

The holder of a certificate issued pursuant to NAC 450B.360 shall not practice beyond the scope of the certificate unless authorized by the health authority which issued the certificate.

NAC 450B.461(2) states in pertinent part:

No advanced emergency technician (AEMT) or paramedic may administer any dangerous drug while serving as an attendant in a service unless the dangerous drug is named on the inventory of medication issued by the medical director of the service and:

- (a) An order is given to the AEMT or paramedic by a physician or registered nurse supervised by a physician; or
- (b) The AEMT or paramedic is authorized to administer the drug pursuant to a written protocol that is approved by the medical director of the service and on file with the Division.

Wendover Ambulance is requesting a variance to allow Advanced Emergency Medical Technicians (AEMTs) to administer **Amiodarone** and **Lidocaine** during resuscitation of cardiac arrest patients with shockable rhythms (ventricular fibrillation and pulseless ventricular tachycardia). The applicant cites rural staffing limitations, extended transport times, and the need to follow current ACLS standards in the absence of a Paramedic.

The authority of the State Board of Health to consider and grant a variance from the requirements of a regulation is set forth at NRS 439.200 and NAC 439.200 – 439.280.

Persons wishing to comment upon the proposed variance may appear at the scheduled public hearing or may submit written testimony at least five days before the scheduled hearing to:

Secretary, State Board of Health
Division of Public and Behavioral Health
4150 Technology Way, Suite 300
Carson City, NV 89706

Anyone wishing to testify for more than five minutes on the proposed variance must petition the Board of Health at the above address. Petitions shall contain the following: 1) a concise statement of the subject(s) on which the petitioner will present testimony; 2) the estimated time for the petitioner's presentation.

This notice has also been posted at the following locations:

DIVISION OF PUBLIC AND BEHAVIORAL HEALTH (DPBH), 4150 TECHNOLOGY WAY, CARSON CITY, NV
DIVISION OF PUBLIC AND BEHAVIORAL HEALTH WEBSITE:

<http://dpbh.nv.gov/Boards/BOH/Meetings/Meetings/>

Joe Lombardo
Governor

Richard Whitley,
MS
Director



DEPARTMENT OF HUMAN SERVICES



NEVADA DIVISION of PUBLIC
and BEHAVIORAL HEALTH



Dena Schmidt
Administrator

Ihsan Azzam,
Ph.D., M.D.
*Chief Medical
Officer*

MEMORANDUM

DATE: August 13, 2025
TO: John Pennell, Chair
State Board of Health
FROM: Dena Schmidt, Administrator
Division of Public and Behavioral Health
RE: Case # 788, Wendover Ambulance

Regulation/Statutory Authority

Nevada Administrative Code (NAC) 450B.384 states:

The holder of a certificate issued pursuant to NAC 450B.360 shall not practice beyond the scope of the certificate unless authorized by the health authority which issued the certificate.

NAC 450B.461(2) states in pertinent part:

No advanced emergency medical technician (AEMT) or paramedic may administer any dangerous drug while serving as an attendant in a service unless the dangerous drug is named on the inventory of medication issued by the medical director of the service and:

- (a) An order is given to the AEMT or paramedic by a physician or registered nurse supervised by a physician;
- (b) The AEMT or paramedic is authorized pursuant to administer the drug pursuant to a written protocol that is approved by the medical director of the service and on file with the Division

Summary of Variance Request:

On May 23, 2025, Wendover Ambulance ("Applicant") submitted a request for a variance from the requirements of NAC 450B.461(2) to allow AEMT's to administer **Amiodarone** and **Lidocaine** during resuscitation of cardiac arrest patients with shockable rhythms (ventricular fibrillation and pulseless

ventricular tachycardia). Applicant cites rural staffing limitations, extended transport times, and the need to follow current ACLS standards in the absence of a Paramedic.

Degree of risk to public health or safety:

Amiodarone is widely used as a first-line antiarrhythmic in cardiac arrest, with a relatively favorable safety profile in pulseless patients. Lidocaine, while also used in cardiac arrest, carries a narrower therapeutic window, more complex pharmacokinetics, and increased risk for toxicity and neurologic complications if misused.

Given the context of AEMT training, the variability in preparation and dosing for Lidocaine, and its declining role in current ACLS algorithms, Lidocaine presents a higher risk for prehospital misuse by providers not trained to the Paramedic level.

Exceptional and undue hardship:

Applicant serves a remote region where a Paramedic may not be available for every cardiac arrest response. In these circumstances, patients may suffer decreased chances of return of spontaneous circulation (ROSC) if ACLS medications are withheld. This creates a legitimate and urgent care gap for which Amiodarone could be a safe and effective intervention under medical oversight.

Intent of Regulation:

NAC 450B.384 and 450B.461 are intended to protect public safety by restricting the administration of medications, especially dangerous drugs to licensed providers within their scope of practice, and only under approved protocols. The regulation ensures a standardized and safe level of care across the state, following the National EMS Scope of Practice Model.

Staff Recommendation

DPBH staff recommends the State Board of Health approve Applicant's variance to NAC 450B.384 and NAC 450B.461 for the administration of **Amiodarone** by AEMT's ONLY.

DPBH staff **does not** support approval of **Lidocaine** administration by AEMTs at this time due to its increased risk profile and the complexity of safe administration without Paramedic-level training.

If approved, the variance for Amiodarone only becomes effective if the following stipulations are met:

1. Only AEMTs who have completed a documented, Medical Director-approved training program specific to Amiodarone may administer this medication. The training must include:
 - Cardiac arrest pharmacology
 - Indications and contraindications for Amiodarone
 - Preparation and administration of IV/IO doses
 - Recognition and management of post-resuscitation complications
2. Training records must be submitted to the Division prior to implementation.
3. Amiodarone may only be administered during confirmed pulseless cardiac arrest (ventricular fibrillation or pulseless ventricular tachycardia) and only:

- Under online medical control; or
 - As part of a standing protocol approved by the Medical Director and on file with the Division
4. All administrations of Amiodarone must be reviewed by the Medical Director within 72 hours.
5. Any adverse events, medication errors, or deviations from protocol must be reported to the Division within 72 hours, including:
- The nature of the occurrence
 - Remediation steps taken
 - Recommendations for additional training or removal of medication privileges
6. **Lidocaine** must remain restricted to Paramedic use as defined by current state regulation and scope of practice guidelines.

Impairment to the purpose of the regulation:

Approving Amiodarone with the above stipulations does not substantially impair the purpose of the regulation. It allows for limited expansion in a rural frontier setting under strict controls and medical oversight, while maintaining public safety. Denial of Lidocaine maintains regulatory integrity by preserving medication use within appropriate training levels.

Public Comments:

[Enter any public comments staff may have received before variance is heard]

Presenter:

Bobbie Sullivan, Emergency Medical Services Program Manager

Attachments:

None.



NEVADA DIVISION of PUBLIC
and BEHAVIORAL HEALTH



NEVADA STATE BOARD OF HEALTH
4150 Technology Way, Suite 300 CARSON CITY, NV 89706

APPLICATION FOR VARIANCE

Please check the appropriate box that pertains to the NAC for which you are requesting a variance.

☐

Division Administration
(NAC 439, 441A, 452, 453A, & 629)

☐

Health Care Quality & Compliance
(NAC 449, 457, 459 & 652)

☐

Child, Family & Community Wellness
(NAC 392, 394, 432A, 439, 441A, & 442)

☒

Office of State Epidemiology
(NAC 440, 450B, 452, 453, 453A, & 695C)

☐

Public Health & Clinical Services
(NAC 211, 444, 446, 447, 583, & 585)

Date: _____

Name of Applicant: Wendover Ambulance

Phone: 801-516-1747

Mailing Address: P.O. Box 2530

City: W. Wendover

State: NV

Zip: 89883

We do hereby apply for a variance to
chapter/section 450B.384 and 450B.461 of the Nevada
Administrative Code (NAC). (For example: NAC 449.204)

Title of section in
question: 450B.384 EMT practice beyond scope of certificate prohibited.
450B.461 Restrictions on authority to administer

Statement of existing or proposed conditions in violation of the NAC:

AEMT Scope of Practice does not allow for the administration of Amiodarone and
Lidocaine by AEMTs. Both are a Schedule IV controlled substance that meets the
definition for "dangerous drug". Wendover Ambulance proposes to utilize Amiodarone
and Lidocaine under strict protocols and on-line medical direction for Pulseless Cardiac
Arrest, V-fib, V-tach.



NEVADA STATE BOARD OF HEALTH
4150 Technology Way, Suite 300 CARSON CITY, NV 89706

APPLICATION FOR VARIANCE

Date of initial operation (if existing): 10-01-1987

ATTENTION: Please read this section closely. Your request for variance will be examined against these criteria:

Any person who, because of unique circumstances, is unduly burdened by a regulation of the State Board of Health and thereby suffers a hardship and the abridgement of a substantial property right may apply for a variance from a regulation. (NAC 439.200(1))

1. The State Board of Health will grant a variance from a regulation only if it finds from the evidence presented at the hearing that:
 - (a) There are circumstances or conditions which:
 - (1) Are unique to the applicant;
 - (2) Do not generally affect other persons subject to the regulation;
 - (3) Make compliance with the regulation unduly burdensome; and
 - (4) Cause a hardship to and abridge a substantial property right of the applicant; and
 - (b) Granting the variance:
 - (1) Is necessary to render substantial justice to the applicant and enable him to preserve and enjoy his property; and
 - (2) Will not be detrimental or pose a danger to public health and safety.
2. Whenever an applicant for a variance alleges that he/she/they suffers or will suffer economic hardship by complying with the regulation, they must submit evidence demonstrating the costs of compliance with the regulation. The Board will consider the evidence and determine whether those costs are unreasonable. (NAC 439.240)

Therefore, it is important for your variance request to be as complete as possible. It is your responsibility to attach documentation supporting your variance request.

Statement of degree of risk of
health

Risk will be minimal due to the training of AEMTs directed and over-
seen by Medical Director. Strict protocols have been written and online medical control will be required.
AEMTs are currently and will maintain ACLS (advanced cardiac life support) certification. Due to staffing
shortage, many only have AEMTs on ambulance and Cardiac patients will suffer undue harm due to inability
of AEMTs to deliver current best practice cardiac care meds until meeting a helicopter.



NEVADA STATE BOARD OF HEALTH
4150 Technology Way, Suite 300 CARSON CITY, NV 89706

APPLICATION FOR VARIANCE

Please state in detail the circumstances or conditions which demonstrate that:

1. An exceptional and undue hardship results from a strict application of the Regulation:

See the attached request document for additional information.

2. The variance, if granted, would not:

A. Cause substantial detriment to the public welfare.

See the attached request document for additional information.

B. Impair substantially the purpose of the regulation from which the application seeks a variance.
See the attached request document for additional information.

The bureau may require the following supporting documents to be submitted with and as a part of this application:

Specific Request:



NEVADA STATE BOARD OF HEALTH
4150 Technology Way, Suite 300 CARSON CITY, NV 89706

APPLICATION FOR VARIANCE

1. Legal description of property concerned
- ☐ 2. General area identification map
- ☐ 3. Plot map showing locations of all pertinent items and appurtenances
- ☐ 4. Well log (if applicable)
- ☐ 5. Applicable lab reports
- ☐ 6. Applicable engineering or construction/remodeling information
- ☐ 7. Other items (see following pages)

This application must be accompanied by evidence demonstrating the costs of your compliance with regulations or specific statutory standards. Your request will be placed on the Board of Health agenda 40 days or more after receipt in this office if accompanied by the required fee (NAC 439.210). The application and supporting documentation will form the basis for the Division of Public and Behavioral Health staff report and recommendation(s) to the Board. Failure to respond to the above statements may cause the Board to deny consideration of the application at the requested Board meeting.

☒ I am/we are requesting this variance request be placed on the next regularly scheduled Board of Health agenda. It is understood that I/we can attend in person at either physical location in Carson City or Las Vegas or we may attend virtual.

Signature: _____

Printed Name: Lauara Lisk

Title: _____

President/CEO/AEMT

Date: _____

05/20/2025



NEVADA DIVISION of PUBLIC
and BEHAVIORAL HEALTH



NEVADA STATE BOARD OF HEALTH
4150 Technology Way, Suite 300 CARSON CITY, NV 89706

APPLICATION FOR VARIANCE

**PLEASE SUBMIT YOUR APPLICATION FOR VARIANCE BY USING
ANY OF THE FOLLOWING METHODS:**

MAIL TO:

Secretary, Nevada State Board of Health
Division of Public and Behavioral Health
4150 Technology Way, Suite 300
Carson City, NV 89706

FAX:

775-687-7570

EMAIL:

DPBH@health.nv.gov

StateBOH@health.nv.gov



NEVADA STATE BOARD OF HEALTH
4150 Technology Way, Suite 300 CARSON CITY, NV 89706

APPLICATION FOR VARIANCE

Please check the appropriate box that pertains to the NAC for which you are requesting a variance.

☐

Division Administration
(NAC 439, 441A, 452, 453A, & 629)

☐

Health Care Quality & Compliance
(NAC 449, 457, 459 & 652)

☐

Child, Family & Community Wellness
(NAC 392, 394, 432A, 439, 441A, & 442)

☒

Office of State Epidemiology
(NAC 440, 450B, 452, 453, 453A, & 695C)

☐

Public Health & Clinical Services
(NAC 211, 444, 446, 447, 583, & 585)

Date: _____

Name of Applicant: Wendover Ambulance

Phone: 801-516-1747

Mailing Address: P O Box 2530

City: W. Wendover

State: NV

Zip: 89883

We do hereby apply for a variance to
chapter/section 450B.384 and 450B.461 of the Nevada
Administrative Code (NAC). (For example: NAC 449.204)

Title of section in
question:

450B.384 EMT practice beyond scope of certificate prohibited. 450B.461 Restrictions on authority to administer

Statement of existing or proposed conditions in violation of the NAC:

AEMT Scope of Practice does not allow for administration of Amiodarone and Lidocaine by AEMTs. Both
are a Schedule IV controlled substance that meets the definition for "dangerous drug".

Wendover Ambulance proposes to utilize Amiodarone and Lidocaine under strict protocols
and on-line medical direction for Pulseless Cardiac Arrest, V-fib, V-tach.



NEVADA STATE BOARD OF HEALTH

4150 Technology Way, Suite 300 CARSON CITY, NV 89706

APPLICATION FOR VARIANCE

Date of initial operation (if existing): 10-01-1987

ATTENTION: Please read this section closely. Your request for variance will be examined against these criteria:

Any person who, because of unique circumstances, is unduly burdened by a regulation of the State Board of Health and thereby suffers a hardship and the abridgement of a substantial property right may apply for a variance from a regulation. (NAC 439.200(1))

1. The State Board of Health will grant a variance from a regulation only if it finds from the evidence presented at the hearing that:
 - (a) There are circumstances or conditions which:
 - (1) Are unique to the applicant;
 - (2) Do not generally affect other persons subject to the regulation;
 - (3) Make compliance with the regulation unduly burdensome; and
 - (4) Cause a hardship to and abridge a substantial property right of the applicant; and
 - (b) Granting the variance:
 - (1) Is necessary to render substantial justice to the applicant and enable him to preserve and enjoy his property; and
 - (2) Will not be detrimental or pose a danger to public health and safety.
2. Whenever an applicant for a variance alleges that he/she/they suffers or will suffer economic hardship by complying with the regulation, they must submit evidence demonstrating the costs of compliance with the regulation. The Board will consider the evidence and determine whether those costs are unreasonable. (NAC 439.240)

Therefore, it is important for your variance request to be as complete as possible. It is your responsibility to attach documentation supporting your variance request.

Statement of degree of risk of
health

Risk will be minimal due to the training of AEMTs directed
and over-seen by Medical Director. Strict protocols have been written and online medical
control will be required. AEMTs are currently and will maintain ACLS (advanced cardiac life support)
certification. Due to staffing shortage, many only have AEMTs on ambulance and Cardiac patients will suffer undue
harm due to inability of AEMTs to deliver current best practice cardiac care meds until meeting a helicopter.



NEVADA DIVISION of PUBLIC
and BEHAVIORAL HEALTH



NEVADA STATE BOARD OF HEALTH
4150 Technology Way, Suite 300 CARSON CITY, NV 89706

APPLICATION FOR VARIANCE

Please state in detail the circumstances or conditions which demonstrate that:

1. An exceptional and undue hardship results from a strict application of the Regulation:

See the attached request document for additional information.

2. The variance, if granted, would not:

- A. Cause substantial detriment to the public welfare.

See the attached request document for additional information.

- B. Impair substantially the purpose of the regulation from which the application seeks a variance.

See the attached request document for additional information

The bureau may require the following supporting documents to be submitted with and as a part of this application:

Specific Request:



NEVADA STATE BOARD OF HEALTH
4150 Technology Way, Suite 300 CARSON CITY, NV 89706

APPLICATION FOR VARIANCE

1. Legal description of property concerned
- _ 2. General area identification map
- _ 3. Plot map showing locations of all pertinent items and appurtenances
- _ 4. Well log (if applicable)
- _ 5. Applicable lab reports
- _ 6. Applicable engineering or construction/remodeling information
- _ 7. Other items (see following pages)

This application must be accompanied by evidence demonstrating the costs of your compliance with regulations or specific statutory standards. Your request will be placed on the Board of Health agenda 40 days or more after receipt in this office if accompanied by the required fee (NAC 439.210). The application and supporting documentation will form the basis for the Division of Public and Behavioral Health staff report and recommendation(s) to the Board. Failure to respond to the above statements may cause the Board to deny consideration of the application at the requested Board meeting.

☒ I am/we are requesting this variance request be placed on the next regularly scheduled Board of Health agenda. It is understood that I/we can attend in person at either physical location in Carson City or Las Vegas or we may attend virtual.

Signature: _____

Printed Name: _____

Title: _____

Date: _____

Lauara Lisk

Lauara Lisk

President/CEO/AEMT

05-20-2025



NEVADA DIVISION of PUBLIC
and BEHAVIORAL HEALTH



NEVADA STATE BOARD OF HEALTH
4150 Technology Way, Suite 300 CARSON CITY, NV 89706

APPLICATION FOR VARIANCE

**PLEASE SUBMIT YOUR APPLICATION FOR VARIANCE BY USING
ANY OF THE FOLLOWING METHODS:**

MAIL TO:

Secretary, Nevada State Board of Health
Division of Public and Behavioral Health
4150 Technology Way, Suite 300
Carson City, NV 89706

FAX:

775-687-7570

EMAIL:

DPBH@health.nv.gov
StateBOH@health.nv.gov

Wendover Ambulance
427 Mesa Street
P.O. Box 2530
West Wendover, Nevada 89883
(775) 664-2081
Fax: (775) 664-2244
E-mail: lauara.wendoverambulance@gmail.com

NAC 439.200 states that “Any person who, because of unique circumstances, is unduly burdened by a regulation of the State Board of Health and thereby suffers a hardship and the abridgement of a substantial property right may apply for a variance from a regulation.”

