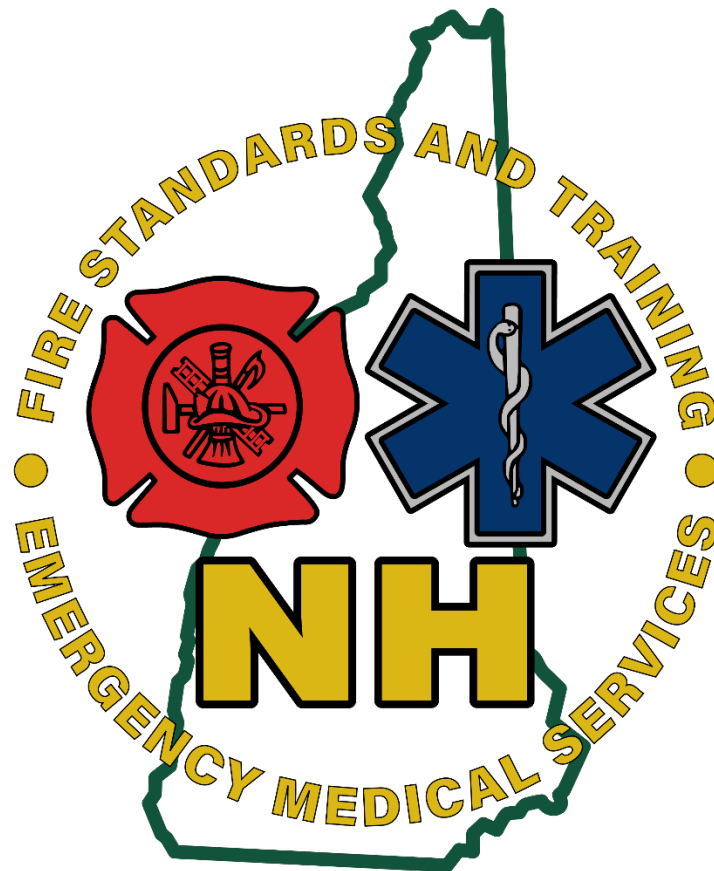


New Hampshire Department of Safety  
Division of Fire Standards and Training &  
Emergency Medical Services

Advanced Sepsis  
Prerequisite Protocol  
Administrative Packet  
2024





NH Department of Safety  
Division of Fire Standards and Training &  
Emergency Medical Services  
Prerequisite Protocol  
Application Form

### EMS Unit Information

EMS Unit Name:

Address:

Head of Unit:

Title:

Email:

Telephone:

Fax:

Clinical Coordinator (PIFT):

Email:

Telephone:

### Medical Direction

Medical Resource Hospital:

Medical Director:

Email:

Telephone:

### Prerequisite Protocols (Select all that apply)

- |                                                               |                                                             |
|---------------------------------------------------------------|-------------------------------------------------------------|
| <input type="radio"/> Advanced Sepsis, 7.0                    | <input type="radio"/> Operational K9, 7.5                   |
| <input type="radio"/> Critical Care Transport, 7.1            | <input type="radio"/> Pilot, 7.6                            |
| <input type="radio"/> Immunization, 7.2                       | <input type="radio"/> Point of Care Ultrasound (POCUS), 7.7 |
| <input type="radio"/> Interfacility Transport (PIFT), 7.3     | <input type="radio"/> Rapid Sequence Intubation (RSI), 7.8  |
| <input type="radio"/> Mobile Integrated Healthcare (MIH), 7.4 |                                                             |

### Required Documents

1. Written recommendation from the Medical Director.
2. Written recommendation from the EMS Unit leader and testament that the providers completed the required training.
3. Provide list of eligible providers.
4. Provide copy of your Quality Management plan as it pertains to the prerequisite protocol(s) applying for.
5. Any additional documentation required specific to the individual prerequisite protocol.

