EMERGENCY HEALTH SERVICES ACT

STAFF, VEHICLE AND EQUIPMENT REGULATION

Alberta Regulation 45/1999

With amendments up to and including Alberta Regulation 38/2018

Office Consolidation

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(Consolidated up to 38/2018)

ALBERTA REGULATION 45/99

Emergency Health Services Act

STAFF, VEHICLE AND EQUIPMENT REGULATION

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Schedule

Definitions
1 In this Regulation,
   (a) “Act” means the Ambulance Services Act;
   (b) “approved facility” means
(i) an approved hospital as defined in the *Hospitals Act*,

(ii) a nursing home as defined in the *Nursing Homes Act*,

or

(iii) any other facility approved by the Minister;

(c) “Emergency Medical Responder” means a person registered as an Emergency Medical Responder under the *Health Disciplines Act*;

(d) “Emergency Medical Technician-Ambulance” means a person registered as an Emergency Medical Technician-Ambulance under the *Health Disciplines Act*;

(e) “Emergency Medical Technologist-Paramedic” means a person registered as an Emergency Medical Technologist-Paramedic under the *Health Disciplines Act*;

(f) “licence” means a licence to provide ambulance services under the *Licensing Regulation*;

(g) “registered nurse” means a registered nurse as defined in the *Nursing Profession Act*;

(h) “registered nurse equivalent” means a registered nurse equivalent (EMR), a registered nurse equivalent (EMT-A) and a registered nurse equivalent (EMT-P) described in section 2;

(i) “Standards of Ambulance Equipment and Supplies” means the *Standards of Ambulance Equipment and Supplies* approved by the Minister and published by the Department of Health.

AR 45/99 s1;206/2001;170/2012

**Registered nurse equivalents**

2(1) In this section, “standards of competencies” means the standards of competencies for an Emergency Medical Responder, an Emergency Medical Technician-Ambulance and an Emergency Medical Technologist-Paramedic as determined by the Alberta College of Paramedics.

(2) A person is a “registered nurse equivalent (EMR)”, “registered nurse equivalent (EMT-A)” or “registered nurse equivalent (EMT-P)” if the person is a registered nurse who is determined by the Alberta College of Paramedics and the Alberta Association of Registered Nurses to have met the relevant standards of competencies.

AR 45/99 s2;221/2004
Higher qualifications permitted

(1) Where this Regulation requires or permits the use of an ambulance attendant who is an Emergency Medical Responder or registered nurse equivalent (EMR), the requirement is also met if an Emergency Medical Technician-Ambulance or a registered nurse equivalent (EMT-A) or an Emergency Medical Technologist-Paramedic or a registered nurse equivalent (EMT-P) is used.

(2) Where this Regulation requires the use of an ambulance attendant who is an Emergency Medical Technician-Ambulance or registered nurse equivalent (EMT-A), the requirement is also met if an Emergency Medical Technologist-Paramedic or a registered nurse equivalent (EMT-P) is used.

Emergency medical responder level

An ambulance meets the requirements necessary to provide ambulance services at the emergency medical responder level if

(a) it is staffed with at least 2 ambulance attendants who are Emergency Medical Responders or registered nurse equivalents (EMR), and

(b) it is equipped with the equipment and supplies specified for that level in the Standards of Ambulance Equipment and Supplies.

Basic life support level

An ambulance meets the requirements necessary to provide ambulance services at the basic life support level if

(a) it is staffed with at least 2 ambulance attendants, one of whom is an Emergency Medical Technician-Ambulance or registered nurse equivalent (EMT-A), and one of whom is an Emergency Medical Responder or registered nurse equivalent (EMR), and

(b) it is equipped with the equipment and supplies specified for that level in the Standards of Ambulance Equipment and Supplies.

Advanced life support level

An ambulance meets the requirements necessary to provide ambulance services at the advanced life support level if

(a) it is staffed with at least 2 ambulance attendants, one of whom is an Emergency Medical Technologist-Paramedic or registered nurse equivalent (EMT-P), and one of whom
is an Emergency Medical Technician-Ambulance or registered nurse equivalent (EMT-A), and

(b) it is equipped with the equipment and supplies specified for that level in the *Standards of Ambulance Equipment and Supplies*.

**Levels of ambulance services**

**7** An operator must ensure that an ambulance used by the operator to provide a level of ambulance services meets the requirements of this Regulation for that level of ambulance services.

**Requirements for ambulance attendants**

**8(1)** No operator may employ or engage a person as an ambulance attendant unless that person is registered under the *Emergency Medical Technicians Regulation* (AR 48/93) or is a registered nurse equivalent.

(2) An operator must ensure that a registered nurse equivalent operates under medical control as defined in the *Emergency Medical Technicians Regulation* (AR 48/93).

**Additional equipment**

**9** No operator may permit equipment that is additional to the equipment required for the level of ambulance services specified in the operator’s licence to be carried in the operator’s ambulances unless the additional equipment is approved by the Registrar.