Wendover Ambulance is seeking a variance to Nevada Administrative Codes 450B.384 and 450B.461

The specific variance requested is:

Allowing Wendover Ambulance Advanced Emergency Medical Technicians (AEMTs) to administer Amiodarone and Lidocaine to patients of Wendover Ambulance for Cardiac Arrest care under a set of very strict Protocols, guidelines and training requirements under authority of the Medical Director.

1. The State Board of Health will grant a variance from a regulation only if it finds from the evidence presented at the hearing that:
 - a. There are circumstances which:
 - i. Are unique to the applicant.
 - ii. Do not generally affect other persons subject to the regulation;
 - iii. Make compliance with the regulation unduly burdensome; and
 - iv. Cause a hardship to abridge a substantial property right of the applicant;
 - b. Granting the Variance:
 - i. Is necessary to render substantial justice to the applicant and enable him to preserve and enjoy his property; and
 - ii. Will not be detrimental or pose a danger to public health and safety.

Wendover Ambulance will provide information to show that our agency has unique circumstances and is burdened by this regulation in regards to the use of Amiodarone and Lidocaine for our cardiac arrest patients.

As some background information, Wendover Ambulance is headquartered in West Wendover, Nevada and began business in 1987. We are an ALS Agency and operate Paramedics and AEMTs (Advanced Emergency Medical Technicians) and EMTs (Emergency Medical Technicians). Like most other rural agencies in Nevada and in fact the whole country, recruitment and retention of Paramedics is difficult at best and so we operate with a combination of Paramedic and AEMT or Paramedic EMT. Larger metropolitan cities have a larger tax base and are in a better position to pay large salaries to Paramedics and so it is extremely difficult for rural agencies to provide the advanced care that is just as needed in rural areas as in the cities, Many times, there will be a call for a second or third ambulance so the subsequent ones will most likely only be staffed with AEMTs as the ALS provider. It is during these times that Wendover Ambulance needs the requested variance.

As some may already know, the state line between Wendover, Utah and West Wendover, Nevada bisects the two Cities and states of Nevada and Utah. This certainly causes some unique situations for our Agency. Because we provide Emergency Medical Services and Transportation to patients on both sides of the line, and transport to hospitals in the Salt Lake City area as well as Elko and Ely Nevada, we are licensed by the Nevada Department of Health as well as the Utah Department of Public Safety. All our Paramedics, AEMTs and EMTs are also licensed in each state.

Wendover is very rural, as the closest hospitals are more than 115 miles away – in any direction. We also cover the Iapah Reservation 65 miles southeast of Wendover and it is considered a Frontier Area by HRSA. Each year Wendover has approximately 950 to 1000 patient calls.

We are governed by the EMS regulations of each state- Nevada and Utah and for the most part they are similar, but a marked difference is the scope of practice of AEMTs. Utah has had a state EMS Medical Director, Dr. Peter Tailac since 2012 who has worked with the Utah State EMS Committee and various sub committees to establish state-wide EMS Protocols. While the Utah Protocol- 2013 version was updated two years ago (2023), Wendover Ambulance is still utilizing the 2013 Wendover Ambulance Protocols version. Based on the Utah 2013 scope of practice for AEMTs these protocols allow for more medication in Cardiac Arrest/Shockable Rhythms than Nevada allows.

The current 2013 Wendover Ambulance Protocols allow AEMTs to administer Amiodarone and Lidocaine for patients in a shockable rhythm, however are not utilized because Nevada EMS requires that we have a variance from the Nevada Board of Health for them. **Our new proposed 2025 Wendover Ambulance Protocols will allow AEMTs the use of amiodarone and lidocaine for Pulseless Shockable Rhythms**, of course the implementation will all be done according to Agency Medical Direction and appropriate training, testing, and quality assurance.

Our Medical Director wants us to follow the current 2013 Cardiac Arrest management protocols that we have had approved each year when our Agency renews its Permit. (A copy of the Protocol is attached) to be replaced by **our proposed 2025 Wendover Ambulance Protocols**. Because our AEMTs have not been utilizing this protocol, Dr. Gerald Doyle, our Medical Director has requested we apply to the Nevada Board of Health for a variance to allow our AEMTs to utilize amiodarone and lidocaine and has had our Paramedic Training Officer develop a training plan, including certification in ACLS and PALS, and will pass the examinations, both practical and didactic. All EMTs will be individually approved by Dr. Doyle before they are allowed to follow the protocol. It should be noted that for more than 10 years our AEMTs all maintain ACLS (American Heart Advanced Cardiac Life Support) certification and PALS (Pediatric Advance Life Support) certification.

As of October 1, 2023, Nevada is part of the EMS Compact that encompasses more than 20 states. Utah has been a member of the Compact for many years. This Compact facilitates the day-to-day movement of EMS Personnel across state boundaries in the performance of their duties. It makes even more sense now that Wendover Ambulance update protocols, since the current protocols have been in place for the last 10 years.

Nevada State EMS has taken the stance that Agencies must adhere to the National EMS Scope of Practice Model. Initially published in 2007 it was revised in 2019 by the National Association of State EMS Officials (NAEMSO). It was developed to provide guidance for States when developing their own EMS scope of practice legislation, rules and regulations. As well all know, it was meant to provide a *minimum* standard, not a maximum standard of care.

To sum it up:

- a. 1. – Unique – Wendover is very rural ambulance service with a service area more than 1,000 square miles serving the local population of approximately 7500 people that swells to double that on weekends due to the casino industry. The closest hospitals are at least 115 miles away in any direction as well as the closest ALS ambulance companies. (Elko and Salt Lake City).
- a. 2. – Effect on other persons (Agencies) – Our variance request would not affect other persons subject to the regulation as we are only requesting Wendover Ambulance staff.
- a. 3. – Unduly burdensome – The current regulation burdens Wendover Ambulance, our community and our patients by limiting the level of service we can provide. The rural area and limited

resources make the hiring of Paramedics difficult and AEMTs are limited in their scope of practice. Many of our second crew calls are only staffed with AEMTs.

- a. 4. – Hardship – Due to extended distances to hospital and limited Paramedics, the patients who receive care in our area may be deprived of appropriate ACLS cardiac care.
- b. 1. – Necessary – Wendover Ambulance needs this variance to provide high quality cardiac care to appropriate patients and they have a right to expect that care.
- b. 2. – The administration of Amiodarone and Lidocaine will not pose a danger to public health and safety. It would in fact do the opposite. Patients deserve to have appropriate healthcare and medications when they come to Wendover. All AEMTs are currently trained in ACLS and PALS guidelines, as well as additional Cardiac Arrest management training.

STATEMENT OF DEGREE OF RISK OF HEALTH:

Wendover Ambulance responds to approximately 1000 patient calls per year. Many of those calls include cardiac arrests. Many times, there are multiple calls at the same time with multiple crews transporting patients to hospitals. Without the immediate availability of paramedics, and subsequent administration of antiarrhythmics (**specifically Amiodarone and Lidocaine**), patients will unnecessarily suffer decreased resuscitation options during treatment and transport to a helicopter and/or hospital.

AN EXCEPTIONAL AND UNDUE HARDSHIP RESULTS FROM STRICT APPLICATION OF THE REGULATION:

The difficulty in recruiting and retaining paramedics in our rural community causes hardship. The back-up AEMTs are unreasonably limited in the care they can offer for treatment of Pulseless, Shockable Cardiac Arrest.

THE VARIANCE, IF GRANTED WOULD NOT:

- A. CAUSE SUBSTANTIAL DETRIMENT TO THE PUBLIC WELFARE.
Approval of this variance would not cause detriment to the public welfare; it would have the opposite effect and provide citizens and visitors with exceptional prehospital medical care. The potential for damage is mitigated through continual, thorough training.
- B. IMPARE SUBSTANTIALLY THE PURPOSE OF THE REGULATION FROM WHICH THE APPLICANT SEEKS A VARIANCE.
The variance would not impair the purpose of the regulation. There have been updates to the NHTSA National Scope of Practice Model that now includes more **Medical Director Approved medications for AEMTs**.

In conclusion, Wendover Ambulance believe this variance will allow our AEMTs to provide a higher level of care needed for our patients while maintaining the highest standards of training and compliance as well under the continued direction and support of our Medical Director.

Sincerely,



Lauara Lisk
President



Wendover Ambulance
427 Mesa Street
P.O. Box 2530
West Wendover, Nevada 89883
(775) 664-2081
Fax: (775) 664-2244

E-mail: lauara.wendoverambulance@gmail.com

NAC439.200 states that "Any person who, because of unique circumstances, is unduly burdened by a regulation of the State Board of Health and thereby suffers a hardship and the abridgement of a substantial property right may apply for a variance from a regulation."

Wendover Ambulance is seeking a variance to Nevada Administrative Codes 450B.384 and 450B.461.

The specific variance requested is:

- Allowing Wendover Ambulance Advanced Emergency Medical Technicians (AEMTs) to administer **Amiodarone and Lidocaine** to patients of Wendover Ambulance for Cardiac Arrest care under a set of very strict Protocols, guidelines and training requirements under authority of the Medical Director.

1. The State Board of Health will grant a variance from a regulation only if it finds from the evidence presented at the hearing that:

- a. There are circumstances or conditions which:
 1. Are unique to the applicant.
 2. Do not generally affect other persons subject to the regulation;
 3. Make compliance with the regulation unduly burdensome; and

4. Cause a hardship to abridge a substantial property right of the applicant:
- b. Granting the Variance:
 1. Is necessary to render substantial justice to the applicant and enable him to preserve and enjoy his property; and
 2. Will not be detrimental or pose a danger to public health and safety.

Wendover Ambulance will provide information to show that our agency has unique circumstances and is burdened by this regulation in regards to the use of amiodarone and Lidocaine for our cardiac arrest patients.

As some background information, Wendover Ambulance is headquartered in West Wendover, Nevada and began business in 1987. We are an ALS Agency and operate Paramedics and AEMTs (Advance Emergency Medical Technicians) and EMTs (Emergency Medical Technicians). Like most other rural agencies in Nevada and in fact the whole country, recruitment and retention of Paramedics is difficult at best and so we operate with a combination of Paramedic and AEMT or Paramedic and EMT. Larger metropolitan cities have a larger tax base and are in a better position to pay large salaries to Paramedics and so it is extremely difficult for rural agencies to provide the advanced care that is just as needed in rural areas as in the cities. Many times, there will be a call for a second or third ambulance and so the subsequent ones will most likely only be staffed with AEMTs as the ALS provider. It is during these times that Wendover Ambulance needs the requested variance.

As some may already know, the state line between Wendover, Utah and West Wendover, Nevada bisects the two Cities and states of Nevada and Utah. This certainly causes some unique situations for our Agency. Because we provide Emergency Medical Services and Transportation to patients on both sides of the line, and transport to hospitals in the Salt Lake City area as well as Elko and Ely Nevada, we are licensed by the Nevada Department of Health as well as the Utah Department of Public Safety. All our Paramedics, AEMTs and EMTs are also licensed in each state.

Wendover is very rural, as the closest hospitals are more than 115 miles away – in any direction. We also cover the Ibapah Reservation 65 miles southeast of Wendover and it is considered a Frontier Area by HRSA. Each year Wendover Ambulance has approximately 950 to 1000 patient calls.

We are governed by the EMS regulations of each state -Nevada and Utah and for the most part they are similar, but a marked difference is the scope of practice of AEMTs. Utah has had a state EMS Medical Director, Dr. Peter Tailac since 2012 who has worked

with the Utah State EMS Committee and various sub committees to establish state-wide EMS Protocols. While the Utah Protocol - 2013 version was updated two years ago (2023), Wendover Ambulance is still utilizing the 2013 Wendover Ambulance Protocols version. Based on the Utah 2013 scope of practice for AEMTs these protocols allow for more medication in Cardiac Arrest / Shockable Rhythms than Nevada allows.

The current 2013 Wendover Ambulance Protocols allow AEMTs to administer Amiodarone and Lidocaine for patients in a shockable rhythm, however are not utilized because Nevada EMS requires that we have a variance from the Nevada Board Of Health for them. **Our new proposed 2025 Wendover Ambulance Protocols will allow AEMTs the use of amiodarone and lidocaine for Pulseless Shockable Rhythms**, Of course the implementation will all be done according to Agency Medical Direction and appropriate training, testing and quality assurance.

Our Medical Director wants us to follow the current 2013 Cardiac Arrest management protocols that we have had approved each year when our Agency renews its Permit. (A copy of the Protocol is attached) to be replaced by **our proposed 2025 Wendover Ambulance Protocols**. Because our AEMTs have not been utilizing this protocol, Dr. Gerard Doyle, our Medical Director has requested that we apply to the Nevada Board of Health for a variance to allow our AEMTs to utilize amiodarone and lidocaine and has had our Paramedic Training Officer develop a training plan, including certification in ACLS for all AEMTs, that he has approved (copy attached). We will continue to review calls with medication usage for Quality Assurance. Before implementation, all our AEMTs will have satisfactorily completed training including certification in ACLS and PALS, and will pass the examinations, both practical and didactic. All AEMTs will be individually approved by Dr. Doyle before they are allowed to follow the protocol. It should be noted that for more than 10 years our AEMTs all maintain ACLS (American Heart Advanced Cardiac Life Support) certification and PALS (Pediatric Advance Life Support) certification.

As of October 1, 2023, Nevada is part of the EMS Compact that encompasses more than 20 states. Utah has been a member of the Compact for many years. This Compact facilitates the day-to-day movement of EMS Personnel across state boundaries in the performance of their duties. It makes even more sense now that Wendover Ambulance update protocols, since the current protocols have been in place for the last 10 years.

Nevada State EMS has taken the stance that Agencies must adhere to the National EMS Scope of Practice Model. Initially published in 2007 it was revised in 2019 by the National Association of State EMS Officials (NAEMSO). It was developed to provide guidance for States when developing their own EMS scope of practice legislation, rules

and regulations. As we all know, it was meant to provide a *minimum* standard, not a maximum standard of care.

To sum it up:

a. 1. – Unique - Wendover is very rural ambulance service with a service area more than 1,000 square miles serving the local population of approximately 7500 people that swells to double that on the weekends due to the casino industry. The closest hospitals are at least 115 miles away in any direction as well as the closest ALS ambulance companies. (Elko and Salt Lake City).

a. 2. - Effect on other persons (Agencies) - Our variance request would not affect other persons subject to the regulation as we are only requesting Wendover Ambulance staff.

a. 3. – Unduly burdensome - The current regulation burdens Wendover Ambulance, our community and our patients by limiting the level of service we can provide. The rural area and limited resources make the hiring of Paramedics difficult and AEMTs are limited in their scope of practice. Many of our second crew calls are only staffed with AEMTs.

a. 4 – Hardship – Due to extended distances to hospitals and limited Paramedics, the patients who receive care in our area may be deprived of appropriate ACLS cardiac care.

b. 1. – Necessary – Wendover Ambulance needs this variance to provide high quality cardiac care to appropriate patients and they have a right to expect that care.

b. 2. – The administration of Amiodarone and Lidocaine will not pose a danger to public health and safety. It would in fact do the opposite. Patients deserve to have appropriate healthcare and medications when they come to Wendover. All AEMTs are currently trained in the current ACLS and PALS guidelines, as well as additional Cardiac Arrest management training.

STATEMENT OF DEGREE OF RISK OF HEALTH:

Wendover Ambulance responds to approximately 1000 patient calls per year. Many of those calls include cardiac arrests. Many times, there are multiple calls at the same time

with multiple crews transporting patients to hospitals. Without the immediate availability of paramedics, and subsequent administration of antiarrhythmics (**specifically Amiodarone and Lidocaine**), patients will unnecessarily suffer decreased resuscitation options during treatment and transport to a helicopter and/or hospital.

AN EXCEPTIONAL AND UNDUE HARDSHIP RESULTS FROM STRICT APPLICATION OF THE REGULATION:

The difficulty in recruiting and retaining paramedics in our rural community causes hardship. The back-up AEMTs are unreasonably limited in the care they can offer for treatment of Pulseless, Shockable Cardiac Arrest.

THE VARIANCE, IF GRANTED WOULD NOT:

A. CAUSE SUBSTANTIAL DETRIMENT TO THE PUBLIC WELFARE.

Approval of this variance would not cause detriment to the public welfare; it would have the opposite effect and provide citizens and visitors with exceptional prehospital medical care. The potential for damage is mitigated through continual, thorough training.

B. IMPARE SUBSTANTIALLY THE PURPOSE OF THE REGULATION FROM WHICH THE APPLICANT SEEKS A VARIANCE.

The variance would not impair the purpose of the regulation. There have been updates to the NHTSA National Scope of Practice Model that now includes more **Medical Director Approved medications for AEMTs**.

In conclusion, Wendover Ambulance believes this variance will allow our AEMTs to provide a higher level of care needed for our patients while maintaining the highest standards of training and compliance as well under the continued direction and support of our Medical Director.

Sincerely



Laura Lisk
President

Wendover Ambulance Verification of Protocols

as of 5-08-24 (last license renewal)

Will be updated for next license renewal 7-01-2025

VERIFICATION OF CURRENT PROTOCOLS

Pursuant to NAC 450B.505(2):

2. The medical director of a service or fire-fighting agency shall:
 - a. Establish medical standards which:
 - i. Are consistent with the national standard which is prepared by the National Highway Traffic Safety Administration of the United States Department of Transportation as a national standard for the level of service for which a permit is issued to the service or an equivalent standard approved by the administrator of the Division and which are approved by the board;
 - ii. Are equal to or more restrictive than the national standard prepared by the National Highway Traffic Safety Administration of the United States Department of Transportation or an equivalent standard approved by the Administrator of the Division and adopted by the state emergency medical system; and;
 - iii. Must be reviewed and maintained on file by the Division or a physician active in providing emergency care who is designated by the Division to review and make recommendations to the Division.
 - b. Direct the emergency care provided by any certified person who is actively employed by the service.