Unit Head's Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Medical Director's Signature: \_\_\_\_\_ Date: \_\_\_\_\_

# Advanced Sepsis Care Prerequisite Protocol

## LICENSURE:

- NH licensed Paramedic.

## EXPERIENCE:

- None.

## EDUCATION:

- Education that meets or exceeds the requirements outlined in this prerequisite protocol.

## MEDICAL DIRECTION:

- Medical Director approval.

## RECOMMENDATION:

- The Medical Director and the EMS Unit leader must mutually agree to participate in the program.
- Written recommendation from the Medical Director.
- Written recommendation from the EMS Unit leader and testament that the providers completed the required training.

## QUALITY MANAGEMENT:

- The QM program will incorporate all the components of an EMS QM program as specified in Administrative Rule Saf-C 5921.
- Medical Director to review all calls where advanced sepsis care was provided.
- EMS agency and receiving hospital(s) must agree to share data about patient diagnosis, care, and outcomes.

## REPORTING:

- The EMS Unit will participate in electronic data collection as required by the NHBEMS and as specified in Administrative Rule Saf-C 5902.08.
- Units utilizing this prerequisite protocol must document medications and procedures performed in their respective NEMSIS fields I.e. (eMedication.03/eProcedures.03).

## RESOURCES:

- MRH agreement with participating hospital which includes access to necessary resources/departments (e.g., E.D., IV team, O.R., Respiratory, etc.).
- Department Policy/Procedure for Advanced Sepsis Care
- Medications and equipment, as needed.

## EXPIRATION:

- 2 years to coincide with the Unit license.

## **Advanced Sepsis Care Prerequisites Checklist**

\_\_\_\_\_ 1. APPLICATION

Provide completed prerequisite application signed by both Medical Director and EMS Unit leader.

\_\_\_\_\_ 2. RECOMMENDATIONS:

Attach letters of recommendation from Medical Director and Head of EMS Unit.  
Provide list of eligible providers and attestation of competencies.

\_\_\_\_\_ 3. EDUCATION

Attach unit training plan and attestation that course meets all educational and training Requirements.

\_\_\_\_\_ 4. QUALITY MANAGEMENT

Provide a copy of your Advanced Sepsis Quality Management Plan.

\_\_\_\_\_ 5. REPORTING REQUIREMENTS

Complete NHESR report for each advanced sepsis patient.

\_\_\_\_\_ 6. EQUIPMENT AND STAFF SUPPORT RESOURCES NECESSARY:

MRH agreement with participating hospital which includes access to necessary resources/departments (e.g., E.D., IV team, O.R., Respiratory, etc.). Medications and equipment, as needed.

\_\_\_\_\_ 7. Department Policy/Procedure for Advanced Sepsis Care

Questions and completed applications should be directed to [clinicalsystems@dos.nh.gov](mailto:clinicalsystems@dos.nh.gov)

# **Advanced Sepsis Prerequisite Protocol Additional Requirements**

## OVERVIEW:

- As the Medical Control Board (MCB) has identified sepsis as a life-threatening organ dysfunction due to a dysregulated host response to infection and that patients may require resuscitation and/or more resource intensive management Advanced Sepsis Care has been approved for Units with approved prerequisite protocols.

## GENERAL PROJECT DESCRIPTION:

- Describe the need for the proposed protocol and the methodology for addressing the need.
- Define the programs goals and provide a methodology for program evaluation.
- Describe/List the additional partners participating in this program including but not limited to local hospitals, or additional EMS units. This must include documentation supporting the existence/establishment of a collaborative relationship between the applicant and said partners (as applicable).
- Define the geographic extent of the proposed program.
- Provide an estimated yearly incident count.

## DEPARTMENT POLICY/PROCEDURE:

- A written policy/procedure to be followed by EMS providers. This should at a minimum include:
  - Provider training and certification requirements.
  - Patient inclusion/exclusion criteria.
  - Required procedures.
  - Available antibiotic options.
  - Notification requirements.
  - Reporting requirements.

