OBJECTIVES

- To outline the responsibilities for ensuring that Emergency Medical Services (EMS) vehicles and equipment meet Alberta Health Services (AHS) policy requirements, legislative requirements and accreditation requirements, and are properly maintained and in a state of readiness.

- To define processes for performing and documenting daily, weekly, monthly and other scheduled vehicle and equipment checks, cleaning, and ongoing maintenance.

- To define the process for reporting vehicle and equipment deficiencies and for requesting repairs and maintenance.

APPLICABILITY

Compliance with this document is required by all Alberta Health Services employees, members of the medical and midwifery staffs, students, volunteers, and other persons acting on behalf of Alberta Health Services (including contracted service providers as necessary).

ELEMENTS

1. Vehicle and Equipment Check Process

   1.1 The E-Check System will be used to record all vehicle and equipment checks.
1.2 **Vehicle Checks** will be completed as outlined in the [Detailed Vehicle Check Guidelines](#).

1.3 Equipment checks (location and quantities) will be verified using the [Detailed Equipment and Supply List](#) for the specific Vehicle ID.

1.4 Access to the **E-Check System** is available using the **Medusa™ ePCR Tablet** or any other AHS computer with internet access.

2. **Daily Activities**

2.1 **EMS Health Care Professional** Responsibilities – Start of Shift

a) EMS health care professionals, operating **Emergency Response Vehicles** will:

b) Document the controlled substances count (if applicable) of each controlled substance carried in their vehicle and on their person, at the start and the end of each shift, using the **Controlled Substances Check**. Note: This pertains only to staff working on an **ALS unit**. **BLS Units** and **NAT Units** are not required to complete the Controlled Substances Check.

c) The Controlled Substances Check sheet will be considered part of the **Controlled Substances Registry** (refer to the EMS **Managing Medications, Solutions and Medical Supplies** Procedure).

d) Sign into the **Mobile Data Terminal (MDT)** (if available) and enter the information as outlined in the Equipment Check within E-Check.

e) Sign into the Medusa™ ePCR Tablet (if applicable) and enter the information and perform the testing as outlined in the Equipment Check within E-Check.

f) Conduct a comprehensive vehicle and equipment check at the beginning of each shift using the Vehicle Check and the Equipment Check contained in the E-Check System. The equipment check will include specific tests, calibration and checking certain levels.

g) The vehicle and equipment checks will be documented in the E-Check system.

h) If the crew is required to respond to a call at the beginning of the shift, the vehicle check will be done as soon as reasonably possible.

i) Disposable gloves will be worn during the vehicle check to prevent hands from being exposed to chemicals such as motor oil or battery acid.

j) Perform hand hygiene prior to checking medical equipment and supplies.
k) Document any vehicle deficiency identified during the vehicle check in the E-Check system.

l) Immediately notify their Clinical Operations Supervisor of any vehicle defect that may affect the safe operation of any EMS vehicle (as outlined in the Critical Vehicle Check Findings list, within the E-Check system).

m) Vehicle defects discovered any time during the shift will be documented using the IssueTrak system.

n) Immediately notify their Clinical Operations Supervisor to arrange for replacement of missing or malfunctioning Essential Equipment, (as outlined in the Essential Equipment list within E-Check).

o) Arrange for replacement of missing or malfunctioning Non-Essential Equipment or medical supplies as soon as possible (e.g. nasal cannula, IV solutions and inverter) as per local practice.

p) Check the integrity of the packaging of medications, solutions and medical supplies during the daily equipment check (refer to the EMS Managing Medications, Solutions and Medical Supplies Procedure).

q) Clean and/or disinfect the vehicle and equipment (refer to the EMS Cleaning and Disinfecting Vehicles and Medical Equipment Procedure).

r) Ensure vehicles equipped with shore lines are plugged in at all times while in the station.

2.2 The Clinical Operations Supervisor will:

a) Ensure all three daily checks (Vehicle Check, Equipment Check and Controlled Substance Check) have been completed for all Radio Call Signs on duty for each shift.

Note: BLS Units and NAT Units are only required to complete the Vehicle Check and the Equipment Check on a daily basis.

3. Weekly Activities

3.1 EMS health care professionals will:

a) Complete weekly service/maintenance requirements during the daily equipment check process as outlined on the Equipment Check for each specific vehicle (i.e. reprogramming Trac Key™, etc).

b) Perform a Vehicle Check and Equipment Check on Spare Vehicles as directed by the Clinical Operations Supervisor.
c) Perform a weekly vehicle and equipment check on vehicles assigned to the **Planning and Preparedness** section of EMS, as directed by the Clinical Operations Supervisor.

3.2 The Clinical Operations Supervisor will:

a) Review the previous week’s vehicle check sheets to determine which spare vehicles have not had a vehicle check or an equipment check completed during the previous week and assign EMS health care professional to perform vehicle checks on them.

b) Assign EMS health care professional to perform the vehicle and equipment check for each vehicle (excluding trailers) assigned to Planning and Preparedness section of EMS.