Date of Protocols currently in use: 6-01-2014

Medical Director who initiated Protocols: Dr. Gerard Doyle

Current Protocols on file: 06-01-2024

If the current Medical Director is NOT the Medical Director who initiated your protocols, please have the current Medical Director sign below indicating they have read and is in agreement with the protocols in use.

Medical Director (Print): Gerard Doyle



Date: 8 May 24

Agency Representative: Lauara Lisk



Date: 5-08-2024

Wendover Ambulance
Verification of Protocols
as of 5-08-24 (last license renewal)
Will be updated for next license renewal
7-01-2025

VERIFICATION OF CURRENT PROTOCOLS

Pursuant to NAC 450B.505 (2):

2. The medical director of a service or fire-fighting agency shall:

(a) Establish medical standards which:

- (1) Are consistent with the national standard which is prepared by the National Highway Traffic Safety Administration of the United States Department of Transportation as a national standard for the level of service for which a permit is issued to the service or an equivalent standard approved by the Administrator of the Division and which are approved by the board;
- (2) Are equal to or more restrictive than the national standard prepared by the National Highway Traffic Safety Administration of the United States Department of Transportation or an equivalent standard approved by the Administrator of the Division and adopted by the state emergency medical system; and
- (3) Must be reviewed and maintained on file by the Division or a physician active in providing emergency care who is designated by the Division to review and make recommendations to the Division.

(b) Direct the emergency care provided by any certified person who is actively employed by the service.

Date of Protocols currently in use: 6-01-2014

Medical Director who initiated Protocols: Dr. Gerard Dopyle

Current Protocols on file: 06-01-2024

If the current Medical Director is NOT the Medical Director who initiated your protocols, please have the current Medical Director sign below indicating they have read and is in agreement with the protocols in use.

Gerard Doyle

Medical Director (Print)

Date

Lauara Lisk

Agency Representative (Print)

Date

Medical Director (Signature)

Agency Representative (Signature)

8 May 24

[Signature]

[Signature]



Wendover Ambulance 2013 Protocols

West Wendover, Nevada

Pulseless Arrest

v-fib

v-tach

PULSELESS ARREST: SHOCKABLE (VENTRICULAR FIBRILLATION or PULSELESS VENTRICULAR TACHYCARDIA)

ALL PROVIDERS

Focused history and physical exam

- Assess for presence or absence of a pulse.
- Determine probable rhythm – ventricular fibrillation or pulseless ventricular tachycardia
- Assess blood glucose level.

Continuous ECG, ETCO₂, and Pulse Oximetry monitoring when available

Treatment Plan

- Begin CPR
- Assume cardiac origins for all adult arrests unless evidence to the contrary. Consider underlying causes and treat when possible.
 - **H's** – Hypovolemia, Hypoxia, Hydrogen ion (Acidosis), Hyper/hypokalemia, Hypothermia, Hypoglycemia
 - **T's** – Toxins (Overdose), Tamponade (Cardiac), Tension Pneumothorax, Thrombosis (ACS or Pulmonary), Trauma

Key Considerations

- Assess for evidence that resuscitation should not be attempted.
- Pregnancy >20 weeks gestation 0 Place wedge-shaped cushion or multiple pillows under patient's right hip (L lateral decubitus position)
 - Transport these patients to the nearest emergency department without delay while attempting to provide continuous compressions and defibrillation, as there is a potential to perform emergency cesarean section.
- Treatment protocols from current nationally established cardiac care certification programs (e.g. ACLS, PALS) may be used in lieu of these resuscitation guidelines.
- AED is only to be used >1 year of age. Use a pediatric system, if available, for ages 1 to 8 years old.
- Pediatric lowest acceptable systolic blood pressure are birth to 1 month = 60mmHg, 1 month to 1 year = 70mmHg, 1 year to 10 years is = 70mmHg + (age x 2) and over 10 years = 90mmHg.

ADULT

EMT

If arrest is **witnessed**

- Defibrillate immediately if AED or manual defibrillator is available.

If **un-witnessed** or defibrillator is not immediately available.

- Begin high quality CPR (100 compressions per minute with minimal interruptions, 2 minute cycles)
- When AED arrives, attach to patient and defibrillate if a shock is advised

Resume CPR immediately after each shock and continue for 2 minutes or until asked to hold by the AED

Check pulse and assess rhythm/shock if advised after each 2 minutes cycle of compressions
Place an NP or OP airway and a non-rebreather mask with high-flow oxygen during the first 2-3 cycles of CPR/defibrillation. After 2*3 cycles apply asynchronous BVM breaths at a rate of 1 breath every 6-8 seconds

PEDIATRIC (<15 years of Age)

NOTE: Pediatric weight based dosing should not exceed Adult dosing.

EMT

If arrest is **witnessed**

- Defibrillate immediately if AED or manual defibrillator is available. **2 J/kg** for the first attempt

If **un-witnessed** or defibrillator is not immediately available.

- Begin high quality CPR

When AED arrives, attach to patient and defibrillate if a shock is advised

Resume CPR immediately after each shock and continue for 2 minutes (5 cycles) or until asked to hold by the AED

Check pulse and assess rhythm/shock if advised after each 2 minutes cycle of compressions

Place an NP or OP airway and apply asynchronous BVM breaths at a rate of 1 breath every 4-6 seconds

AEMT

Vascular access and fluid therapy per **IV-IO Access and Fluid Therapy Guidelines**

Airway management as above with use of a supraglottic airway device instead of BVM, if available

Defibrillation: 360 J for a monophasic defibrillator or **200 J** for a biphasic

Resume CPR (2 minute cycle) immediately following shock delivery, then perform rhythm analysis

PERSISTENT OR RECURRENT VF/VT PRESENT

Epinephrine

- **1 mg (1:10,000) IV push**
- Repeat every 3-5 minutes

ANTIARRHYTHMICS

May use any **ONE** antiarrhythmic available, either amiodarone or lidocaine

Amiodarone

- **300 mg IV/IO** for refractory VF/Pulseless Vtach
- Second dose is 150 mg IV/IO

Lidocaine

- **1-1.5 mg/kg IV/IO push** or one time dose of 1.5 mg/kg
- May repeat every 3-5 min up to 3 mg/kg

PARAMEDIC

Consider endotracheal intubation

Vasopressin

- Give 40 units IV/IO in place of the 1st or 2nd dose of epinephrine.
- May be more effective than epinephrine in cases of beta blocker overdose

Magnesium – Give 1-2 gm IV over 2 minutes for Torsades de Pointes

AEMT

Advanced airway, vascular access and fluid therapy per **IV-IO Access and Fluid Therapy Guidelines**

Defibrillation: 2 J/kg for the first shock with either a monophasic or biphasic defibrillator. Second shock at **4 J/kg** and subsequent shocks at **>4 J/kg** to a maximum of 10 J/kg or the adult dose
Resume CPR (2 minute cycle) immediately following shock delivery, then perform rhythm analysis

PERSISTENT OR RECURRENT VF/VT PRESENT

Epinephrine

- **0.01 mg/kg = 0.1 ml/kg (1:10,000) IV or IO push**
- Repeat every 3-5 minutes
- May repeat initial dose

ANTIARRHYTHMICS

May use any **ONE** antiarrhythmic available, either amiodarone or lidocaine

Amiodarone

- **5 mg/kg IV/IO**
- May repeat up to 2 times for refractory VF/pulseless VT
- Do not exceed 300 mg for Vfib/Pulseless Vtach

Lidocaine

- **1 mg/kg IV/IO**
- May repeat every 3-5 minutes up to 3 mg/kg

PARAMEDIC

Consider endotracheal intubation

Vasopressin – Not recommended.

Magnesium – Give 25-50 mg/kg IV/IO for Torsades de Pointes. Maximum 2 grams



Wendover Ambulance 2025 Protocols

West Wendover, Nevada

May 2025

Pending approval by Nevada EMS

Pulseless Arrest

v-fib

v-tach

CARDIAC ARREST

ALL PROVIDERS/EMT

For Traumatic Arrest refer to General Trauma Management Guidelines

Focused history and physical exam

- Assess for evidence that resuscitation should not be attempted per the **Death Determination Guideline**.

Continuous ECG, ETCO₂, and Pulse Oximetry monitoring when available

Treatment Plan

- **Assess for presence of a pulse, respirations, and consciousness. If absent:**
 - **Begin chest compressions for 2 min**
 - **Apply AED and shock if advised.**
- AEMT/PM: Apply cardiac monitor/defibrillator and shock if Vtach/Vfib

Key Considerations

- Effective chest compressions are critical
 - Consider ventilating adult patients with a pediatric BVM bag to avoid hyperinflation
 - Minimize interruptions in chest compressions
 - Precharge the defibrillator and countdown to rhythm check/defibrillation
 - Use a verbal 10 second countdown during any pause to limit hands-off time
 - Rate 100-120/min recommend metronome or CPR feedback
 - Depth: 2-2.5 inches (adult)/ 1/3 of chest depth (pediatric)
 - Allow full chest recoil after each compression
 - After each shock, immediately perform 2 minutes of chest compressions before checking rhythm/pulse
 - Rotate compressors every 2 minutes
 - If using mechanical CPR:
 - Apply device with minimum interruption in CPR
 - Check rhythm every 2 minutes. When an organized rhythm is present, check pulse (5 seconds only, use a verbal countdown)
 - Duration of resuscitation as below
- Consider the Pit Crew model as an approach to treatment
 - xPre-defined roles, as determined by a specific EMS agency, for members of an integrated team of first-responders, BLS, and ALS.
 - Designated individuals for chest compressions
 - Designated individuals for overall code leadership/management
 - Designated individual for airway management
 - Additional roles to be assigned as determined by specific agency based on provider availability include: IO/IV access, medication administration, CPR quality monitoring, cardiac rhythm monitoring, defibrillation
 - Consider transition of roles as additional providers become available to ensure maximal use of resources
 - Treatment of the adult cardiac arrest patient in the field is preferred in the majority of cases and is associated with improved outcomes
 - Assume cardiac origins for all adult arrests unless evidence to the contrary. Consider underlying causes and treat them when possible.
 - Duration of resuscitation. Consider prolonged attempts in patients with an initial shockable rhythm and a witnessed collapse
 - Initial shockable: <5% survival after 40 minutes of resuscitation attempt
 - Initial Asystole/PEA rhythms: <1% survival after 20 minutes of resuscitation attempt
- **H's & T's** – Treat as appropriate with confirmed or suspected Hypovolemia, Hypoxia, Hydrogen ion (Acidosis), Hyperkalemia, Hypothermia, Hypoglycemia, or specific Toxins.

Pregnancy >20 weeks gestation

- Perform manual displacement of the uterus to the patient's left. If unable to perform manual displacement, place wedge-shaped cushion or multiple pillows under patient's right hip to achieve 30 degree lateral tilt.

- Transport pregnant patients to the nearest emergency department without delay while attempting to provide continuous compressions and defibrillation (if applicable). There is potential to perform an emergency cesarean section in the ED, which may save the fetus and the mother.

Pediatric Population

- Consider transport in pediatric arrest after 15 minutes of field resuscitation, including high-quality CPR, effective ventilations, and IV/IO access.
- Pediatric lowest acceptable systolic blood pressures are birth to 1 month = 60mmHg, 1 month to 1 year = 70mmHg, 1 year to 10 years = 70mmHg + (age x 2), >10 years = 90mmHg.

As nationally-established cardiac care guidelines (e.g. ACLS, PALS) are updated, these may be integrated into performance, as per agency medical director.

ADULT

EMT

AED

- Defibrillate immediately if AED advises shock.
- Resume CPR immediately after each shock and continue for 2 minutes
- Check pulse and repeat shock if prompted by AED

Respiratory Management: Use a 30:2 compressions to ventilations ratio

PEDIATRIC (<15 years of Age)

NOTE: Pediatric weight based dosing should not exceed Adult dosing.

EMT

AED

- Defibrillate immediately if AED advises shock.
- Resume CPR immediately after each shock and continue for 2 minutes
- Check pulse and repeat shock if prompted by AED

Respiratory Management:

- Place an NP or OP airway and use a 30:2 compressions to ventilation ratio

**AEMT
ALL RHYTHMS**

- Begin CPR
- Vascular access and fluid therapy.
- Consider placement of a supraglottic device without interrupting CPR
- **Epinephrine:** 1 mg (10 ml of 0.1 mg/ml / 1:10,000) IV/IO push every 2-4 min as long as the patient remains pulseless. Note that better outcomes are observed with earlier administration of epinephrine, with epinephrine given via IV route, and with shorter dosing intervals (2 min)
- Unless a clear response to epinephrine is observed, consider a **limit of 3 total doses**.
- Consider NS 1000mL IV/IO bolus if hypovolemia suspected

SHOCKABLE RHYTHM (VF/VT) PRESENT

- **Defibrillation**
- **360 J** for a monophasic defibrillator or **120-360 J** for a biphasic, with escalating energy for subsequent shocks (Follow manufacturer's recommendations)
- Resume CPR immediately after shock and continue for 2 minutes
- Check rhythm and pulse every 2 min

**RESTRICTED FOR AEMT USE PENDING
VARIANCE APPROVAL. PERMITTED FOR
PARAMEDICS WITHIN SCOPE**

- **Anti-arrhythmics are indicated for shockable rhythms that are unresponsive to defibrillation**
- May administer either **ONE** of these anti-arrhythmics:
- **Amiodarone** 300 mg IV/IO, second dose is 150 mg IV/IO after 5 min
- Contact OLMC before terminating resuscitative efforts in the field

PARAMEDIC

Anti-arrhythmics are indicated for shockable rhythms that are unresponsive to defibrillation

- **Lidoaine** 1 mg/kg IV/IO/ET. May repeat every 3-5 min up as needed up to 3 mg/kg
 - Follow with continuous infusion (1 to 4 mg/minute) after return of perfusion.

ALL RHYTHMS

May consider endotracheal intubation, if unable to adequately ventilate with supraglottic airway, **per Airway and Tracheostomy Management Guideline**.

Intubation must not interfere with chest compressions

**AEMT
ALL RHYTHMS**

- Begin CPR
- BVM, supraglottic airway, vascular access and fluid therapy
- **Epinephrine:** 0.01 mg/kg (0.1 mg/ml / 1:10,000) IV/IO every 2-4 min as long as the patient remains pulseless. Note that better outcomes are observed with earlier administration of epinephrine, with epinephrine given via IV route, and with shorter dosing intervals (every 2 min)
- Max dose = 1 mg (10ml)
- Unless a clear response to epinephrine is observed, consider a limit of 3 total doses.
- Consider NS 20 ml/kg IV/IO bolus if hypovolemia suspected reassess and repeat if needed to a Max of 60 mL/kg

SHOCKABLE RHYTHM (VF/VT) PRESENT

- **Defibrillation**
- **2 J/kg** for the first shock with either a monophasic or biphasic defibrillator. Second and subsequent shocks increase by 2 J/kg, up to a max dose 10 J/kg
- Resume CPR immediately after shock and continue for 2 minutes
- Check rhythm and pulse every 2 min

**RESTRICTED FOR AEMT USE PENDING
VARIANCE APPROVAL. PERMITTED FOR
PARAMEDICS WITHIN SCOPE**

- **Anti-arrhythmics are indicated for shockable rhythms that are unresponsive to defibrillation**
- May administer either **ONE** these antiarrhythmics:
- **Amiodarone** 5 mg/kg IV/IO (max 300 mg/dose). May repeat 2 more times every 5 min as needed. (Total max 450 mg)
- Contact OLMC before terminating resuscitative efforts in the field

PARAMEDIC

Anti-arrhythmics are indicated for shockable rhythms that are unresponsive to defibrillation

- **Lidoaine** 1 mg/kg IV/IO/ET. May repeat every 3-5 min up as needed up to 3 mg/kg
 - **Maintenance 20-50 mcg/kg/min**

ALL RHYTHMS

May consider endotracheal intubation, in unable to adequately ventilate with BVM (preferred) or supraglottic airway, **per Airway and Tracheostomy Management Guideline**.

Intubation must not interfere with chest compressions

Special Circumstances

- Known or Suspected Hyperkalemia
 - Calcium Chloride 1 gram IV/IO over 2 min. May repeat every 5 min X2 OR Calcium Gluconate 3 grams IV/IO over 2 min
 - Sodium Bicarbonate 1 mEq/kg IV/IO may repeat every 5 min X2
- Polymorphic VT associated with long QT
 - Magnesium 2 gm IV/IO over 2 min

Contact OLMC for further orders or therapies

Special Circumstances

- Known or Suspected Hyperkalemia
 - Calcium Chloride 20 mg/kg IV/IO may repeat in 10 min (max 2 grams) OR Calcium Gluconate 100 mg/kg may repeat in 10 min (max 3 grams)
 - Sodium Bicarbonate 1 mEq/kg IV/IO (Max of 50 mEq). For <2 years of age 4.2% concentration.
- Polymorphic VT associated with long QT
 - Magnesium 50 mg/kg (Max = 2,000 mg) IV/O over 2 min

Contact OLMC for further orders or therapies



Wendover Ambulance 2013 Protocols

West Wendover, Nevada

Pulseless Arrest

v-fib

v-tach

PULSELESS ARREST: SHOCKABLE (VENTRICULAR FIBRILLATION or PULSELESS VENTRICULAR TACHYCARDIA)

ALL PROVIDERS

- ❑ Focused history and physical exam
 - Assess for presence or absence of a pulse.
 - Determine probable rhythm – ventricular fibrillation or pulseless ventricular tachycardia
 - Assess blood glucose level.
- ❑ Continuous ECG, ETCO₂, and pulse oximetry monitoring when available
- ❑ **Treatment Plan**
 - Begin CPR
 - Assume cardiac origins for all adult arrests unless evidence to the contrary. Consider underlying causes and treat when possible.
 - **H's** - Hypovolemia, Hypoxia, Hydrogen ion (Acidosis), Hyper/hypokalemia, Hypothermia, Hypoglycemia
 - **T's** – Toxins (Overdose), Tamponade (Cardiac), Tension Pneumothorax, Thrombosis (ACS or Pulmonary), Trauma
- ❑ **Key Considerations**
 - Assess for evidence that resuscitation should not be attempted.
 - Pregnancy >20 weeks gestation - Place wedge-shaped cushion or multiple pillows under patient's right hip (L lateral decubitus position)
 - Transport these patients to the nearest emergency department without delay while attempting to provide continuous compressions and defibrillation, as there is a potential to perform emergency cesarean section.
 - Treatment protocols from current nationally established cardiac care certification programs (e.g. ACLS, PALS) may be used in lieu of these resuscitation guidelines.
 - AED is only to be used > 1 year of age. Use a pediatric system, if available, for ages 1 to 8 years old.
 - Pediatric lowest acceptable systolic blood pressures are birth to 1 month = 60mmHg, 1 month to 1 year = 70mmHg, 1 year to 10 years is = 70mmHg + (age x 2) and over 10 years = 90mmHg.