## STAFFING PLAN:

- Define who will be providing the proposed interventions/assessments and how these will fit within the normal EMS staffing/operations of the Unit (if applicable).
- Provide a detailed listing of providers approved to provide the proposed interventions/assessments.

- Must include full name, NH EMS License # and level.
- Must be signed and dated by the Head of EMS Unit, and EMS Medical Director.
- Once approved additional providers can be added to the program via submittal of documentation including the elements noted above.
- Specify what type of schedule will these services be made available.

#### TRAINING PLAN:

- Describe what training will be provided to enable the providers to deliver the interventions/assessments described above.
- Define who will be responsible for training oversight and coordination.
  - Must include this individual's qualifications that enable them to provide and oversee this training.
- Define a continuing education program specific to the proposed protocol.
- See Appendix A - Advanced Sepsis Care Minimum Course Requirements

#### QUALITY MANAGEMENT AND DATA COLLECTION PLAN:

- Develop a quality management (QM) program specifically for the advanced sepsis program or specify how advanced sepsis will be part of an existing QM program. The QM program shall incorporate all the components of an EMS QM program as specified in Administrative Rules Saf-C 5921. In addition, the QM plan should include:
  - Documentation of each use of the treatment modality.
  - Any adverse events, regardless of whether the treatment modality is presumed to be the cause of the adverse event.
  - Any deviation from the protocol, which should be reported immediately to the Division per standard process.
  - Rapid (e.g. < 24 hours) reporting of any serious adverse events, including any deaths, regardless of whether the treatment modality is presumed to be the cause of the adverse event to:
    - The training officer and medical director, AND
    - The Division
  - QM by the training officer of 100% of the calls involving the treatment modality. Where the QM is proposed to be less than 100%, the proposal should include an explanation of why 100% QM is unnecessary.

#### DOCUMENTATION:

- Patient Care Reports (PCR's) of all patient encounters must be submitted to the FSTEMS as required by Saf-C 5902.08.
- Units utilizing this prerequisite protocol must document medications and procedures performed in their respective NEMESIS fields I.e. (eMedication.03/eProcedures.03).

**Appendix A**  
**Advanced Sepsis Care**  
**Minimum Course Requirements**

**Objectives**

Objectives Legend

C = Cognitive  
P = Psychomotor  
A = Affective

1 = Knowledge  
2 = Application  
3 = Problem – solving level

**Cognitive Objective**

At the completion of the paramedic student will be able to:

- 1) Discuss the pathophysiology of sepsis. (C-1)
- 2) Discuss how to differentiate between sepsis, severe sepsis, and septic shock. (C-1)
- 3) Discuss the importance of early identification and treatment of sepsis. (C-1)
- 4) Discuss the process of laboratory specimen collection (including a rainbow set and blood cultures). (C-1)
- 5) Discuss the laboratory testing methods to be used by the EMS agency. (C-1)
- 6) Discuss the proper antibiotic selection and administration. (C-1)
- 7) Discuss the importance of proper documentation and reporting. (C-1)
- 8) Discuss the importance of proper performance evaluation. (C-1)

**Affective Objectives**

At the completion of the course the paramedic will be able to:

- 1) Value the importance of early sepsis identification and treatment. (A-1)

**Psychomotor Objectives**

At the completion of this course the paramedic will be able to:

- 1) Demonstrate the ability to comply with body substance isolation guidelines. (P-2)
- 2) Demonstrate the ability to properly identify patients who meet the advance sepsis protocol guidelines. (P-3)
- 3) Demonstrate the ability to properly and successfully draw laboratory specimens (including rainbow tops and blood cultures). (P-2)
- 4) Demonstrate the ability to analyze data to determine if a patient meets criteria in the advance sepsis care protocol for prehospital interventions. (P-3)
- 5) Demonstrate the ability to select and administer the appropriate antibiotic. (P-3)
- 6) Demonstrate the ability to properly document all tests and interventions. (P-2)

**Preparation**

Motivation: The advanced sepsis care protocol is intended to guide paramedics in the identification, laboratory diagnosis and advanced treatment of severe sepsis and septic shock.