3.3 The Supervisor of Fleet, Equipment and Supply or their designate for each EMS zone/division will:

a) Determine which vehicles are due for their scheduled Preventative Maintenance Service/Inspections within the upcoming week (refer to the Preventative Maintenance Standards for **EMS Vehicles Procedure** PS-EMS-01-03).

b) Determine which vehicles are due for **Deep Cleaning** within the upcoming week. Refer to the **EMS Cleaning and Disinfecting Vehicles and Medical Equipment Procedure**.

4. **Monthly Activities**

4.1 On the 25th of each month, EMS health care professionals will:

a) Conduct a comprehensive review of the medical supplies, solutions and medications on their unit (refer to the **EMS Managing Medications, Solutions and Medical Supplies Procedure**).

b) Record the number of all medical supplies, solutions and medications into three counts; items that will expire in the next month, items that will expire in the second month and items that will expire in greater than 2 months, using the **Monthly Drug Expiry Check** form within E-Check.

c) Discard and replace all medical supplies and medications which will expire prior to or at the end of the current month (refer to the **EMS Managing Medications, Solutions and Medical Supplies Procedure**).

d) Complete the Monthly Drug Expiry Check for spare vehicles as directed by the Clinical Operations Supervisor.

e) Complete the Monthly Drug Expiry Check for vehicles assigned to Planning and Preparedness section of EMS, as directed by the Clinical Operations Supervisor.
f) Complete the Monthly Drug Expiry Check on trailers assigned to Planning and Preparedness section of EMS, as directed by the Clinical Operations Supervisor.

4.2 The Clinical Operations Supervisor will:

a) Ensure EMS health care professionals have completed the Monthly Drug Expiry Check for all the active vehicles in the fleet.

b) Assign EMS health care professionals to complete the Monthly Drug Expiry Check on all spare vehicles in the fleet.

c) Assign EMS health care professionals to perform the Monthly Drug Expiry Check on all vehicles assigned to the Planning and Preparedness section of EMS.

d) Assign EMS health care professionals to perform the Equipment Check Sheet for each trailer assigned to Planning and Preparedness section of EMS.

4.3 The Supervisor of Fleet, Equipment and Supply or their designate for each EMS zone will:

a) Determine which pieces of equipment are due for a scheduled Preventative Maintenance Service / Inspection (refer to the EMS Managing Medications, Solutions and Medical Supplies Procedure).

b) Determine which medications, solutions or medical supplies will expire in the next two months and order stock accordingly (refer to the EMS Managing Medications, Solutions and Medical Supplies Procedure).

5. Vehicle Checks for Non-Responsive Vehicles

5.1 EMS health care professionals will:

a) Complete a vehicle check prior to driving the vehicle.

b) Document the vehicle check in the E-Check system upon returning to a location with an AHS Computer.

c) Report safety concerns with the vehicle, directly to the Supervisor - Fleet, Equipment and Supply or their designate the appropriate EMS zone/area.
6. Performance Measures

6.1 Random audits of compliance of the daily check process, weekly activities and monthly supply and equipment checks.

DEFINITIONS

**ALS Unit** means Advance Life Support unit. These units are staffed with at least one health care professional that is registered as an EMT-P.

**BLS Unit** means Basic Life Support unit. These units are usually staffed with health care professions who are registered as an EMT-A.

**Clinical Operations Supervisor (or designate)** means the EMS management staff member, responsible for ensuring that check sheets are completed and that vehicle or equipment defects and safety issues are managed.

**Controlled Substances Check** means a customized list of Controlled Substances that need to be documented at the start and end of each shift. This document is contained in the E-Check system and will be considered part of the Controlled Substances Registry.

**Controlled Substances Registry** means a registry that is required by Controlled Drugs and Substances Act documenting all activity involving a controlled substance within the EMS service. This activity will be recorded in a controlled substance registry. The registry is designed to record movement of all quantities of controlled substance from the time it is acquired by the EMS system to the time of its use or disposition. Each EMS station or EMS vehicle where Designated Administrators, Medical Directors or Paramedics involved controlled drugs and substances will maintain a registry. The controlled substance registry documentation and tracking will be comprised from various sources such as PCRs Pyxis, Vehicle Equipment Check System database and paper methods.

**Critical Vehicle Check Findings** means a listing of vehicle safety related problems discovered during a daily vehicle check. The reported problem may require the vehicle be placed out of service. This decision will be made by the Clinical Operations Supervisors in discussion with the health care professional doing the vehicle check. This document is available within the E-Check system.

**Deep Cleaning** means a thorough cleaning process that involves cleaning and inspecting all equipment and supplies and systematically cleaning and disinfecting all surfaces in the front cab, rear patient compartment, inside cabinets and outside lockers.