ADULT

EMT

- ❑ If arrest is **witnessed**
 - Defibrillate immediately if AED or manual defibrillator is available.
- ❑ If **un-witnessed** or defibrillator is not immediately available.
 - Begin high quality CPR (100 compressions per minute with minimal interruptions, 2 minute cycles)
 - When AED arrives, attach to patient and defibrillate if a shock is advised
- ❑ Resume CPR immediately after each shock and continue for 2 minutes or until asked to hold by the AED
- ❑ Check pulse and assess rhythm / shock if advised after each 2 minutes cycle of compressions
- ❑ Place an NP or OP airway and a non-rebreather mask with high-flow oxygen during the first 2-3 cycles of CPR/defibrillation. After 2-3 cycles apply

PEDIATRIC (<15 years of Age)

NOTE: Pediatric weight based dosing should not exceed Adult dosing.

EMT

- ❑ If arrest is **witnessed**
 - Defibrillate immediately if AED or manual defibrillator is available. **2 J/kg** for the first attempt
- ❑ If **un-witnessed** or defibrillator is not immediately available.
 - Begin high quality CPR
 - When AED arrives, attach to patient and defibrillate if a shock is advised
- ❑ Resume CPR immediately after each shock and continue for 2 minutes (5 cycles) or until asked to hold by the AED
- ❑ Check pulse and assess rhythm / shock if advised after each 2 minutes cycle of compressions
- ❑ Place an NP or OP airway and apply asynchronous BVM breaths at a rate of 1 breath every 4-6 seconds

asynchronous BVM breaths at a rate of 1 breath every 6-8 seconds

AEMT

- ❑ Vascular access and fluid therapy per **IV-IO Access and Fluid Therapy Guidelines**
- ❑ Airway management as above with use of a supraglottic airway device instead of BVM, if available
- ❑ **Defibrillation: 360J** for a monophasic defibrillator or **200J** for a biphasic
- ❑ Resume CPR (2 minute cycle) immediately following shock delivery, then perform rhythm analysis

PERSISTENT OR RECURRENT VF/VT PRESENT

- ❑ **Epinephrine**
 - **1 mg (1:10,000) IV push**
 - Repeat every 3-5 minutes

ANTIARRHYTHMICS

- ❑ May use any **ONE** antiarrhythmic available, either amiodarone or lidocaine
- ❑ **Amiodarone**
 - **300mg IV/IO** for refractory VF/pulseless Vtach
 - Second dose is 150mg IV/IO
- ❑ **Lidocaine**
 - **1-1.5 mg/kg IV/IO push** or one time dose of 1.5 mg/kg
 - May repeat every 3-5 min up to 3 mg/kg

PARAMEDIC

- ❑ Consider endotracheal intubation
- ❑ **Vasopressin**
 - Give 40 units IV/IO in place of the 1st or 2nd dose of epinephrine.
 - May be more effective than epinephrine in cases of beta blocker overdose
- ❑ **Magnesium** - Give 1-2gm IV over 2 minutes for Torsades de Pointes

AEMT

- ❑ Advanced airway, vascular access and fluid therapy per **IV-IO Access and Fluid Therapy Guidelines**
- ❑ **Defibrillation: 2 J/kg** for the first shock with either a monophasic or biphasic defibrillator. Second shock at **4J/Kg** and subsequent shocks at **≥4J/Kg** to a maximum of 10J/Kg or the adult dose
- ❑ Resume CPR (2 minute cycle) immediately following shock delivery, then perform rhythm analysis

PERSISTENT OR RECURRENT VF/VT PRESENT

- ❑ **Epinephrine**
 - **0.01 mg/kg = 0.1 ml/kg (1:10,000) IV or IO push**
 - Repeat every 3-5 minutes
 - May repeat initial dose

ANTIARRHYTHMICS

- ❑ May use any **ONE** antiarrhythmic available, either amiodarone or lidocaine
- ❑ **Amiodarone**
 - **5mg/kg IV/IO**
 - May repeat up to 2 times for refractory VF/pulseless VT
 - Do not exceed 300mg for VFib/Pulseless Vtach
- ❑ **Lidocaine**
 - **1 mg/kg IV/IO**
 - May repeat every 3-5 minutes up to 3 mg/kg

PARAMEDIC

- ❑ Consider Endotracheal Intubation
- ❑ **Vasopressin** - Not Recommended.
- ❑ **Magnesium** - Give 25-50mg/kg IV/IO for Torsades de Pointes. Maximum 2grams



Wendover Ambulance 2025 Protocols

West Wendover, Nevada

May 2025

Pending approval by Nevada EMS

Pulseless Arrest

v-fib

v-tach

CARDIAC ARREST

ALL PROVIDERS / EMT

For Traumatic Arrest refer to General Trauma Management Guidelines

- ☐ Focused history and physical exam
 - Assess for evidence that resuscitation should not be attempted per the ***Death Determination Guideline***.
- ☐ Continuous ECG, ETCO₂, and Pulse Oximetry monitoring when available
- ☐ **Treatment Plan**
 - **Assess for presence of a pulse, respirations, and consciousness. If absent:**
 - **Begin chest compressions for 2 min**
 - **Apply AED and shock if advised.**
 - AEMT/PM: Apply cardiac monitor/defibrillator and shock if Vtach/Vfib
- ☐ **Key Considerations**
 - Effective chest compressions are critical
 - Consider ventilating adult patients with a pediatric BVM bag to avoid hyperinflation
 - Minimize interruptions in chest compressions
 - Precharge the defibrillator and countdown to rhythm check/defibrillation
 - Use a verbal 10 second countdown during any pause to limit hands-off time
 - Rate: 100-120/min recommend metronome or CPR feedback
 - Depth: 2-2.5 inches (adult) / 1/3 of chest depth (pediatric)
 - Allow full chest recoil after each compression
 - After each shock, immediately perform 2 minutes of chest compressions before checking rhythm/pulse
 - Rotate compressors every 2 minutes
 - If using mechanical CPR:
 - Apply device with minimum interruption in CPR
 - Check rhythm every 2 minutes. When an organized rhythm is present, check pulse(5 seconds only, use a verbal countdown)
 - Duration of resuscitation as below
 - Consider the Pit Crew model as an approach to treatment
 - Pre-defined roles, as determined by a specific EMS agency, for members of an integrated team of first responders, BLS, and ALS.
 - Designated individuals for chest compressions
 - Designated individual for overall code leadership/management
 - Designated individual for airway management

- Additional roles to be assigned as determined by specific agency based on provider availability include: IO/IV access, medication administration, CPR quality monitoring, cardiac rhythm monitoring, defibrillation
- Consider transition of roles as additional providers become available to ensure maximal use of resources
- Treatment of the adult cardiac arrest patient in the field is preferred in the majority of cases and is associated with improved outcomes
- Assume cardiac origins for all adult arrests unless evidence to the contrary. Consider underlying causes and treat them when possible.
- Duration of resuscitation. Consider prolonged attempts in patients with an initial shockable rhythm and a witnessed collapse
- Initial shockable: <5% survival after 40 minutes of resuscitation attempt
- Initial Asystole/PEA rhythms: <1% survival after 20 minutes of resuscitation attempt
- **H's & T's** - Treat as appropriate with confirmed or suspected Hypovolemia, Hypoxia, Hydrogen ion (Acidosis), Hyperkalemia, Hypothermia, Hypoglycemia, or specific Toxins.
- ❑ **Pregnancy >20 weeks gestation**
 - Perform manual displacement of the uterus to the patient's left. If unable to perform manual displacement, place wedge-shaped cushion or multiple pillows under patient's right hip to achieve 30 degree lateral tilt.
 - Transport pregnant patients to the nearest emergency department without delay while attempting to provide continuous compressions and defibrillation (if applicable). There is potential to perform an emergency cesarean section in the ED, which may save the fetus and the mother.
- ❑ **Pediatric Population**
 - Consider transport in pediatric arrest after 15 minutes of field resuscitation, including high-quality CPR, effective ventilations, and IV/IO access.
 - Pediatric lowest acceptable systolic blood pressures are birth to 1 month = 60mmHg, 1 month to 1 year = 70mmHg, 1 year to 10 years = 70mmHg + (age x 2), >10 years = 90mmHg.
- ❑ As nationally-established cardiac care guidelines (e.g. ACLS, PALS) are updated, these may be integrated into performance, as per agency medical director.

ADULT

PEDIATRIC (<15 years of Age)
NOTE: Pediatric weight based dosing should not exceed adult dosing.

EMT

- ❑ **AED**
 - Defibrillate immediately if AED advises shock.
 - Resume CPR immediately after each shock and continue for 2 minutes
 - Check pulse and repeat shock if prompted by AED
- ❑ **Respiratory Management:** Use a 30:2 compressions to ventilations ratio

EMT

- ❑ **AED**
 - Defibrillate immediately if AED advises shock
 - Resume CPR immediately after each shock and continue for 2 minutes
 - Check pulse and repeat shock if prompted by AED
- ❑ **Respiratory Management:**
 - Place an NP or OP airway and use a 30:2 compressions to ventilation ratio

AEMT

ALL RHYTHMS

- Begin CPR
- Vascular access and fluid therapy.

AEMT

ALL RHYTHMS

- Begin CPR
- BVM, supraglottic airway, vascular access and fluid therapy

- Consider placement of a supraglottic device without interrupting CPR
- **Epinephrine:** 1 mg (10 ml of 0.1 mg/ml/1:10,000) IV/IO push every 2-4 min as long as the patient remains pulseless. Note that better outcomes are observed with earlier administration of epinephrine, with epinephrine given via IV route, and with shorter dosing intervals (every 2 min)
- Unless a clear response to epinephrine is observed, consider a **limit of 3 total doses**.
- Consider NS 1000 mL IV/IO bolus if hypovolemia suspected

SHOCKABLE RHYTHM (VF/VT) PRESENT

- **Defibrillation**
- **360J** for a monophasic defibrillator or **120-360J** for a biphasic, with escalating energy for subsequent shocks (Follow manufacturer's recommendations)
- Resume CPR immediately after shock and continue for 2 minutes
- Check rhythm and pulse every 2 min

**RESTRICTED FOR AEMT
USE PENDING VARIANCE
APPROVAL. PERMITTED
FOR PARAMEDICS
WITHIN SCOPE**

- Anti-arrhythmics are indicated for shockable rhythms that are unresponsive to defibrillation
- May administer either **ONE** of these anti-arrhythmics:
- **Amiodarone** 300 mg IV/IO, second dose is 150 mg IV/IO after 5 min

- Contact OLMC before terminating resuscitative efforts in the field

PARAMEDIC

- **Epinephrine:** 0.01 mg/kg (0.1 mg/ml / 1:10,000) IV/IO every 2-4 min as long as the patient remains pulseless. Note that better outcomes are observed with earlier administration of epinephrine, with epinephrine given via IV route, and with shorter dosing intervals (every 2 min)
- Max dose = 1 mg (10 ml)
- Unless a clear response to epinephrine is observed, consider a limit of 3 total doses.
- Consider NS 20 ml/kg IV/IO bolus if hypovolemia suspected, reassess and repeat if needed to a Max of 60 mL/kg

SHOCKABLE RHYTHM (VF/VT) PRESENT

- **Defibrillation**
- **2 J/kg** for the first shock with either a monophasic or biphasic defibrillator. Second and subsequent shocks increase by 2 J/kg, up to a max dose 10 J/kg
- Resume CPR immediately after shock and continue for 2 minutes
- Check rhythm and pulse every 2 min

**RESTRICTED FOR AEMT USE
PENDING VARIANCE
APPROVAL. PERMITTED
FOR PARAMEDICS WITHIN
SCOPE**

- Anti-arrhythmics are indicated for shockable rhythms that are unresponsive to defibrillation
- May administer either **ONE** these antiarrhythmics:
- **Amiodarone** 5 mg/kg IV/IO (max 300mg/dose). May repeat 2 more times every 5 min as needed. (Total max 450mg)
- Contact OLMC before terminating resuscitative efforts in the field

PARAMEDIC

☐ Anti-arrhythmics are indicated for shockable rhythms that are unresponsive to defibrillation

- **Lidocaine 1 mg/kg IV/IO/ET. May repeat every 3-5 min up as needed up to 3 mg/kg.**
 - Follow with continuous infusion (1 to 4 mg/minute) after return of perfusion.

☐ Anti-arrhythmics are indicated for shockable rhythms that are unresponsive to defibrillation

- **Lidocaine 1 mg/kg IV/IO/ET. May repeat every 3-5 min up to 3 mg/kg.**
 - Maintenance 20-50 mcg/kg/min

PARAMEDIC

ALL RHYTHMS

- ☐ May consider endotracheal intubation, if unable to adequately ventilate with supraglottic airway, *per Airway and Tracheostomy Management Guideline.*
- ☐ Intubation must not interfere with chest compressions.
- ☐ Special Circumstances
 - Known or Suspected Hyperkalemia
 - Calcium Chloride 1 gram IV/IO over 2 min. May repeat every 5 min X2
OR Calcium Gluconate 3 grams IV/IO over 2 min
 - Sodium Bicarbonate 1 mEq/kg IV/IO may repeat every 5 min X2
 - Polymorphic VT associated with long QT
 - Magnesium 2 gm IV/O over 2 min

📞 Contact OLMC for further orders or therapies

PARAMEDIC

ALL RHYTHMS

- ☐ May consider endotracheal intubation, if unable to adequately ventilate with BVM (preferred) or supraglottic airway, *per Airway and Tracheostomy Management Guideline.*
- ☐ Intubation must not interfere with chest compressions.
- ☐ Special Circumstances
 - Known or Suspected Hyperkalemia
 - Calcium Chloride 20 mg/kg IV/IO may repeat in 10 min (max 2 grams) OR Calcium Gluconate 100 mg/kg IV/IO may repeat in 10 min (max 3 grams)
 - Sodium Bicarbonate 1 mEq/kg IV/IO (Max of 50 mEq). For <2 years of age use 4.2% concentration.
 - Polymorphic VT associated with long QT
 - Magnesium 50 mg/kg (Max = 2,000 mg) IV/O over 2 min

📞 Contact OLMC for further orders or therapies

Letters of Support

Agency Medical Director

Utah State EMS Medical Director

Utah Bureau of EMS

1 May, 2025

Bobbie Sullivan
Program Manager, Emergency Medical Services Program
Division of Public and Behavioral Health
Nevada Department of Health and Human Services
4126 Technology Way, STE 100
Carson City, NV 89706

Dear Ms. Sullivan:

I am writing to express my unequivocal support for the variance requests for EMS protocols by the Wendover Ambulance service. Specifically, I have been the volunteer EMS director for Wendover Ambulance for over 10 years, and also am faculty at one of their primary (if not their only) receiving facilities.

As you know, Wendover serves a large rural catchment area with essentially no local healthcare support, and no local hospital. They rely heavily on critical care air medical transport rendezvous because of this, and additionally, because of limited support available locally, this service is the only option for early institution of relatively advanced medical interventions in time critical illnesses such as trauma, shock states, cardiac arrest, seizures and acute behavioral emergencies. The variances that are being requested are essential for this care. In addition, these requests are well within the scope of practice according to Utah guidelines and we have the endorsement of Dr. Peter Taillac, the current EMS Medical Director for the State of Utah, for these protocols.

From my standpoint as a physician, there is an excellent evidence-base in the medical literature for the prehospital use of medications and protocols discussed in these requests.

For instance, American Epilepsy Society guidelines recommends that EMS personnel use midazolam, (or lorazepam or diazepam) as first-line treatment for status epilepticus. Additionally, an overwhelming majority of patients with status epilepticus did not receive adequate treatment. Higher midazolam doses were not associated with respiratory harm, and patients do not derive clinical benefit despite the risks of prolonged seizures. Wendover also has limited law enforcement response for behavioral emergencies and EMS crews can be at risk from agitated patients for behavioral emergencies and EMS crews can be at risk from agitated patients; a midazolam protocol for prehospital agitation will be associated with reduced agitation and a low rate of adverse events, as reported by other EMS system.

Other medications requested by Wendover in these variances have similar support, and given the unique logistical and other factors demand serious consideration for adaptation. As their medical director, I will ensure that these protocols utilize continuous monitoring of oxygen saturation,

blood pressure and heart rate when those medications are administered. This will allow crews to frequently reassess patients. Finally, several protocols will require online medical control (done via radio to the University of Utah ED physicians on duty) as well as documentation of use and dose, time, and patient response to each administration for later case review by me and Wendover personnel.

I look forward to hearing any thoughts, questions or comments you have regarding these variances and trust that we can ensure the best care for the residents of the Wendover area and it's many visitors.

Sincerely,

Gerard Doyle, MD MPH

May 16, 2025

To: Secretary, State Board of Health Division of Public and Behavioral Health
4150 Technology Way, Suite 300
Carson City, NV 89706

Re: Support for Wendover Ambulance Variance Request to Allow Amiodarone and Lidocaine to be Administered by Advanced EMTs Under Medical Director-Approved Protocol

As the Utah State EMS Medical Director, I would like to lend my strong support to Wendover Ambulance in seeking a Nevada variance to allow Advanced EMTs (AEMTs) to administer amiodarone and lidocaine to cardiac arrest patients, under a protocol approved by their medical director.

Wendover Ambulance does not always have a paramedic on duty and in many cases their patients are cared for and transported by AEMTs. Their transport times are long, as their nearest hospital is over 100 miles away. Cardiac arrest patients should be afforded appropriate medical care en route to the hospital. **These medications are used to prevent lethal arrhythmias that can cause a re-arrest in these patients.**

Utah has allowed AEMTs to safely administer amiodarone and lidocaine for over 15 years. Such administration is reflected in our Utah State EMS Protocol Guidelines¹. Essentially all of our rural EMS agencies allow this in their local protocols. Over this extended period, we have had no issues with inappropriate or unsafe administration of amiodarone or lidocaine by trained AEMTs.

As of 2019, the National Highway Traffic Administration National EMS Scope of Practice Model has allowed administration of “Medical Director-Approved Medications.”² The administration of intravenous amiodarone and lidocaine is within the national scope of practice for AEMTs and is thus allowed by most states.