Prerequisites: National Registry of Emergency Medical Technician – Paramedic  
State of New Hampshire Paramedic license

Teaching Methods: Lecture, discussion, and practical  
Advance Sepsis Care Prerequisite criteria set forth by the Medical Control Board

### **Material**

AV Equipment: Utilize various audio-visual materials related to sepsis identification, treatment, and documentation. The continuous design and development of new audio-visual material relating to EMS requires careful review to determine which best meet the needs of the program. Materials should be edited to assure meeting the objectives of the curriculum.

Laboratory: Collection devices (needles, syringes, vacutainers, etc.), BSI, testing cartridges, specimen tubes with various media (including blood cultures), hospital transfer of care forms

### **Personnel**

Primary Instructor(s): Medical Director, or their designee

Assistant Instructor(s): Medical Laboratory Consultant / Scientist  
Student ratio for practical portion should be no greater than 1:6

Instructor Activities: Approve delivery of didactic portion of training  
Reinforce student progress in cognitive, affective, and psychomotor domains.  
Redirect students having difficulty with content.

### **Evaluation**

Practical: Evaluate the actions of the paramedic students during role play, practice, or other skill station to determine their compliance with the cognitive and affective objectives and their mastery of the psychomotor objectives of this lesson.

Remediation: Identify students or groups of students who are having difficulty with this subject content and work with student(s) until they have met the cognitive, affective, and psychomotor objectives of this lesson.

Enrichment: Identify what is unique in the local area concerning this topic and incorporate into local training modules.



Time:                    Laboratory Collection  
Didactic – 1 hour  
Practical – 1 hour

Sepsis Pathophysiology / Identification  
Didactic – 2 hours

Antibiotic (specific to those provided to service)  
Didactic – 1 hour

### **Syllabus Requirements**

#### Antibiotics:

- Pharmacology.
- Indications.
- Contraindications.
- Dose.
- Administration.
- Storage.
- Treatments of adverse reactions.
- Importance of antibiotic stewardship.

#### Phlebotomy:

- The skills required for proper specimen collection, including patient preparation, if applicable, labeling, handling, preservation or fixation, processing or preparation, transportation, and storage of specimens.

#### Sepsis:

- Pathology.
- Sepsis Clock – time to interventions and their importance.
- Signs / symptoms (Identification).
- Mortality / Morbidity.
- End Tidal CO<sub>2</sub> (importance and limitations)
- Local data (how sepsis impacts the local community).

#### Reporting:

- The EMS Unit will participate in electronic data collection as required by the NHBEMS and as specified in Administrative Rule Saf-C 5902.08.
- Transfer of care report

# 7.0

# Sepsis - Advanced Care

This prerequisite protocol is only to be used by EMS Units and their affiliated providers who are authorized by FSTEMS

### IDENTIFICATION OF POSSIBLE SEPSIS

- Suspected infection – YES
- Evidence of sepsis criteria – YES (2 or more):
  - Temperature < 96.8 °F or > 101°F.
  - Heart rate > 90 bpm.
  - Respiratory rate > 20 bpm.

Plus one of the following signs of acute organ failure:

- Mean Arterial Pressure (MAP) < 65mmHg (systolic blood pressure < 90 mmHg).
- New onset altered mental status OR increasing mental status change with previously altered mental status.
- ETCO<sub>2</sub> < 25 mmHg.

### PARAMEDIC - PREREQUISITES REQUIRED - ADULT ONLY

#### CONTRAINDICATIONS:

- Known allergies to available antibiotics.

#### PROCEDURE:

P

1. Draw labs:
  - Rainbow top draw (blue, purple, yellow and green).
  - Blood cultures X 2.
2. Administer fluid and vasopressor per Sepsis Protocol 2.21.
3. Administer appropriate antibiotics per your medical resource hospital .

Prerequisite Protocol 7.0