



Davidson County EMS  
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June 10, 2025

MEMORANDUM FOR North Carolina Office of EMS

SUBJECT: 2025 Protocol Changes

1. I have reviewed the current agency protocols and am proposing the following changes. We have also sent copies of the new protocols for your review, as requested.

Protocol	Requested Change
UP 11	Maximum Fentanyl single dose to 50mcg, add Ketorolac 15 mg IM
UP 13	Remove "10mg" from Pearls
UP 15	Remove MAP goals, push dose Epinephrine to 5mcg & Phenylephrine to 50mcg throughout, initial fluid resuscitation with 500mL NS/LR
UP 18	Midazolam to 2.5mg IV/IO/IN, add Ativan 2mg IM
AR 1	Remove "Preferably $\geq 94\%$ "
AR 2	Remove "Preferably $\geq 94\%$ "
AR 5	Goal SaO <sub>2</sub> $\geq 94\%$ for "breathing adequate", remove "Preferably $\geq 94\%$ " elsewhere
AR 6	Remove "Preferably $\geq 94\%$ "
AR 7	Add "Repeat as needed X3" to Albuterol Nebulizer treatment
AR 8	Fentanyl dose to 50mcg (adult) and 1 mcg/kg (peds)
AC 2	Push dose Epinephrine to 5mcg every 2 mins PRN, Midazolam to 2.5mg
AC 3	Change "Shockable Rhythm" to "Shock Advised?"
AC 4	Remove Morphine, Fentanyl dose to 50mcg, added image of the Smith-Modified Sgarbossa's Criteria to page 1
AC 5	Change "SPB" to "SBP" throughout, remove MAP goals
AC 6	Remove Adenosine for Unstable/Serious S&S patients, narrow and irregular energy to 200J & note they may repeat @ 200J for subsequent attempts, titrate to goal HR of <120bpm, delete redundant Adenosine dose, add "Calcium channel blockers (i.e., Diltiazem) should be avoided in patients with a history of CHF as they can lead to hemodynamic collapse. In these patients, rate control is less important, and they may benefit from a low volume fluid bolus (250-500mL).", delete extra space in "54 %" on page 2
AC 7	Switch Lidocaine & Amiodarone on the front for ease of understanding, delete 5mg Midazolam IN, change to a single repeat 12 mg Adenosine dose, change symptomatic HR to 150 bpm
AC 9	Change to "Torsades de pointes"
AC 10	Maintain SpO <sub>2</sub> form 94-98%, remove MAP goals
AC 11	Remove "(Optional)"
AC 12	Remove "(Optional)"
AC 14	Title all pages "Mechanical Circulatory Support LVAD, RVAD, and Bi-VAD"

AM 1	Diphenhydramine to 50mg all routes, IM Epinephrine to 0.5mg, push dose Epinephrine to 5mcg, remove MAP goal
AM 2	Blood glucose goal to $\geq 70\text{mg/dL}$
AM 5	Remove MAP goals, push dose Epinephrine to 5mcg & phenylephrine to 50mcg throughout
AO 3	Add boxes that allow for TXA 2g IV/IO in <i>"Post-partum hemorrhage with SBP &lt;90mmHg or Uncontrolled vaginal hemorrhage with signs of shock."</i> , Oxytocin added
PM 2	Add EMT Glucagon
TB 3	Midazolam to 0.1mg/kg for peds throughout, near the <i>"Entrapped for &gt;2hrs"</i> box add <i>"Give bolus IV fluids (see Pearls) then start..."</i> , remove table on page 2
TB 4	Cefazolin dose for peds to 30mg/kg (maximum 2g)
TB 5	Add text box from State Protocol, change to read <i>"Titrate SpO2 to 100%"</i> & <i>"Prevent oxygen desaturation events"</i>
TB 10	Remove <i>"(Optional)"</i>
TE 1	Midazolam 2.5 mg IV/IO (adult) & 0.1mg/kg (peds), remove table on page 2
TE 7	Naloxone to 2mg

2. For questions related to this memorandum, please contact me directly at [Nicholas.petit@davidsoncountync.gov](mailto:Nicholas.petit@davidsoncountync.gov).

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