I fully support and recommend approval of this Nevada variance for Wendover Ambulance to allow AEMTs to administer amiodarone and lidocaine under a medical director-approved protocol. I am available at any time for questions regarding this issue: ptailiac@utah.gov / 801-803-3217

Peter Taillac, MD, FACEP, FAEMS
Medical Director
Office of Emergency Medical Services and Preparedness
Department of Health and Human Services

1. <https://ems.utah.gov/operations-and-response/ems-operations/medical-direction-ems-protocol-guidelines/>
2. https://www.ems.gov/assets/National_EMS_Scope_of_Practice_Model_2019.pdf (page 36, please note the footnote on that page: “and others defined by state/local protocol”)

4/28/2025

To Whom It May Concern,

The Bureau of Emergency Medical Services offers out full endorsement for Wendover Ambulance's initiative to permit Advanced Emergency Medical Technicians (AEMTs) to administer Amiodarone and Lidocaine in accordance with the 2023 Utah EMS Protocol Guidelines.

Amiodarone or Lidocaine are the recommended antiarrhythmic for refractory ventricular fibrillation (VF) and pulseless ventricular tachycardia (VT), two of the most serious cardiac arrest rhythms. Early access to these medications increase the likelihood of successful resuscitation and improves the chances for return of spontaneous circulation (ROSC).

Wendover Ambulance's AEMTs are well-trained in cardiac arrest management and are operating in an environment where rapid transport to definitive care may be prolonged. Allowing AEMTs to administer Amiodarone or Lidocaine during cardiac arrest will significantly enhance their ability to stabilize patients during these critical moments.

We trust Wendover Ambulance's leadership and training program to ensure appropriate education, skill verification, and OLMC oversight. The Bureau of EMS strongly supports this request to improve lifesaving capabilities in Wendover's prehospital care system.

Respectfully,
Mark Herrera
EMS Ed., Rural Outreach, & SSoC Program Manager
Utah Bureau of EMS
801-232-9138
markherrera@utah.gov
ems.utah.gov

Letters of Support

Agency Medical Director
Utah State EMS Medical Director
Utah Bureau of EMS

1 May, 2025

Bobbie Sullivan
Program Manager | Emergency Medical Services Program
Division of Public and Behavioral Health
Nevada Department of Health and Human Services
4126 Technology Way, STE 100
Carson City, NV 89706

Dear Ms Sullivan:

I am writing to express my unequivocal support for the variance requests for EMS protocols by the Wendover Ambulance service. Specifically, I have been the volunteer EMS director for Wendover Ambulance for over 10 years, and also am faculty at one of their primary (if not their only) receiving facilities.

As you know, Wendover serves a large rural catchment area with essentially no local healthcare support, and no local hospital. They rely heavily on critical care air medical transport rendezvous because of this, and additionally, because of limited support available locally, this service is the only option for early institution of relatively advanced medical interventions in time critical illnesses such as trauma, shock states, cardiac arrest, seizures and acute behavioral emergencies. The variances that are being requested are essential for this care. In addition, these requests are well within the scope of practice according to Utah guidelines and we have the endorsement of Dr. Peter Taillac, the current EMS Medical Director for the State of Utah, for these protocols.

From my standpoint as a physician, there is an excellent evidence-base in the medical literature for the prehospital use of the medications and protocols discussed in these requests.

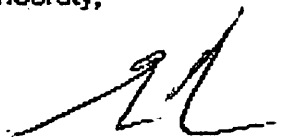
For instance, American Epilepsy Society guidelines recommends that EMS personnel use midazolam, (or lorazepam or diazepam) as first-line treatment for status epilepticus. Additionally, an overwhelming majority of patients with status epilepticus did not receive adequate treatment. Higher midazolam doses were not associated with respiratory harm, and patients do not derive clinical benefit despite

the risks of prolonged seizures. Wendover also has limited law enforcement response for behavioral emergencies and EMS crews can be at risk from agitated patients; a midazolam protocol for prehospital agitation will be associated with reduced agitation and a low rate of adverse events, as reported by other EMS systems.

Other medications requested by Wendover in these variances have similar support, and given the unique logistical and other factors demand serious consideration for adaptation. As their medical director, I will ensure that these protocols utilize continuous monitoring of oxygen saturation, blood pressure and heart rate when those medications are administered. This will allow crews to frequently reassess patients. Finally, several protocols will require online medical control (done via radio to the University of Utah ED physicians on duty) as well as documentation of use and dose, time, and patient response to each administration for later case review by me and Wendover personnel.

I look forward to hearing any thoughts, questions or comments you have regarding these variances and trust that we can ensure the best care for the residents of the Wendover area and it's many visitors.

Sincerely,

A handwritten signature in black ink, appearing to be 'GD' or 'Gerard Doyle', written in a cursive style.

Gerard Doyle, MD MPH



State of Utah

SPENCER J. COX
Governor

DEIDRE M. HENDERSON
Lieutenant Governor

Department of Public Safety

JESS L. ANDERSON
Commissioner

May 16, 2025

To: Secretary, State Board of Health Division of Public and Behavioral Health
4150 Technology Way, Suite 300
Carson City, NV 89706

Re: Support for Wendover Ambulance Variance Request to Allow Amiodarone and Lidocaine to be Administered by Advanced EMTs Under Medical Director-Approved Protocol

As the Utah State EMS Medical Director, I would like to lend my strong support to Wendover Ambulance in seeking a Nevada variance to allow Advanced EMTs (AEMTs) to administer amiodarone and lidocaine to cardiac arrest patients, under a protocol approved by their medical director.

Wendover Ambulance does not always have a paramedic on duty and in many cases their patients are cared for and transported by AEMTs. Their transport times are long, as their nearest hospital is over 100 miles away. Cardiac arrest patients should be afforded appropriate medical care en route to the hospital. **These medications are used to prevent lethal arrhythmias that can cause a re-arrest in these patients.**

Utah has allowed AEMTs to safely administer amiodarone and lidocaine for over 15 years. Such administration is reflected in our Utah State EMS Protocol Guidelines¹. Essentially all of our rural EMS agencies allow this in their local protocols. Over this extended period, we have had no issues with inappropriate or unsafe administration of amiodarone or lidocaine by trained AEMTs.

As of 2019, the National Highway Traffic Administration National EMS Scope of Practice Model has allowed administration of "Medical Director-Approved Medications."² The administration of intravenous amiodarone and lidocaine is within the national scope of practice for AEMTs and is thus allowed by most states.

I fully support and recommend approval of this Nevada variance for Wendover Ambulance to allow AEMTs to administer amiodarone and lidocaine under a medical director-approved protocol. I am available at any time for questions regarding this issue: ptailiac@utah.gov / 801-803-3217.

Peter Taillac, MD, FACEP, FAEMS
Medical Director

Office of Emergency Medical Services and Preparedness
Department of Health & Human Services

1. <https://ems.utah.gov/operations-and-response/ems-operations/medical-direction/ems-protocol-guidelines/>
2. https://www.ems.gov/assets/National_EMS_Scope_of_Practice_Model_2019.pdf (page 36, please note the footnote on that page: "and others defined by state/local protocol")



State of Utah

SPENCER J. COX
Governor

DEIDRE M. HENDERSON
Lieutenant Governor

Department of Public Safety

JESS L. ANDERSON
Commissioner

4/28/2025

To Whom It May Concern,

The Bureau of Emergency Medical Services offers our full endorsement for Wendover Ambulance's initiative to permit Advanced Emergency Medical Technicians (AEMTs) to administer Amiodarone and Lidocaine in accordance with the 2023 Utah EMS Protocol Guidelines.

Amiodarone or Lidocaine are the recommended antiarrhythmic for refractory ventricular fibrillation (VF) and pulseless ventricular tachycardia (VT), two of the most serious cardiac arrest rhythms. Early access to these medications increase the likelihood of successful resuscitation and improves the chances for return of spontaneous circulation (ROSC).

Wendover Ambulance's AEMTs are well-trained in cardiac arrest management and are operating in an environment where rapid transport to definitive care may be prolonged. Allowing AEMTs to administer Amiodarone or Lidocaine during cardiac arrest will significantly enhance their ability to stabilize patients during these critical moments.

We trust Wendover Ambulance's leadership and training programs to ensure appropriate education, skill verification, and OLMC oversight. The Bureau of EMS strongly supports this request to improve lifesaving capabilities in Wendover's prehospital care system.

Respectfully,



MARK HERRERA
*EMS Ed., Rural Outreach, & SSoC
Program Manager*
Utah Bureau of EMS
801-232-9138
markherrera@utah.gov
ems.utah.gov

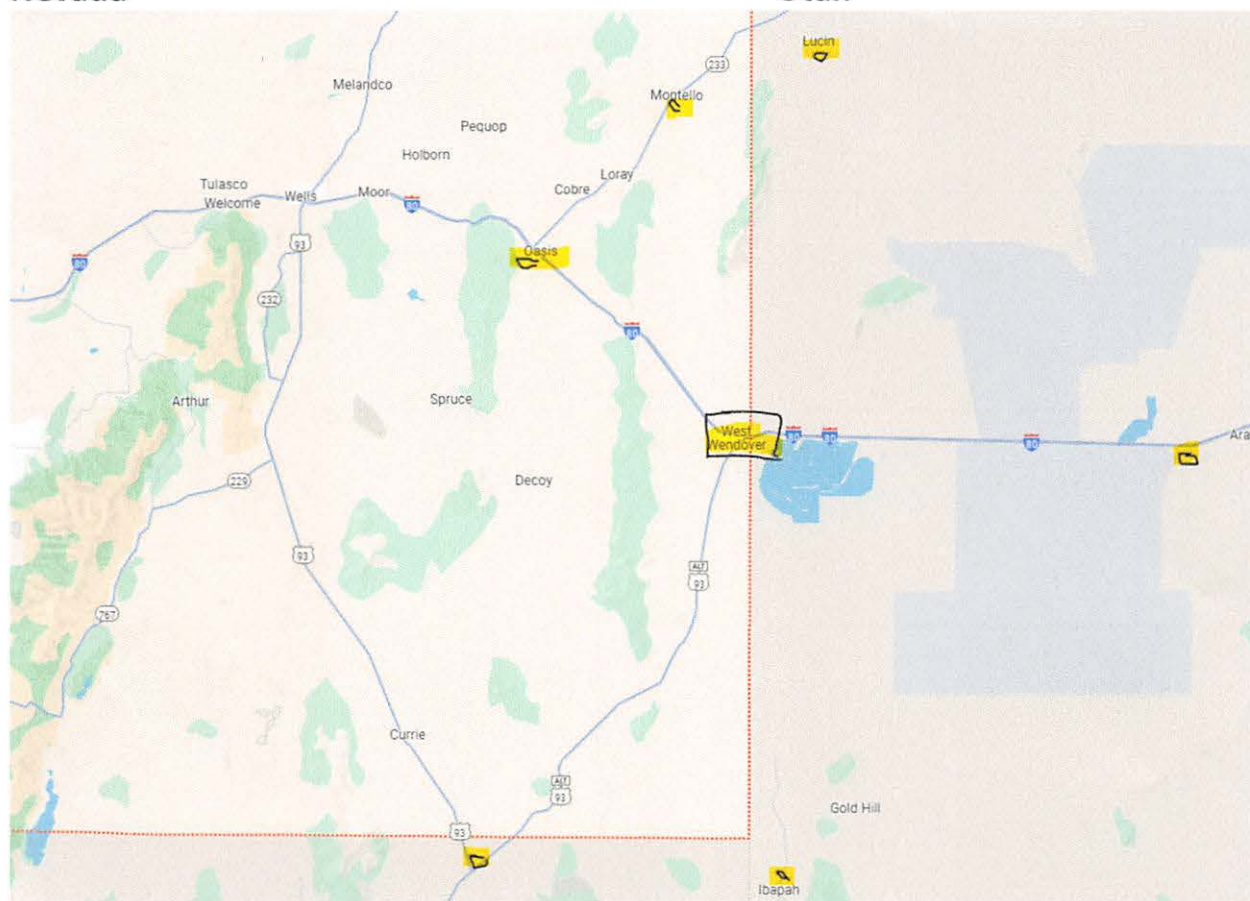
Wendover Ambulance

service area map

Utah and Nevada

Nevada

Utah



Wendover Ambulance Service area:

- West –MM 380 I-80 - ½ way to Wells, NV
- North – SR 233 to Montello , NV
- North – Pilot Mtn Rd. to Lucin, UT
- South – Alt 93 Loges Junction – ½ way to Ely, NV
- South – Alt 93, NV to Ibapah Rd, UT
- East – mm 56 I-80 – ½ way to Tooele, UT

Wendover Ambulance Lesson Plan

Amiodarone / Lidocaine

WENDOVER AMBULANCE LESSON PLAN

ANTI-ARRHYTHMICS -AMIODARONE AND LIDOCAINE

PURPOSE: TO FAMILIARIZE ADVANCED EMTS ON THE PROPER ADMINISTRATION AND UTILIZATION OF AMIODARONE AND LIDOCAINE. THIS WILL BE ACCOMPLISHED BY SYNCHRONUS AND ASYNCHRONUS TRAINING, ONLINE TESTING AND IN PERSON SKILLS TESTING

LESSON PLAN: Will review the following information regarding the use of AMIODARONE AND LIDOCAINE

- 1. Breakdown of pathophysiology of medication**
 - a. Including how AMIODARONE AND LIDOCAINE effects the cardiovascular system
- 2. Appropriate uses for AMIODARONE AND LIDOCAINE**
 - a. Review of the following protocols:
 - i. Cardiac Arrest
- 3. Review of Potential Adverse Effects of AMIODARONE AND LIDOCAINE**
 - a. Cardiac Arrhythmias
 - b. Hypotension
- 4. Management of Potential Adverse Effects of AMIODARONE AND LIDOCAINE**
 - a. Airway management including BVM if necessary
 - b. Hemodynamic management with appropriate fluids
- 5. Required Patient monitoring after administration**
 - a. ETCO2
 - b. Blood Pressure
 - c. SPO2
 - d. 4-Lead Cardiac Monitoring
- 6. Review of physical administration**
 - a. Dosing
 - b. Concentration
 - c. Physical practice of drawing
 - d. Safe IV medication administration
- 7. Testing- Students will be required to pass Didactic and Psychomotor testing at 80% or higher**
 - a. Written test reviewing**
 - i. Action
 - ii. Indications
 - iii. Contraindications
 - iv. Side Effects
 - v. Dosing

- vi. Adverse Reaction Management
- vii. Patient Scenarios where AMIODARONE AND LIDOCAINE may or may not be appropriate for use

b. Psychomotor Testing to include

- i. Patient Scenarios
 - 1. Appropriate for using AMIODARONE AND LIDOCAINE
 - 2. Inappropriate for using AMIODARONE AND LIDOCAINE
 - 3. Management of adverse effects •

c. Advanced Cardiac Life Support and Pediatric Advanced Life Support Training - AEMTS will be required to hold AHA ACLS and PALS certifications by December 31, 2025

- i. Can be accomplished by
 - 1. In Person Training Class
 - 2. Online didactic with in person skills pass off

Wendover Ambulance Lesson Plan

Amiodarone / Lidocaine

WENDOVER AMBULANCE LESSON PLAN

Anti-Arrhythmics – Amiodarone and Lidocaine

PURPOSE: TO FAMILIARIZE ADVANCED EMTS ON THE PROPER ADMINISTRATION AND UTILIZATION OF AMIODARONE AND LIDOCAINE. THIS WILL BE ACCOMPLISHED BY SYNCHRONUS AND ASYNCHRONUS TRAINING, ONLINE TESTING AND IN PERSON SKILLS TESTING

LESSON PLAN: Will review the following information regarding the use of AMIODARONE AND LIDOCAINE

- 1. Breakdown of pathophysiology of medication**
 - a. Including how AMIODARONE AND LIDOCAINE effects the cardiovascular system
- 2. Appropriate uses for AMIODARONE AND LIDOCAINE**
 - a. Review of the following protocols:
 - i. Cardiac Arrest
- 3. Review of Potential Adverse Effects of AMIODARONE AND LIDOCAINE**
 - a. Cardiac Arrhythmias
 - b. Hypotension
- 4. Management of Potential Adverse Effects of AMIODARONE AND LIDOCAINE**
 - a. Airway management including BVM if necessary
 - b. Hemodynamic management with appropriate fluids
- 5. Required Patient monitoring after administration**
 - a. ETCO2
 - b. Blood Pressure
 - c. SPO2
 - d. 4-Lead Cardiac Monitoring
- 6. Review of physical administration**
 - a. Dosing
 - b. Concentration
 - c. Physical practice of drawing
 - d. Safe IV medication administration

7. Testing – Students will be required to pass Didactic and Psychomotor testing at 80% or higher

a. Written test reviewing

- i. Action
- ii. Indications
- iii. Contraindications
- iv. Side Effects
- v. Dosing
- vi. Adverse Reaction Management
- vii. Patient Scenarios where AMIODARONE AND LIDOCAINE may or may not be appropriate for use

b. Psychomotor Testing to include


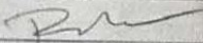
- i. Patient Scenarios
 1. Appropriate for using AMIODARONE AND LIDOCAINE
 2. Inappropriate for using AMIODARONE AND LIDOCAINE
 3. Management of adverse effects

c. Advanced Cardiac Life Support and Pediatric Advanced Life Support Training - AEMTS will be required to hold AHA ACLS and PALS certifications by December 31, 2025

- i. Can be accomplished by
 1. In Person Training Class
 2. Online didactic with in person skills pass off

Wendover Ambulance

Narcotics and Medication handling

|  HEALTH UNIVERSITY OF UTAH Pharmacy Services INVOICE / STATEMENT | | | | |
|---|-----|---|------------|-----------------|
| Sold To: | | Wendover Ambulance Service Attn: Inpatient Pharmacy/Accounts Payable PO Box 2530 Wendover, NV 89883-2530 | | |
| Invoice Number: | | 20250304-4 | | |
| Invoice Date: | | 3/4/2025 | | |
| DATE | QTY | Description | Unit Price | Amount |
| 2/14/2025 | 50 | Midazolam 5mg/1ml vial NDC: 43323-0415-25 | \$3.56 | \$178.75 |
| 2/14/2025 | 50 | Morphine 10mg/1ml vial NDC: 00641-4127-25 | \$2.79 | \$139.50 |
| 2/14/2025 | 25 | Fentanyl 100mcg/2ml NDC: 72572-0170-25 | \$1.58 | \$39.50 |
| Grand Total: | | | | \$357.85 |
| Signed:  _____ <div style="text-align: center;">University of Utah Representative</div> | | | | |
| Contact: | | Name pharmacy purchasing @hsc.utah.edu | | |
| Remit to: | | University of Utah Health Department of Pharmacy Services 50 North Medical Drive Rm A050 Salt Lake City, Utah 84143 | | |

Medications are logged and marked with a consecutive numbered tag:

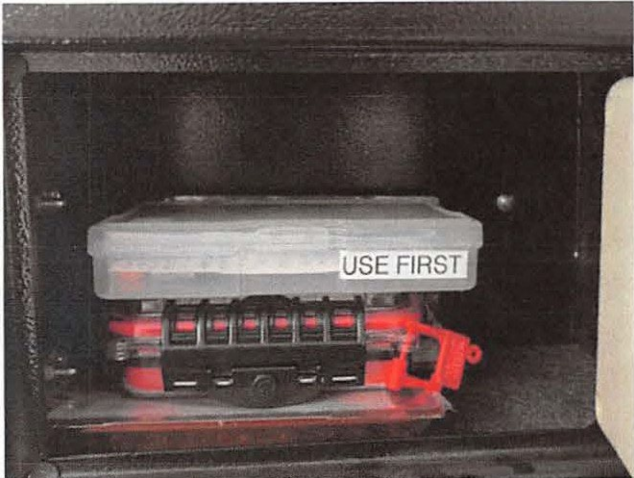


A black, heavy-duty metal safe is shown standing upright. It has a combination dial and a keyhole on the front door. The safe is positioned against a light-colored wall, and a window with blinds is visible to the right.

