner as the last successful defibrillation.

PROCEDURE:

1. Continue 2 minute cycles of High Performance CPR with a defibrillation shock between each cycle if indicated
2. Have performed 3 single defibrillation shocks without a change in rhythm from ventricular fibrillation
3. Place a 2nd set of defibrillator pads in the alternate orientation
   If original pad placement was right upper chest & left apex, then use anterior/posterior as alternate pad placement
   If original pad placement was anterior/posterior, then use right upper chest & left apex as alternate pad placement
4. Administer a maximum charge defibrillation shock with the defibrillator pads in the alternate orientation
5. If no change in rhythm from ventricular fibrillation, administer a 2nd maximum charge defibrillation shock with the defibrillator pads in the alternate orientation
6. If no change in rhythm from ventricular fibrillation, connect a defibrillator to each set of pads (both original and alternate placement) and deliver maximum defibrillation shock from each defibrillator simultaneously (one EMS provider pushes the buttons on both defibrillators)
7. If patient develops ROSC, support patient's airway and ventilation, continuously monitor patient and vital signs, and transport patient to the hospital.
   If patient with ROSC develops recurrent ventricular fibrillation, defibrillate at last energy setting.
8. If no change in rhythm from ventricular fibrillation with double defibrillation:
   Contact Online Medical Control (OLMC) to discuss the situation.
   Deliver a 2nd maximum defibrillation shock from each defibrillator simultaneously.
   Prepare patient for transport to the hospital.
9. Send PCR to the agency's supervising physician

VENTRICULAR ASSIST DEVICE (VAD)

SUBJECTIVE:

Ventricular Assist Devices (VADs) are mechanical pumps implanted in patients with severe heart failure awaiting or in place of a heart transplant allowing the patient to return home.

The VAD is dependent on an external power supply, either 110 volt AC or battery. A patient with a VAD, along with their close family members or friends, will have received extensive training in the use and operation of the VAD from the center which implanted the VAD.

Almost all VAD patients will have had a Left Ventricular Assist Devices (LVAD) implanted and some may also have had a Right Ventricular Assist Device (RVAD) implanted.

OBJECTIVE:

The level of consciousness will be of prime importance in evaluating the patient's condition.

Patients with a VAD will likely not have a palpable pulse, blood pressure detectable by EMS personnel (unless using a Doppler) or reliable pulse oximeter reading. The mean arterial pressure (MAP), if measureable, should be at least 50 mm Hg.

End tidal CO_2 measurements will be reliable with a normal value of 35-45 mm Hg and should be at least 20 mm Hg.

A hum from the implanted pump will usually be heard or palpated in the patient's central or left lower chest.

Most patients with a VAD will have received an Automatic Implantable Cardioverter Defibrillator (AICD).