**Detailed Equipment and Supply List** means a customized list of equipment and supplies to be carried on a specific vehicle. The list details the location of equipment and supplies, as well as the numbers of each supply within the vehicle. This document is available in the E-Check system.

**Detailed Vehicle Check Guidelines** means step-by-step instructions on how to perform a vehicle check and when and how vehicle defects are to be reported. This document is available in the E-Check System.
**E-Check System** means the province-wide EMS Vehicle and Equipment Check System. This second party piece of web-based software will used to record and manage all vehicle and equipment checks for EMS.

**Emergency Response Vehicle** means an EMS Vehicle including, but not limited to, Ambulances and paramedic response units that are equipped with Emergency Warning Devices and used or intended to be used for providing emergency medical services. **Note:** The term, “ambulance,” will be used in this policy to describe emergency response vehicles.

**Equipment Check** means a customized list of items which require inspection and/or testing prior to equipment being deemed in a state of readiness.

**Essential Equipment** means a list of equipment which, if not immediately replaced may result in the EMS vehicle being placed out of service (e.g. the multilevel cot or cardiac monitor). This decision will be made by the Clinical Operations Supervisors in discussion with the health care professional doing the equipment check. This document is available within the E-Check system.

**Health care professional** means an individual who is a member of a regulated health discipline, as defined by the Health Disciplines Act or the Health Professions Act, and who practices within scope or role.

**IssueTrak** means a web-based vehicle defect reporting system which is interfaced with the E-Check system, to create trouble tickets for defects reported during the vehicle check. IssueTrak will also be used to create trouble tickets for vehicle problems discovered during the shift.

**Medusa™ ePCR Tablet** means a tough-book laptop computer with software installed for EMS staff to document patient care.

**Mobile Data Terminal (MDT)** means a computer mounted in the cab of an emergency response vehicle that is used for communicating event information between dispatch and operations staff.

**Monthly Drug Expiry Check** means a listing of all medications, solutions and supplies with expiry date. This check sheet is available in the E-Check system and will be completed for all EMS vehicles on the 25th of each month.

**NAT Unit** means a Non-Ambulance Transport unit. These units are usually staffed with health care professionals who are registered as an EMR. For the purposes of this procedure, NAT units will be included in the Emergency Response Vehicle category because they carry patients and medical equipment.

**Non-Essential Equipment** means equipment which, if not immediately replaced would not result in the vehicle being placed out of service. Extra stock may be on a vehicle or an alternative can be used until the equipment is replaced (i.e. portable radio can be used if the mobile radio is not working, etc).

**Non-Emergency Response Vehicle** means an EMS vehicle that is not used or intended to be used for providing emergency responses.
Packaging means a sealed enclosure (paper, foil or plastic) designed to protect a medications or medical supply integrity.

Planning and Preparedness means a section of the Business Standards and Operations Support division of EMS. The Planning and Preparedness section is responsible for Major Incident planning. They maintain several specialized vehicles and trailers which are used during disaster exercises and during major incidents (MCI’s).

Radio Call Sign means the radio call sign assigned to a specific unit according to the unit naming convention designed by EMS. This number is used by dispatch and operations personnel to identify a unit; regardless of which vehicle they are using.

Spare Vehicle means a designated replacement vehicle to be used while an active vehicle is undergoing repairs or scheduled maintenance.

Vehicle means any motorized or wheeled mode of transport requiring licensing to operate on public highways including, but not limited to, ambulances, cars, buses, vans, sport utility vehicles and trailers. This definition includes both Emergency Response Vehicles and Non-Emergency Response Vehicles.

Vehicle Check means a standardized list of items which require inspection prior to a vehicle being deemed safe to drive.

Vehicle and Equipment Readiness means a ready EMS vehicle has been deemed to be safe to operate and is fully stocked with equipment that has been tested and/or calibrated.

Vehicle ID means the vehicle identification number issued to each vehicle by EMS Fleet when it is commissioned for use within EMS.

Vehicle Operator means an EMS employee assigned to use a specific EMS vehicle. This includes office staff, management staff and health care professionals.
REFERENCES

- Alberta Health Services Governance Documents:
  - Preventative Maintenance Standards For EMS Vehicles Procedure (#PS-EMS-01-02)
  - EMS Preventative Maintenance Standards For Medical Equipment Procedure (#PS-EMS-01-03)
  - EMS Managing Medications, Solutions and Medical Supplies Procedure (#PS-EMS-05-01)
  - Emergency Medical Services Cleaning and Disinfecting Vehicles and Medical Equipment Procedure (#PS-EMS-02-01)

- Non-Alberta Health Services Documents:
  - Accreditation Canada Emergency Medical Services Standards
  - Accreditation Canada Required Organizational Practices (ROPs) Preventive Maintenance Program