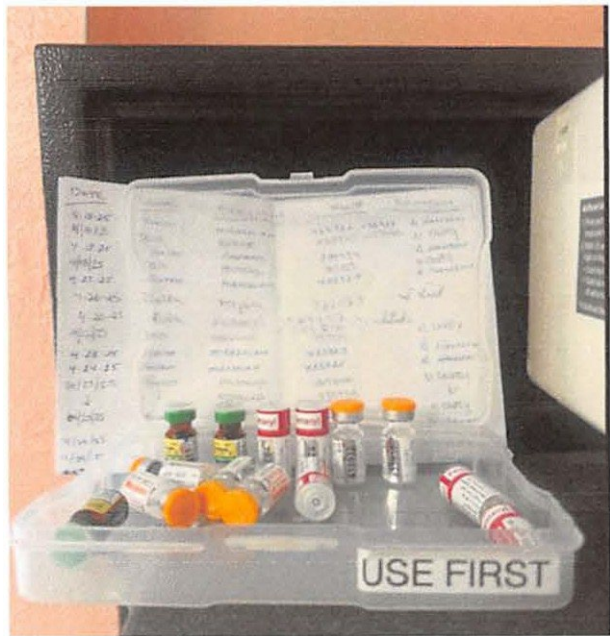
[illegible]

Record keeping and audits are integral to a successful program. Once the narcotics are delivered to Wendover, they are logged and kept in the Big Safe that is in the Manager's office. Only two people have access to that safe – the Owner, Lauara Lisk and Operations Manager Darin Hanson. The door lock to the Owner's office is an electronic lock and has limited access by Owner and Managers. Ambulances are equipped with small combo safes that are attached to the wall.

There is a smaller safe in the manager's office that is bolted to the wall and has a limited amount of controlled substance for use to re-stock the ambulances after a call when Lauara or Darin are not available. Only three crew leads have the combination to this safe:



When Crew Leaders take medications from the small safe, the following documentation is done:



All ambulances have combination lock safes for the controlled substances, dangerous drugs:



These are the individual locked boxes for controlled Substances that are in each ambulance lock safe:



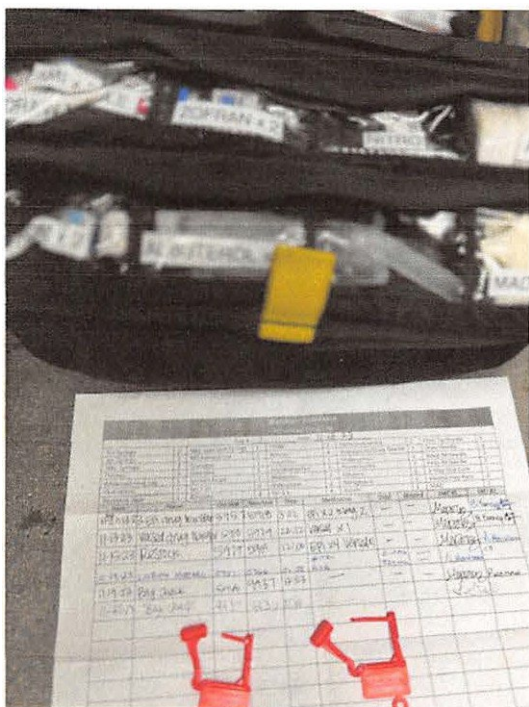
Medications are logged as seen here:



Crew on-scene bag with AEMT medications:



Inside the AEMT medications bag with control log:



In our ambulance bay we have a small safe that is bolted to the wall for the used/wasted medications that we track and account for. The used vial is taped to a control form with the patient and call info and deposited into that wall safe. Every couple of weeks the contents are taken out, the vial removed and the forms scanned to records systems. The vials are then disposed of by either Lauara or Darin at t he University of Utah Hospital Pharmacy used medications depository.



Controlled substance use

Date 3/11/25

Medication Used Morphine

NDC # 0441-6127-01

Lot # J230625

Expiration Date Sep 2025

Amount Used 10mg

Amount Left None


Patient Name [Redacted]

DOB 6/19/1966

Reason Used Pain Management

Paramedic/EMT Kergh Wolfe Charles Lanier

LB # Tangu
Serial # 781019

A small, clear glass vial with a metal cap, labeled "MORPHINE" and "221015", is taped to the right side of the form.

Office Security - electronic lock to Owner's Office:



NAC 450B.461

Restrictions on authority to administer

Licensed Ambulance equipment and supply list from NV EMS website

CONTROLLED SUBSTANCES AND DANGEROUS DRUGS

NAC 450B.461 Restrictions on authority to administer. ([NRS 450B.120](#), [450B.180](#), [450B.1915](#), [450B.197](#), [453.375](#), [454.213](#))

1. No paramedic may administer any controlled substance as defined in the preliminary chapter of NRS to a patient while serving as an attendant in a service **unless** the controlled substance is named on the inventory of medication issued by the medical director of the service and:

(a) An order is given to the paramedic by a physician or a registered nurse supervised by a physician; or

(b) The paramedic is authorized to administer the controlled substance pursuant to a written protocol that is approved by the medical director of the service and on file with the Division.

2. No advanced emergency medical technician or paramedic may administer any dangerous drug while serving as an attendant in a service **unless** the dangerous drug is named on the inventory of medication issued by the **medical director** of the service and:

(a) An order is given to the advanced emergency medical technician or paramedic by a physician or a registered nurse supervised by a physician; **or**

(b) The advanced emergency medical technician or paramedic **is authorized** to administer the drug **pursuant to a written protocol** that is approved by the **medical director** of the service and **on file with the Division**.

3. An emergency medical technician shall not administer or assist in administering any dangerous drug.

4. As used in this section, "dangerous drug" has the meaning ascribed to it in [NRS 454.201](#).

(Added to NAC by Bd. of Health, eff. 8-1-91; A by R182-01, 3-5-2002; R024-14, 10-24-2014; R068-16, 1-27-2017)

Note added by applicant: Protocol verification and approval signed by medical director and provided with annual permit renewal.

**State of Nevada EMS Program Inspection Form
AMBULANCE UNIT**

| | | | | | | | | | | |
|--|--------------------|-------------|--------------|------------------|---------------------|--------------------------------------|-------------------|-------------|------------|-------------|
| Permit No. | Agency Name | | | | | | Level | | | |
| | Address | | | | | Unit # | | | | |
| Year | Make | Type | Color | License # | Vin/Serial # | | Insp. Date | | | |
| Type of Inspection : New Regular Corrective Return to Service Replacement of | | | | | | | Odometer | | | |
| Basic Life Support | | | | | | | | | | |
| Airway/Ventilation | | | Min. | Y/N | Cat. | Dressing | | Min. | Y/N | Cat. |
| Fixed Oxygen (500 lbs. min.) | | | 1 | | A | ABD- Trauma Dressings | | 2 | | A |
| Portable Oxygen (500 lbs. min.) | | | 1 | | A | 4x4's | | 20 | | A |
| Adult Nasal Cannula | | | 4 | | A | 5x9's or equiv. | | 5 | | A |
| Child & Infant Nasal Cannula ** | | | 2 | | | Triangular Bandage | | 2 | | B |
| Adult Non Rebreather Mask | | | 4 | | A | Roller Gauze | | 4 | | A |
| Child Non Rebreather Mask | | | 2 | | A | Occlusive Dressing | | 2 | | A |
| Infant Non Rebreather Mask ** | | | 2 | | | Burn Dressing Various Sizes | | 2 | | A |
| Bag Valve Mask with O2 Reservoir | | | | | | Tape/Hypoallergenic Various Sizes | | 2 | | B |
| Adult & Child | | | 1ea | | A | Survival/Thermal Blanket ** | | 1 | | |
| OPA's Size 0 - 5 / equiv. | | | 1ea | | A | Patient Assessment | | | | |
| NPA's 16F - 34F / equiv. | | | 1ea | | A | AED or SAED with Adult & Pedi Pads | | 1 | | A |
| Fixed Suction | | | 1 | | A | Adult BP Cuff | | 1 | | A |
| Portable Suction / battery operated | | | 1 | | A | Pulse Ox with Adult & Pedi Probes ** | | 1 | | |
| Tonsillar Suction | | | 2 | | A | Child BP Cuff | | 1 | | A |
| Suction Tubing | | | 2 | | A | Infant BP Cuff ** | | 1 | | |
| Flexible Suction Cath. W/ airflow ctrl | | | 2 | | B | Adult Stethoscope | | 1 | | A |
| Bulb Syringe not in OB Kit | | | 1 | | B | Pediatric Stethoscope ** | | 1 | | |
| Immobilization Devices | | | | | | Pen Flashlight | | 1 | | B |
| Backboard Impervious | | | 2 | | A | Thermometer | | 1 | | B |
| KED or equiv. | | | 1 | | A | Obstetrical/Child | | | | |
| Straps (3 per Board) / Spider Straps | | | 2 | | A | Obstetrical Kit (sterile) | | 2 | | A |
| C-Collars (Adult-Tall,Reg,No-Neck | | | | | | Infant Swaddler | | 2 | | B |
| Short,Pedi, No-Neck or Adjustable) | | | 2ea | | A | Current Broselow Tape or equiv. | | 1 | | B |
| Adult & Pedi Traction Splint | | | 1 | | A | Meconium Aspirator ** | | 1 | | |
| Pediatric Backboard ** | | | 1 | | | Infant Warming Device ** | | 1 | | |
| Head Immobilizers | | | 2 | | A | Child Restraint System ** | | | | |
| Splints for Extremities / Arms & Legs | | | 2ea | | B | | | | | |
| Miscellaneous Items | | | | | | | | | | |
| PPE Gowns, Glasses, Gloves etc. | | | 2 | | A | Tourniquet | | 1 | | B |
| Drinking Water, 1000 ml | | | 1 | | B | Ring Cutter ** | | 1 | | |
| Hot & Cold Packs | | | 2 | | B | Supply of Clean Linen | | 2 | | A |
| Hemostatic Agent ** | | | 1 | | | Trauma Scissors | | 1 | | A |
| Emesis Basin / Bags | | | 2 | | B | Irrigation Solution 1000 ml | | 1 | | B |
| Mounted Sharps Container | | | 1 | | A | Chem Strips/Glucometer ** | | 1 | | |

| | | | | Unit # | | | |
|---|------|-----|------|---|------|-----|------|
| ILS EQUIPMENT | Min. | Y/N | CAT. | ALS EQUIPMENT | MIN. | Y/N | CAT. |
| IV Administration Sets Macro Drip | 2 | | A | Monitor/Defibrillator-Adult and Pedi Pads | 1 | | A |
| Buretrol or equiv. | 1 | | A | Chest Decompression Kit | 1 | | A |
| Capnography Adult ** | 1 | | | Needle Cricothyroidotomy Kit | 1 | | A |
| Capnography Pedi ** | 2 | | | Nasogastric Tubes Various Sizes | 2ea | | B |
| End Tidal CO2 Detector | 2 | | B | Endotracheal Intubation Kit | 1 | | A |
| IV Catheters Various Sizes | 2ea | | A | Endotracheal Tubes 2.5 - 8.0 | 2ea | | A |
| IO Needles #15 or 18 Gauge | 2 | | A | Adult & Pedi Stylet | 2ea | | A |
| Syringes,TB w/ needle | 2ea | | A | | | | |
| IM Needles | 2 | | B | IV FLUIDS | | | |
| Supraglottic Airway Device | 2ea | | A | Normal Saline 1000cc | 4 | | A |
| Magill Forceps | 1 | | A | Lactated Ringers ** | 2 | | |
| Nebulizers | 2 | | A | Dextrose 5% Water ** | 2 | | |
| Syringes Various Sizes | 2ea | | A | | | | |
| MEDICATIONS BASED ON AGENCY PROTOCOLS AND SERVICE LEVEL | | | | | | | |
| Acetaminophen / Tylenol | | | | Ketorolac/ Toradol | | | |
| Activated Charcoal | | | | Levalbuterol/ Xopenex | | | |
| Adenosine / Adenocard | | | | Levophed/ Norepinephrine | | | |
| Albuterol / Proventil | | | | Lidocaine | | | |
| Amiodarone / Cardarone | | | | Lidocaine Gel | | | |
| Aspirin | | | | Lidocaine Pre-Mix Bag | | | |
| Atropine Sulfate | | | | Lorazepam/ Ativan | | | |
| Atrovent / Ipratropium Bromide | | | | Magnesium Sulfate | | | |
| Calcium Chloride | | | | Midazolam / Versed | | | |
| Cyanide Antidote Kit | | | | Morphine Sulfate | | | |
| Dextrose | | | | Naloxone / Narcan | | | |
| Diazepam/Valium | | | | Neo-Synephrine or Equivalent | | | |
| Diltiazem/ Cardizem | | | | Nitroglycerin | | | |
| Diphenhydramine / Benadryl | | | | Nitroglycerin Drip | | | |
| Dobutamine | | | | Nitrous Oxide / Nitronox | | | |
| Dopamine / Intropin | | | | Ondansetron/ Zofran | | | |
| DuoDote | | | | Oxymetazoline/ Afrin | | | |
| Epinephrine 1:10,000 | | | | Oxytocin /Pitocin | | | |
| Epinephrine 1:1000 | | | | Promethazine / Phenergan | | | |
| Epinephrine auto Inj adult/pedi | | | | Racemic Epi | | | |
| Fentanyl/ Sublimaze | | | | Sodium Bicarb 8.4% | | | |
| Flumazenil/ Ramazacon | | | | Solu-mederal | | | |
| Furosemide / Lasix | | | | Terbutaline | | | |
| Glucagon | | | | Tetracaine or Equivalent | | | |
| Glucose Paste | | | | Thiamine / Vitamin B1 | | | |
| Haloperidol / Haldol | | | | Vasopressin/ Pitressin | | | |
| Hydromorphone/ Dilaudid | | | | | | | |
| Ketamine | | | | Paralytic Medications | | | |

"Medication list is different for each agency based off of approved protocols. All medications approved for your agency must be stocked appropriately and be within expiration date. All violations of medications are considered to be a Category A "

N/A = Not Applicable

** = Optional Equipment

Unit #

| OPERATIONAL STANDARDS | | | | | | | |
|--------------------------------------|---|---|------|--|---|---|------|
| Meet Standards / Working | Y | N | CAT. | Meet Standards / Working | Y | N | CAT. |
| Light bar Operational | | | A | Dispatch Radio Operational | | | A |
| Box Lights Operational | | | A | Hospital Radio Operational | | | A |
| Scene Lights Operational | | | B | Heater & Air Conditioner Operational | | | A |
| Headlights Operational | | | A | Disinfectant Solution | | | B |
| Flash Light | | | B | Protective Helmet Per Attendant ** | | | |
| Interior Lights Operational | | | A | Interior Clean & Sanitized | | | A |
| Siren Operational | | | A | Medications Stored for Climate | | | |
| Brake lights Operational | | | A | Control | | | A |
| Turn Indicators Operational | | | A | Controlled Medications Stored | | | |
| Horn Operational | | | A | in Locked Cabinet or Under Direct | | | |
| Fire Extinguisher 5 lbs. ABC Type | | | A | Control of Appropriate Licensed Provider | | | A |
| Seat with Safety Belts | | | A | Controlled Substances Record of | | | |
| Gurney with 5 Point Rest. Harness | | | A | Usage Inventory issued by Service | | | |
| Gurney Fasteners Secured | | | A | Compliant with NAC 450B.481 | | | A |
| Stair Chair ** | | | | Equipment Clean & Sanitized | | | A |
| Name Printed on Both Sides | | | | Ambulance Fully Operational | | | A |
| of Vehicle | | | A | Current Hazardous Materials Guide | | | B |
| Reflective Safety Wear per Attendant | | | A | Triage Kit | | | B |
| Copy of Protocols | | | B | Hand Sanitizer | | | B |

ALL VIOLATIONS MUST BE CORRECTED AS OUTLINED BELOW

Violations in Category "A" If All Category "A" supplies of any item are missing this requires the unit be immediately removed from service. The unit must be re-inspected and found in compliance with the NRS's and the NAC's of 450B. If less than all category "A" supplies of any item are missing the item shall be treated as a category "B" item.

Violations in Category "B" must be corrected with a written report to the Division of Public & Behavioral Health Emergency Medical Systems program regional office within 72 hours. Failure to comply with this notice may result in suspension of your permit or removal of the unit from service.

Comments :

This Unit **DOES / DOES NOT** comply with the Emergency Medical Systems Regulations of the Division of Public & Behavioral Health.



THIS UNIT IS HEREBY REMOVED FROM SERVICE UNTIL SUCH TIME THAT IT OBTAINS A SATISFACTORY INSPECTION

| | | |
|-------|---------------|------------------|
| Date: | Inspected By: | Acknowledged By: |
|-------|---------------|------------------|

NAC 450B.461
Restrictions on authority to administer

Licensed Ambulance equipment and supply list
from NV EMS website

2. The applicant shall submit proof to the Division, signed by the person responsible for the training, that the applicant has successfully completed the course or curriculum specified in paragraph (b) of subsection 1.