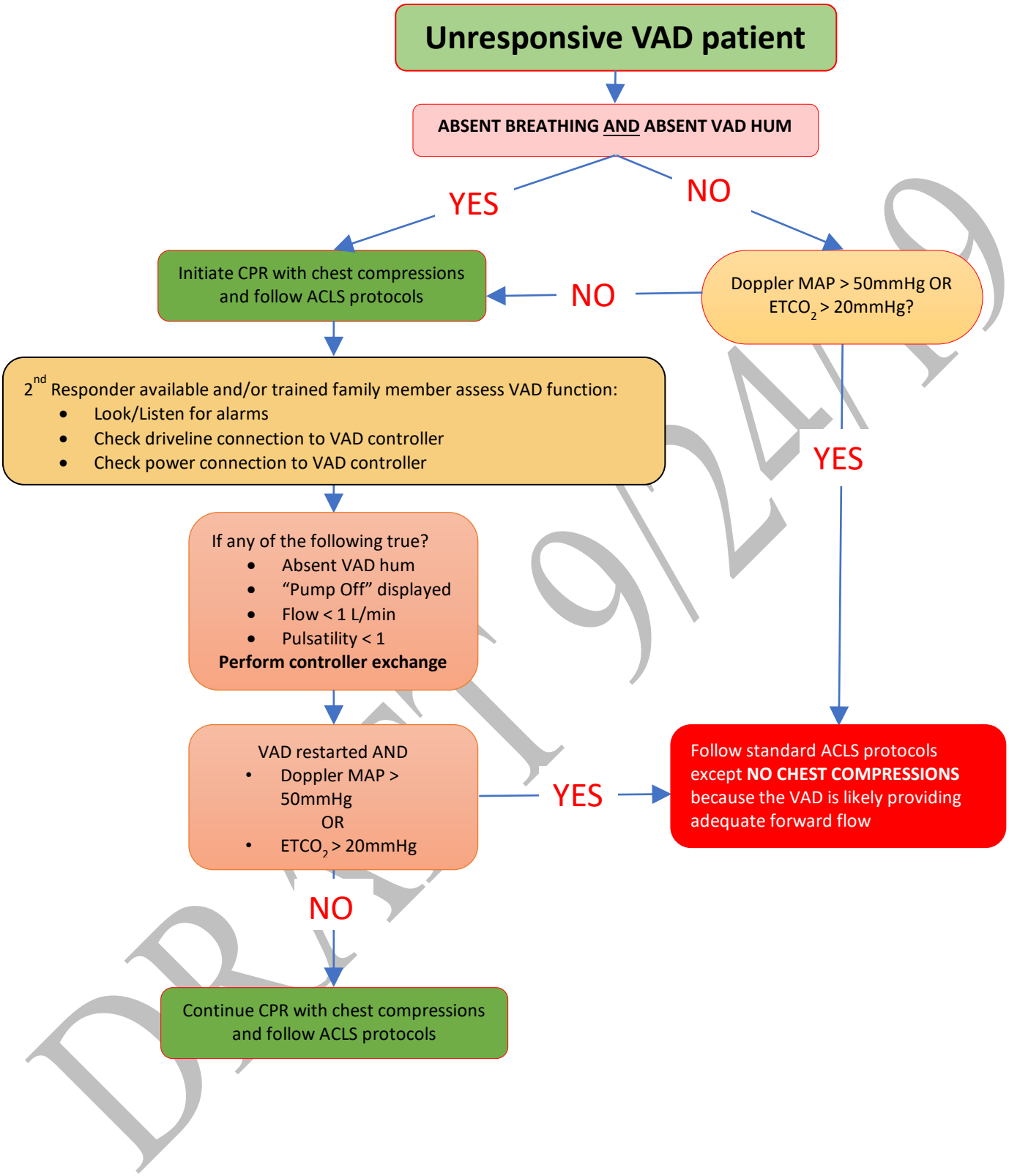
ASSESSMENT:

Patient with an VAD

The 2 most common reasons for VAD pump failure are disconnection of the power and failure of the driveline.

TREATMENT:

EMR: **EMT:**	• Oxygen • Ensure that the VAD controller is On and working. Exchange the controller. • Defibrillation can be performed normally. • $ETCO_2$ monitoring. • Contact the patient's VAD Center, or Providence St. Vincent's Hospital VAD Center at (971) 678-4042, or Stanford VAD Center (650) 723-4000 • Package patient to avoid constriction on the VAD or tension on cables. • One patient companion knowledgeable about the VAD should be transported in the back of the ambulance along with the patient. • Transport <u>all</u> VAD equipment (power supply, controllers, batteries, emergency backup bag, etc.) with the patient. • Any patient with an VAD should be transported to PMMC or RRMC. • Chest compressions and CPR may be performed if: The patient is unconscious, apneic and without an VAD hum.
AEMT	• Large bore IV or IO with crystalloid
EMT-I: **Paramedic:**	• Cardiac monitoring • Cardiac medications can be administered • 12 lead ECG


Unresponsive VAD patient
ABSENT BREATHING AND ABSENT VAD HUM
YES
NO
Initiate CPR with chest compressions and follow ACLS protocols
NO
Doppler MAP > 50mmHg OR ETCO2 > 20mmHg?
2nd Responder available and/or trained family member assess VAD function:
Look/Listen for alarms
Check driveline connection to VAD controller
Check power connection to VAD controller
YES
If any of the following true?
Absent VAD hum
"Pump Off" displayed
Flow < 1 L/min
Pulsatility < 1
Perform controller exchange
VAD restarted AND
Doppler MAP > 50mmHg
OR
ETCO2 > 20mmHg
YES
Follow standard ACLS protocols except NO CHEST COMPRESSIONS because the VAD is likely providing adequate forward flow
NO
Continue CPR with chest compressions and follow ACLS protocols