(Added to NAC by Bd. of Health by R182-01, eff. 3-5-2002; A by R024-14, 10-24-2014)

NAC 450B.457 Certification of emergency medical dispatcher trained in another state. (NRS 450B.120, 450B.155)

1. The Division may issue a certificate as an emergency medical dispatcher to an applicant who is trained in another state if:

(a) The applicant:

- (1) Is a resident of Nevada;
- (2) Will be a resident of Nevada within 6 months after applying for a certificate;
- (3) Is a resident of another state and is employed by an agency that is responsible for emergency medical dispatch within the State of Nevada; or
- (4) Is attending a course of training held in this State and approved by the Division.

(b) The applicant:

(1) Successfully completes a course of training that is approved by the Division and is at least equivalent to the national standard for emergency medical dispatchers; and

(2) Holds a certificate as an emergency medical dispatcher that is issued by an authorized agency in the other state.

(c) The applicant's certification or registration in the other state has not been revoked, terminated or suspended pursuant to any disciplinary proceeding.

(d) The Division receives verification of the applicant's certificate as an emergency medical dispatcher from the issuing agency of the other state on a form provided by the Division.

(e) The applicant submits the appropriate form and the fee prescribed in NAC 450B.700.

2. The Division may require the applicant to pass an evaluation or examination of his or her competency administered by the Division.

(Added to NAC by Bd. of Health by R182-01, eff. 3-5-2002; A by R024-14, 10-24-2014; R068-16, 1-27-2017)

NAC 450B.458 Expiration and renewal of certificate. (NRS 450B.120, 450B.155)

1. A certificate as an emergency medical dispatcher expires on the date of expiration appearing on the certificate and, after the initial period, expires biennially. The Division shall designate the date of expiration of each certificate.

2. Such a certificate may be renewed if:

(a) The Division determines that the holder of the certificate has, before the date of expiration, successfully completed:

(1) A course of continuing training that is at least equivalent to the national standard prepared by the National Highway Traffic Safety Administration of the United States Department of Transportation as a national standard as a refresher course for emergency medical dispatchers and is offered by a training center or approved by the Division; or

(2) Any other program of continuing education that is approved by the Division. Such a program must not be approved unless the requirement for attendance for that program for an emergency medical dispatcher is at least 8 hours.

(b) The holder submits, within the 3 months immediately preceding the date the certificate expires, an application indicating compliance with the requirements set forth in paragraph (a).

(Added to NAC by Bd. of Health by R182-01, eff. 3-5-2002; A by R024-14, 10-24-2014; R068-16, 1-27-2017)

NAC 450B.459 Late renewal of certificate. (NRS 450B.120, 450B.155) If an emergency medical dispatcher is unable to attend a course for continuing training required to renew his or her certificate, or otherwise comply with the requirements for renewal, within the prescribed period, he or she may submit a written request for a late renewal on a form provided by the Division.

(Added to NAC by Bd. of Health by R182-01, eff. 3-5-2002; A by R068-16, 1-27-2017)

CONTROLLED SUBSTANCES AND DANGEROUS DRUGS

NAC 450B.461 Restrictions on authority to administer. (NRS 450B.120, 450B.180, 450B.1915, 450B.197, 453.375, 454.213)



1. No paramedic may administer any controlled substance as defined in the preliminary chapter of NRS to a patient while serving as an attendant in a service unless the controlled substance is named on the inventory of medication issued by the medical director of the service and:

(a) An order is given to the paramedic by a physician or a registered nurse supervised by a physician; or

(b) The paramedic is authorized to administer the controlled substance pursuant to a written protocol that is approved by the medical director of the service and on file with the Division.

2. No advanced emergency medical technician or paramedic may administer any dangerous drug while serving as an attendant in a service unless the dangerous drug is named on the inventory of medication issued by the medical director of the service and:

(a) An order is given to the advanced emergency medical technician or paramedic by a physician or a registered nurse supervised by a physician; or

(b) The advanced emergency medical technician or paramedic is authorized to administer the drug pursuant to a written protocol that is approved by the medical director of the service and on file with the Division.

3. An emergency medical technician shall not administer or assist in administering any dangerous drug.

4. As used in this section, "dangerous drug" has the meaning ascribed to it in NRS 454.201. (Added to NAC by Bd. of Health, eff. 8-1-91; A by R182-01, 3-5-2002; R024-14, 10-24-2014; R068-16, 1-27-2017)

NAC 450B.465 Storage and security. (NRS 450B.120)

1. Each dangerous drug and controlled substance used by a service must be stored:

(a) In its original container, and each original container must bear a securely attached label which is legibly marked; and

(b) Under appropriately controlled climatic conditions.

2. In addition to the requirements set forth in subsection 1, each controlled substance must be:

(a) Stored in a locked cabinet in the ambulance, air ambulance or agency's vehicle; or

(b) Under the direct physical control of a paramedic or a registered nurse.

3. When a controlled substance is not being used, it must be secured, together with the record for that controlled substance, in a manner approved by the medical director of the service.

(Added to NAC by Bd. of Health, eff. 8-1-91; A by R182-01, 3-5-2002; R024-14, 10-24-2014)

NAC 450B.471 Administration: Reporting requirements; discarding of unused portion of unit dose. (NRS 450B.120, 450B.180, 450B.1915, 450B.197, 453.375, 454.213)

1. Each time a paramedic or registered nurse administers a controlled substance or an advanced emergency medical technician, paramedic or registered nurse administers a dangerous drug, an entry must be made on the report of emergency care. The entry must contain:

(a) The name of the medication administered;

(b) The dose of the medication administered;

(c) The route of administration;

(d) The date and time of administration;

(e) The name of the physician ordering the medication if the medication is ordered outside of a standing protocol;

(f) The signature, electronic signature or initials of the person who administered the medication and the emergency medical services number of that person; and

(g) If a registered nurse administered the medication, the emergency medical services number or license number of that nurse.

2. If the entire amount of a unit dose of a controlled substance is not used when it is administered to a patient, the unused portion of that unit dose must be discarded. The discarding of the unused portion of the unit dose must be:

(a) Verified by a witness who is a licensed attendant of the service or an employee of the hospital to which the patient was transported and who shall sign or electronically sign a statement indicating the unused portion was discarded; and

(b) Noted in the record for controlled substances.

3. If any error is made in administering a medication or the patient has an unusual reaction to a medication, the advanced emergency medical technician, paramedic or registered nurse who administered the medication shall immediately report the error or reaction to the receiving physician,

* protocol verification and approval signed by medical director and provided with annual permit renewal.

| | | | | Unit # | | | |
|--|------|-----|------|---|------|-----|------|
| ILS EQUIPMENT | Min. | Y/N | CAT. | ALS EQUIPMENT | MIN. | Y/N | CAT. |
| IV Administration Sets Macro Drip | 2 | | A | Monitor/Defibrillator-Adult and Pedi Pads | 1 | | A |
| Buretrol or equiv. | 1 | | A | Chest Decompression Kit | 1 | | A |
| Capnography Adult ** | 1 | | | Needle Cricothyroidotomy Kit | 1 | | A |
| Capnography Pedi ** | 2 | | | Nasogastric Tubes Various Sizes | 2ea | | B |
| End Tidal CO2 Detector | 2 | | B | Endotracheal Intubation Kit | 1 | | A |
| IV Catheters Various Sizes | 2ea | | A | Endotracheal Tubes 2.5 - 8.0 | 2ea | | A |
| IO Needles #15 or 18 Gauge | 2 | | A | Adult & Pedi Stylet | 2ea | | A |
| Syringes, TB w/ needle | 2ea | | A | | | | |
| IM Needles | 2 | | B | IV FLUIDS | | | |
| Supraglottic Airway Device | 2ea | | A | Normal Saline 1000cc | 4 | | A |
| Magill Forceps | 1 | | A | Lactated Ringers ** | 2 | | |
| Nebulizers | 2 | | A | Dextrose 5% Water ** | 2 | | |
| Syringes Various Sizes | 2ea | | A | | | | |
| MEDICATIONS BASED ON AGENCY PROTOCOLS AND SERVICE LEVEL | | | | | | | |
| Acetaminophen / Tylenol | | | | Ketorolac/ Toradol | | | |
| Activated Charcoal | | | | Levalbuterol/ Xopenex | | | |
| Adenosine / Adenocard | | | | Levophed/ Norepinephrine | | | |
| Albuterol / Proventil | | | | Lidocaine | | | |
| Amiodarone / Cardarone | | | | Lidocaine Gel | | | |
| Aspirin | | | | Lidocaine Pre-Mix Bag | | | |
| Atropine Sulfate | | | | Lorazepam/ Ativan | | | |
| Atrivent / Ipratropium Bromide | | | | Magnesium Sulfate | | | |
| Calcium Chloride | | | | Midazolam / Versed | | | |
| Cyanide Antidote Kit | | | | Morphine Sulfate | | | |
| Dextrose | | | | Naloxone / Narcan | | | |
| Diazepam/Valium | | | | Neo-Synephrine or Equivalent | | | |
| Diltiazem/ Cardizem | | | | Nitroglycerin | | | |
| Diphenhydramine / Benadryl | | | | Nitroglycerin Drip | | | |
| Dobutamine | | | | Nitrous Oxide / Nitronox | | | |
| Dopamine / Intropin | | | | Ondansetron/ Zofran | | | |
| DuoDote | | | | Oxymetazoline/ Afrin | | | |
| Epinephrine 1:10,000 | | | | Oxytocin /Pitocin | | | |
| Epinephrine 1:1000 | | | | Promethazine / Phenergan | | | |
| Epinephrine auto Inj adult/pedi | | | | Racemic Epi | | | |
| Fentanyl/ Sublimaze | | | | Sodium Bicarb 8.4% | | | |
| Flumazenil/ Ramazepam | | | | Solu-medrol | | | |
| Furosemide / Lasix | | | | Terbutaline | | | |
| Glucagon | | | | Tetracaine or Equivalent | | | |
| Glucose Paste | | | | Thiamine / Vitamin B1 | | | |
| Haloperidol / Haldol | | | | Vasopressin/ Pitressin | | | |
| Hydromorphone/ Dilaudid | | | | | | | |
| Ketamine | | | | Paralytic Medications | | | |

*Medication list is different for each agency based off of approved protocols. All medications approved for your agency must be stocked appropriately and be within expiration date. All violations of medications are considered to be a Category A *

N/A = Not Applicable

** = Optional Equipment

OPERATIONAL STANDARDS

| Meet Standards / Working | Y | N | CAT. | Meet Standards / Working | Y | N | CAT. |
|---------------------------------------|---|---|------|--|---|---|------|
| Light bar Operational | | | A | Dispatch Radio Operational | | | A |
| Box Lights Operational | | | A | Hospital Radio Operational | | | A |
| Scene Lights Operational | | | B | Heater & Air Conditioner Operational | | | A |
| Headlights Operational | | | A | Disinfectant Solution | | | B |
| Flash Light | | | B | Protective Helmet Per Attendant ** | | | |
| Interior Lights Operational | | | A | Interior Clean & Sanitized | | | A |
| Siren Operational | | | A | Medications Stored for Climate Control | | | A |
| Brake lights Operational | | | A | Controlled Medications Stored | | | |
| Turn Indicators Operational | | | A | in Locked Cabinet or Under Direct | | | |
| Horn Operational | | | A | Control of Appropriate Licensed Provider | | | A |
| Fire Extinguisher 5 lbs. ABC Type | | | A | Controlled Substances Record of | | | |
| Seat with Safety Belts | | | A | Usage Inventory issued by Service | | | |
| Gumay with 5 Point Rest. Harness | | | A | Compliant with NAC 450B.481 | | | A |
| Gumay Fasteners Secured | | | A | Equipment Clean & Sanitized | | | A |
| Stair Chair ** | | | | Ambulance Fully Operational | | | A |
| Name Printed on Both Sides of Vehicle | | | A | Current Hazardous Materials Guide | | | B |
| Reflective Safety Wear per Attendant | | | A | Triage Kit | | | B |
| Copy of Protocols | | | B | Hand Sanitizer | | | B |

ALL VIOLATIONS MUST BE CORRECTED AS OUTLINED BELOW

Violations in Category "A" If All Category "A" supplies of any item are missing this requires the unit be immediately removed from service. The unit must be re-inspected and found in compliance with the NRS's and the NAC's of 450B. If less than all category "A" supplies of any item are missing the item shall be treated as a category "B" item.

Violations in Category "B" must be corrected with a written report to the Division of Public & Behavioral Health Emergency Medical Systems program regional office within 72 hours. Failure to comply with this notice may result in suspension of your permit or removal of the unit from service.

Comments :

This Unit **DOES / DOES NOT** comply with the Emergency Medical Systems Regulations of the Division of Public & Behavioral Health.



THIS UNIT IS HEREBY REMOVED FROM SERVICE UNTIL SUCH TIME THAT IT OBTAINS A SATISFACTORY INSPECTION

| | | |
|-------|---------------|------------------|
| Date: | Inspected By: | Acknowledged By: |
|-------|---------------|------------------|

**State of Nevada EMS Program Inspection Form
AMBULANCE UNIT**

| | | | | | | |
|---|-------------|------|-------|--------------------------------------|--------------|---------------|
| Permit No. | Agency Name | | | | | Level |
| | Address | | | | | Unit # |
| Year | Make | Type | Color | License # | Vin/Serial # | Insp. Date |
| Type of Inspection : Return to | | | | | | Odometer |
| New Regular Corrective Service Replacement of | | | | | | |
| Basic Life Support | | | | | | |
| Airway/Ventilation | Min. | Y/N | Cat. | Dressing | Min. | Y/N Cat. |
| Fixed Oxygen (500 lbs. min.) | 1 | | A | ABD- Trauma Dressings | 2 | |
| Portable Oxygen (500 lbs. min.) | 1 | | A | 4x4's | 20 | |
| Adult Nasal Cannula | 4 | | A | 5x9's or equiv. | 5 | |
| Child & Infant Nasal Cannula ** | 2 | | | Triangular Bandage | 2 | B |
| Adult Non Rebreather Mask | 4 | | A | Roller Gauze | 4 | A |
| Child Non Rebreather Mask | 2 | | A | Occlusive Dressing | 2 | A |
| Infant Non Rebreather Mask ** | 2 | | | Bum Dressing Various Sizes | 2 | A |
| Bag Valve Mask with O2 Reservoir | | | | Tape/Hypoallergenic Various Sizes | 2 | B |
| Adult & Child | 1ea | | A | Survival/Thermal Blanket ** | 1 | |
| OPA's Size 0 - 5 / equiv. | 1ea | | A | Patient Assessment | | |
| NPA's 16F - 34F / equiv. | 1ea | | A | AED or SAED with Adult & Pedi Pads | 1 | A |
| Fixed Suction | 1 | | A | Adult BP Cuff | 1 | |
| Portable Suction / battery operated | 1 | | A | Pulse Ox with Adult & Pedi Probes ** | 1 | |
| Tonsillar Suction | 2 | | A | Child BP Cuff | 1 | A |
| Suction Tubing | 2 | | A | Infant BP Cuff ** | 1 | |
| Flexible Suction Cath. W/ airflow ctrl | 2 | | B | Adult Stethoscope | 1 | A |
| Bulb Syringe not in OB Kit | 1 | | B | Pediatric Stethoscope ** | 1 | |
| Immobilization Devices | | | | Pen Flashlight | 1 | B |
| Backboard Impervious | 2 | | A | Thermometer | 1 | B |
| KED or equiv. | 1 | | A | Obstetrical/Child | | |
| Straps (3 per Board) / Spider Straps | 2 | | A | Obstetrical Kit (sterile) | 2 | A |
| C-Collars (Adult-Tail, Reg, No-Neck) | | | | Infant Swaddler | 2 | B |
| Short/Pedi, No-Neck or Adjustable) | 2ea | | A | Current Broselow Tape or equiv. | 1 | B |
| Adult & Pedi Traction Splint | 1 | | A | Meconium Aspirator ** | 1 | |
| Pediatric Backboard ** | 1 | | | Infant Warming Device ** | 1 | |
| Head Immobilizers | 2 | | A | Child Restraint System ** | | |
| Splints for Extremities / Arms & Legs | 2ea | | B | | | |
| Miscellaneous Items | | | | | | |
| PPE Gowns, Glasses, Gloves etc. | 2 | | A | Tourniquet | 1 | B |
| Drinking Water, 1000 ml | 1 | | B | Ring Cutter ** | 1 | |
| Hot & Cold Packs | 2 | | B | Supply of Clean Linen | 2 | A |
| Hemostatic Agent ** | 1 | | | Trauma Scissors | 1 | A |
| Emesis Basin / Bags | 2 | | B | Irrigation Solution 1000 ml | 1 | B |
| Mounted Sharps Container | 1 | | A | Chem Strips/Glucometer ** | 1 | |

2019 National EMS Scope of Practice Model

Pharmacological Intervention Minimum Psychomotor Skill Set

AEMT Scope of Practice - Pages 20 – 21, 28

Medical Director Approved Medications – pages 29 & 30

National EMS Scope of Practice Model 2019: Including Change Notices 1.0 and 2.0

Table of Contents

| | |
|--|-----------|
| Executive Summary | xi |
| I. Background | 1 |
| Overview of the EMS Profession..... | 2 |
| The Evolution of the EMS Agenda for the Future | 3 |
| Implementation of the 2007 National EMS Scope of Practice Model | 5 |
| Approach to Revising the National EMS Scope of Practice Model | 6 |
| The Role of State Government..... | 7 |
| II. Understanding the Scope of Practice | 7 |
| Overview | 7 |
| The Interdependent Relationship Between Education, Certification, Licensure, and Credentialing | 7 |
| Scope of Practice Versus Standard of Care | 13 |
| A Comprehensive Approach to Safe and Effective Out-of-Hospital Care | 13 |
| III. Special Considerations | 14 |
| Liability in EMS Licensing and Oversight..... | 14 |
| Scope of Practice for Special Populations..... | 14 |
| Scope of Practice During Disasters, Public Health Emergencies, and Extraordinary Circumstances | 15 |
| Scope of Practice for EMS Personnel Functioning in Nontraditional Roles | 15 |
| Specialty Care Delivered by Licensed EMS Personnel | 15 |
| Military to Civilian EMS Transition..... | 16 |
| IV. Description of Levels | 18 |
| Emergency Medical Responder | 18 |
| Emergency Medical Technician..... | 19 |
| *Advanced Emergency Medical Technician..... | 20 |
| Paramedic | 21 |
| V. Depth and Breadth of Knowledge | 24 |
| VI. Interpretive Guidelines | 25 |
| I. Skill – Airway/Ventilation/Oxygenation..... | 25 |
| II. Skill – Cardiovascular/Circulation | 26 |
| III. Skill – Splinting, Spinal Motion Restriction, and Patient Restraint | 27 |
| IV. *Skill – Medication Administration - Routes..... | 28 |
| V. *Medical Director Approved Medications..... | 29 |
| VI. Skill – IV Initiation/Maintenance Fluids | 30 |

| | | |
|--|--|------------|
| VII. | Skill – Miscellaneous | 30 |
| VIII. | Definitions | 32 |
| Appendix A: History of Occupational Regulation in EMS | | A-1 |
| Appendix B: Changes and Considerations From the 2007 Practice Model | | B-1 |
| | Nomenclature | B-2 |
| | Academic Degree Requirements for Paramedics | B-2 |
| | Attendant Qualifications for Ambulance Transport | B-2 |

2019 National EMS Scope of Practice Model

Pharmacological Intervention Minimum Psychomotor Skill Set

AEMT Scope of Practice - pages 20-21, 28

Medical Director Approved Medications – pages 29-30



U.S. Department
of Transportation
**National Highway
Traffic Safety
Administration**



DOT HS 813 151

August 2021

National EMS Scope of Practice Model 2019: Including Change Notices 1.0 and 2.0

Table of Contents

| | |
|--|------------|
| Executive Summary | xi |
| I. Background | 1 |
| Overview of the EMS Profession | 1 |
| The Evolution of the EMS Agenda for the Future..... | 2 |
| Implementation of the 2007 National EMS Scope of Practice Model..... | 3 |
| Approach to Revising the National EMS Scope of Practice Model | 5 |
| The Role of State Government | 6 |
| II. Understanding Professional Scope of Practice | 7 |
| Overview..... | 7 |
| The Interdependent Relationship Between Education, Certification, Licensure, and Credentialing..... | 7 |
| Scope of Practice Versus Standard of Care | 13 |
| A Comprehensive Approach to Safe and Effective Out-of-Hospital Care | 13 |
| III. Special Considerations | 14 |
| Liability in EMS Licensing and Oversight..... | 14 |
| Scope of Practice for Special Populations | 14 |
| Scope of Practice During Disasters, Public Health Emergencies, and Extraordinary Circumstances | 15 |
| Scope of Practice for EMS Personnel Functioning in Nontraditional Roles | 15 |
| Specialty Care Delivered by Licensed EMS Personnel..... | 15 |
| Military to Civilian EMS Transition..... | 16 |
| IV. Description of Levels | 18 |
| Emergency Medical Responder | 18 |
| Emergency Medical Technician | 19 |
| ★ Advanced Emergency Medical Technician | 20 |
| Paramedic..... | 21 |
| V. Depth and Breadth of Knowledge..... | 24 |
| VI. Interpretive Guidelines | 25 |
| I. Skill – Airway/Ventilation/Oxygenation..... | 25 |
| II. Skill – Cardiovascular/Circulation..... | 26 |
| III. Skill – Splinting, Spinal Motion Restriction, and Patient Restraint | 27 |
| ★ IV Skill – Medication Administration – Routes | 28 |
| ★ V Medical Director Approved Medications | 29 |
| VI. Skill – IV Initiation/Maintenance Fluids | 30 |
| VII. Skill – Miscellaneous | 30 |
| VII. Definitions | 32 |
| Appendix A: History of Occupational Regulation in EMS | A-1 |
| Appendix B: Changes and Considerations From the 2007 Practice Model | B-1 |
| Nomenclature | B-2 |
| Academic Degree Requirements for Paramedics | B-2 |
| Attendant Qualifications for Ambulance Transport | B-2 |

Advanced Emergency Medical Technician

AEMT Scope of Practice - Pages 20 – 21, 28

(Start of Page 20)

Education Requirements

Successful completion of an EMT training program that is:

- Complaint with a uniform national standard for quality, and
- Approved by the State of U.S. Territory

Primary Role

Provide basic patient care and medical transportation within the emergency care system.

Type of Education

Vocational/Technical setting:

- Diploma or certificate awarded for successful completion.

Critical Thinking

Within a limited set of protocol-driven, clearly defined principles that:

- Engages in basic risk versus benefit analysis.
- Participated in making decisions about patient care, transport destinations, the need for additional patient care resources, and similar judgements.

Level of Supervision

General medical oversight required. Some autonomy at basic life support level, assist higher-level personnel at the scene and during patient transport.



Advanced Emergency Medical Technician

Description

The AEMT is a health professional whose primary focus is to respond to, assess, and triage non-urgent, urgent, and emergent requests for medical care, apply basic and focused advanced knowledge and skills necessary to provide patient care and/or medical transportation, and facilitate access to a higher level of care when the needs of the patient exceed the capability level of the AEMT. The additional preparation beyond EMT prepares an AEMT to improve patient care in common emergency conditions for which reasonably safe, targeted, and evidence-based interventions exist. Interventions within the AEMT scope of practice may carry more risk if not performed properly than interventions authorized for the EMT/EMT levels. With proper supervision, an AEMT may serve as a patient care team member in a hospital or health care setting to the full extent of their education, certification, licensure and credentialing. In a community setting an AEMT might visit patients at home and make observations that are reported to a higher-level authority to help manage a patient's care.

Advanced emergency medical technicians:

- Function as part of a comprehensive EMS response, community, health, or public safety system with medical oversight.

(End of Page 20)

(Start of Page 21)



- Perform interventions with the basic and advanced equipment typically found on an ambulance,
- Perform focused advanced skills and pharmacological interventions that are engineered to mitigate specific life-threatening conditions, medical, and psychological conditions with a targeted set of skills beyond the level of an EMT.
- Function as an important link from the scene into the health care system.

Other Attributes

The learning objectives and additional clinical preparation for AEMTs exceed the level of EMTs. In areas where paramedic response is not available, the AEMT may be the highest level of EMS personnel a patient encounters before reaching a hospital. AEMTs advocate health and safety practices that may help reduce harm to the public.

Education Requirements

Successful completion of a nationally accredited or CAAHEP-accredited AEMT program that meets all other State/Territorial requirements. (The target for full implementation of AEMT program accreditation is January 1, 2025.)

Primary Role

Provide basic and focused advanced patient care; determine transportation needs in the health care system.

Type of Education

Vocational/technical or academic setting:

- Diploma, certificate, or associates degree awarded for successful completion.

Critical Thinking

Within a limited set of protocol-driven, clearly defined principles that:

- Engages in basic risk versus benefit analysis.
- Participates in making decisions about patient care, transport destinations, the need for additional patient care resources, and similar judgements.

Level of Supervision

Medical oversight required. Minimal autonomy for limited advanced skills. Provides some supervision of lower level personnel. Assist higher-level personnel at the scene and during transport.

Paramedic

Description

The paramedic is a health professional whose primary focus is to respond to, assess, and triage emergent, urgent, and non-urgent requests for medical care, apply basic and advanced knowledge and skills necessary to determine patient physiologic, psychological, and

(End of Page 21)

(Start of Page 28)

IV. Skill – Medication Administration – Routes

| IV. Skill – Medication Administration – Routes ³ | EMR | EMT | AEMT | Paramedic |
|---|-----|----------------|------|-----------|
| Aerosolized/nebulized | | X | X | X |
| Endotracheal tube | | | | X |
| Inhaled | | X | X | X |
| Intradermal | | | | X |
| Intramuscular | | X ⁴ | X | X |
| Intramuscular – auto-injector | X | X | X | X |
| Intranasal | | | X | X |
| Intranasal – unit-dosed, premeasured | X | X | X | X |
| Intraosseous – Initiation, peds or adult | | | X | X |
| Intravenous | | | X | X |
| Mucosal/sublingual | | X | X | X |
| Nasogastric | | | | X |
| Oral | | X | X | X |

³Limited to Medical Director Approved Medications.

⁴Medical direction should ensure appropriate clinical experience and education, including the separate skills of medication preparation, medication dilution, filling a syringe from a multi-dose vial, and changing the needle on a syringe.

(End of Page 28)

Advanced Emergency Medical Technician

AEMT Scope of Practice - pages 20-21, 28

Education Requirements

Successful completion of an EMT training program that is:

- Compliant with a uniform national standard for quality, and
- Approved by the State or U.S. Territory.

Primary Role

Provide basic patient care and medical transportation within the emergency care system.

Type of Education

Vocational/Technical setting:

- Diploma or certificate awarded for successful completion.

Critical Thinking

Within a limited set of protocol-driven, clearly defined principles that:

- Engages in basic risk versus benefit analysis.
- Participates in making decisions about patient care, transport destinations, the need for additional patient care resources, and similar judgments.

Level of Supervision

General medical oversight required. Some autonomy at basic life support level, assist higher-level personnel at the scene and during patient transport.



Advanced Emergency Medical Technician

Description

The AEMT is a health professional whose primary focus is to respond to, assess, and triage non-urgent, urgent, and emergent requests for medical care, apply basic and focused advanced knowledge and skills necessary to provide patient care and/or medical transportation, and facilitate access to a higher level of care when the needs of the patient exceed the capability level of the EMT. The additional preparation beyond EMT prepares an AEMT to improve patient care in common emergency conditions for which reasonably safe, targeted, and evidence-based interventions exist. Interventions within the AEMT scope of practice may carry more risk if not performed properly than interventions authorized for the EMT/EMT levels. With proper supervision, an AEMT may serve as a patient care team member in a hospital or health care setting to the full extent of their education, certification, licensure, and credentialing. In a community setting an AEMT might visit patients at home and make observations that are reported to a higher-level authority to help manage a patient's care.

Advanced emergency medical technicians:

- Function as part of a comprehensive EMS response, community, health, or public safety system with medical oversight.

added in 2019

- Perform interventions with the basic and advanced equipment typically found on an ambulance.
- ★ • Perform focused advanced skills and pharmacological interventions that are engineered to mitigate specific life-threatening conditions, medical, and psychological conditions with a targeted set of skills beyond the level of an EMT.
- Function as an important link from the scene into the health care system.

Other Attributes

The learning objectives and additional clinical preparation for AEMTs exceed the level of EMTs. In areas where paramedic response is not available, the AEMT may be the highest level of EMS personnel a patient encounters before reaching a hospital. AEMTs advocate health and safety practices that may help reduce harm to the public.

Education Requirements

Successful completion of a nationally accredited or CAAHEP-accredited AEMT program that meets all other State/Territorial requirements. (The target for full implementation of AEMT program accreditation is January 1, 2025.)

Primary Role

Provide basic and focused advanced patient care; determine transportation needs in the health care system.

Type of Education

Vocational/technical or academic setting:

- Diploma, certificate, or associates degree awarded for successful completion.

Critical Thinking

Within a limited set of protocol-driven, clearly defined principles that:

- Engages in basic risk versus benefit analysis.
- Participates in making decisions about patient care, transport destinations, the need for additional patient care resources, and similar judgments.

Level of Supervision

Medical oversight required. Minimal autonomy for limited advanced skills. Provides some supervision of lower level personnel. Assist higher-level personnel at the scene and during transport.

Paramedic

Description

The paramedic is a health professional whose primary focus is to respond to, assess, and triage emergent, urgent, and non-urgent requests for medical care, apply basic and advanced knowledge and skills necessary to determine patient physiologic, psychological, and

| III. Skill – Splinting, Spinal Motion Restriction (SMR), and Patient Restraint | EMR | EMT | AEMT | Paramedic |
|---|------------|------------|-------------|------------------|
| Splint – traction | | X | X | X |
| Mechanical patient restraint | | X | X | X |
| Emergency moves for endangered patients | X | X | X | X |

IV. Skill – Medication Administration – Routes

| IV. Skill – Medication Administration – Routes³ | EMR | EMT | AEMT | Paramedic |
|---|------------|----------------|-------------|------------------|
| Aerosolized/nebulized | | X | X | X |
| Endotracheal tube | | | | X |
| Inhaled | | X | X | X |
| Intradermal | | | | X |
| Intramuscular | | X ⁴ | X | X |
| Intramuscular – auto-injector | X | X | X | X |
| Intranasal | | | X | X |
| Intranasal – unit-dosed, premeasured | X | X | X | X |
| Intraosseous – initiation, peds or adult | | | X | X |
| Intravenous | | | X | X |
| Mucosal/sublingual | | X | X | X |
| Nasogastric | | | | X |
| Oral | | X | X | X |

³ Limited to Medical Director Approved Medications.

⁴ Medical direction should ensure appropriate clinical experience and education, including the separate skills of medication preparation, medication dilution, filling a syringe from a multi-dose vial, and changing the needle on a syringe.

Advanced Emergency Medical Technician

Medical Director Approved Medications - Pages 29 – 30

| IV. Skill – Medication Administration – Routes³ | EMR | EMT | AEMT | Paramedic |
|---|------------|------------|-------------|------------------|
| Rectal | | | | X |
| Subcutaneous | | | X | X |
| Topical | | | | X |
| Transdermal | | | | X |

V. Medical Director Approved Medications

| V. Medical Director Approved Medications | EMR | EMT | AEMT | Paramedic |
|---|------------|------------|----------------|------------------|
| Use of epinephrine (auto-injector) for anaphylaxis (supplied and carried by the EMS agency) | | X | X | X |
| Use of auto-injector antidotes for chemical/hazardous material exposures | X | X | X | X |
| Use of opioid antagonist auto-injector for suspected opioid overdose | X | X | X | X |
| Immunizations | | | X | X |
| Immunizations during a public health emergency | | X | X | X |
| Inhaled – beta agonist/bronchodilator and anticholinergic for dyspnea and wheezing | | X | X | X |
| Inhaled – monitor patient administered (i.e., nitrous oxide) | X | X | X | X |
| Intravenous | | | X ⁵ | X |
| Maintain infusion of blood or blood products | | | | X |
| Oral aspirin for chest pain of suspected ischemic origin | | X | X | X |
| Oral glucose for suspected hypoglycemia | | X | X | X |
| Oral over-the-counter (OTC) analgesics for pain or fever | | X | X | X |
| OTC medications, oral and topical | | | | X |
| Parenteral analgesia for pain | | | X | X |
| Sublingual nitroglycerin for chest pain of suspected ischemic origin | | X | | |



| | | | | |
|--|--|--|---|---|
| – limited to patient’s own prescribed medication | | | | |
| Sublingual nitroglycerin for chest pain of suspected ischemic origin | | | X | X |
| Thrombolytics | | | | X |

☆⁵Limited to analgesia, antinausea/antiemetic, dextrose, epinephrine, naloxone, and other defined by State/local protocol

VI. Skill – IV Initiation/Maintenance Fluids

| VI. Skill – Initiation/Maintenance Fluids | EMR | EMT | AEMT | Paramedic |
|--|-----|-----|------|-----------|
| Access indwelling catheters and implanted central IV ports | | | | X |
| Central line – monitoring | | | | X |
| Intraosseous – initiation, peds or adult | | | X | X |
| Intravenous access | | | X | X |
| Intravenous initiation – peripheral | | | X | X |
| Intravenous – maintenance of non-medicated IV fluids | | | X | X |
| Intravenous – maintenance of medicated IV fluids | | | | X |

VI. Skill – IV Initiation/Maintenance Fluids

| VI. Skill – Miscellaneous | EMR | EMT | AEMT | Paramedic |
|--|-----|-----|------|-----------|
| Access indwelling catheters and implanted central IV ports | X | X | X | X |
| Assisted delivery (childbirth) | | X | X | X |

Advanced Emergency Medical Technician

Medical Director Approved Medications – pages 29-30

| IV. Skill – Medication Administration – Routes³ | EMR | EMT | AEMT | Paramedic |
|---|------------|------------|-------------|------------------|
| Rectal | | | | X |
| Subcutaneous | | | X | X |
| Topical | | | | X |
| Transdermal | | | | X |

V. Medical Director Approved Medications

| V. Medical Director Approved Medications | EMR | EMT | AEMT | Paramedic |
|---|------------|------------|----------------|------------------|
| Use of epinephrine (auto-injector) for anaphylaxis (supplied and carried by the EMS agency) | | X | X | X |
| Use of auto-injector antidotes for chemical/hazardous material exposures | X | X | X | X |
| Use of opioid antagonist auto-injector for suspected opioid overdose | X | X | X | X |
| Immunizations | | | X | X |
| Immunizations during a public health emergency | | X | X | X |
| Inhaled – beta agonist/bronchodilator and anticholinergic for dyspnea and wheezing | | X | X | X |
| Inhaled – monitor patient administered (i.e., nitrous oxide) | | | X | X |
| Intranasal - opioid antagonist for suspected opioid overdose | X | X | X | X |
| Intravenous | | | X ³ | X |
| Maintain infusion of blood or blood products | | | | X |
| Oral aspirin for chest pain of suspected ischemic origin | | X | X | X |
| Oral glucose for suspected hypoglycemia | | X | X | X |



³ Limited to analgesia, antinausea/antiemetic, dextrose, epinephrine, glucagon, naloxone, and others defined by State/local protocol.

| V. Medical Director Approved Medications | EMR | EMT | AEMT | Paramedic |
|--|------------|------------|-------------|------------------|
| Oral over-the-counter (OTC) analgesics for pain or fever | | X | X | X |
| OTC medications, oral and topical | | | | X |
| Parenteral analgesia for pain | | | X | X |
| Sublingual nitroglycerin for chest pain of suspected ischemic origin – limited to <i>patient's own prescribed medication</i> | | X | | |
| Sublingual nitroglycerin for chest pain of suspected ischemic origin | | | X | X |
| Thrombolytics | | | | X |

VI. Skill – IV Initiation/Maintenance Fluids

| VI. Skill – IV Initiation/Maintenance Fluids | EMR | EMT | AEMT | Paramedic |
|--|------------|------------|-------------|------------------|
| Access indwelling catheters and implanted central IV ports | | | | X |
| Central line – monitoring | | | | X |
| Intraosseous – initiation, peds or adult | | | X | X |
| Intravenous access | | | X | X |
| Intravenous initiation - peripheral | | | X | X |
| Intravenous – maintenance of non-medicated IV fluids | | | X | X |
| Intravenous – maintenance of medicated IV fluids | | | | X |

VII. Skill – Miscellaneous

| VII. Skill – Miscellaneous | EMR | EMT | AEMT | Paramedic |
|--|------------|------------|-------------|------------------|
| Assisted delivery (childbirth) | X | X | X | X |
| Assisted complicated delivery (childbirth) | | X | X | X |