**Patient care report**

**10(1)** An operator must ensure that

(a) an ambulance attendant who attends a patient completes a patient care report in the form approved by the Minister immediately after the transportation of the patient,

(b) if the patient is transported to an approved facility, one copy of the patient care report is given for inclusion in the patient’s medical chart to a person at that facility who has the authority to receive patient information,

(c) if the patient is transported to the patient’s home or a place other than an approved facility, the copy of the patient care report intended for the facility is retained in the records of the operator, and
(d) one copy of the patient care report is forwarded to the Department of Health at a place and within the time specified by the Minister.

(2) An operator must store patient care reports securely.

(3) An operator must retain a copy of a patient care report for a period of 10 years from the date the patient was transported.

(4) Despite subsection (3), the contents of a patient care report may be microfilmed or electronically stored, and the original report may be destroyed not less than one year after the patient is transported.


Patient information

11 When an ambulance is used to transfer a patient from one approved facility to another, the sending facility must provide the ambulance attendant with

(a) the patient’s identity,

(b) a summary of the patient’s medical history prior to the transfer, including information that is relevant to complications that may arise during the transfer,

(c) any orders by the attending physician for treatment of the patient during transportation,

(d) the reason for the transfer, and

(e) the name of the receiving physician, the receiving facility and confirmation that the receiving facility has been notified.

AR 45/99 s11

Patient transportation

12(1) A patient must be transported in the patient compartment of the ambulance.

(2) A patient must be secured with a safety device appropriate to the patient’s condition.

(3) Unless access to a patient’s upper torso is required for medical or resuscitative procedures, a patient transported on a cot must at all times be secured using a restraint system that includes 3 cross straps and 2 shoulder straps, as supplied and recommended by the manufacturer of the cot.

AR 45/99 s12;76/2009
Standards for attendants

13(1) At least one ambulance attendant must be present in the patient compartment of the ambulance with the patient when the patient is being transported, unless a physician or a registered nurse is present with the patient during that time.

(2) A person who drives an ambulance must hold a Class 1, 2 or 4 operator’s licence under the Operator Licensing and Vehicle Control Regulation (AR 320/2002).

Ambulances, equipment and supplies

14(1) An operator must ensure that each ambulance and all equipment and supplies used or to be used by the operator in providing ambulance services are maintained in a clean, sanitary condition, in good repair, in proper working order and in accordance with the manufacturer’s instructions and standards.

(2) An operator must ensure that equipment, supplies and medication used in providing ambulance services are handled as follows:

(a) all sterile equipment and supplies, whether disposable or reusable, are kept in sealed packaging;

(b) all sterile reusable equipment that has been used in the provision of care to a patient is removed from the ambulance, cleaned and re-sterilized before being used again;

(c) all equipment, supplies and medications that have a specified shelf life are, on or before the expiry date, removed from the ambulance and

(i) disposed of in accordance with any waste management guidelines and standards prescribed by the Minister, or

(ii) in the case of sterile reusable equipment, cleaned, re-sterilized and repackaged.

Vehicle and equipment standards

15(1) An operator must ensure that all ambulances used to provide ambulance services meet the standards specified in the Schedule.

(2) Despite subsection (1), sections 5, 16 and 19(d)(i) of the Schedule do not apply to
(a) an ambulance that received its unit number from the Registrar before March 1, 1999,

(b) an ambulance that was manufactured before March 1, 1999, or

(c) an ambulance that was used to provide ambulance services outside Alberta before March 1, 1999, that is brought into Alberta on or after March 1, 1999 and that is approved by the Registrar.

New ambulance standards

15.1(1) Effective March 15, 2010, a licensed ambulance operator must ensure that all ambulances used to provide ambulance services that receive a unit number from the Registrar on or after March 15, 2010 meet the Ambulance Vehicle Standards Code January 2010 published by the Department.

(2) Despite subsection (1), if the patient compartment of an ambulance that received its unit number from the Registrar before March 15, 2010 is, after that date, mounted on a new chassis and a new unit number is issued by the Registrar, the following shall apply in respect of that ambulance:

(a) the Minimum Vehicle Standards for Ambulances set out in the Schedule, but not including section 3(d) to (g);

(b) section 16 of the Ambulance Vehicle Standards Code January 2010 published by the Department.

Exception

15.2 If the Registrar is of the opinion that it is in the public interest, the Registrar may, subject to any term or condition that the Registrar considers necessary,

(a) vary the minimum vehicle standards that apply to an ambulance, or

(b) exempt any ambulance from the application of any standard or condition that may be contained in either

(i) the Minimum Vehicle Standards for Ambulances set out in the Schedule, or

(ii) the Ambulance Vehicle Standards Code January 2010 published by the Department.
Smoking in an ambulance

16 No person may smoke in an ambulance at any time.

Disposal of medical waste

17 An operator must ensure that all biomedical waste, including sharps containers, is disposed of in accordance with any waste management guidelines and standards governing the disposal of biomedical waste that are prescribed by the Minister.

Notifiable diseases

18 If a patient who is known to have or who is suspected of having a notifiable disease under the Communicable Diseases Regulation (AR 238/85) is transported in an ambulance, the operator must ensure that

(a) notification is made to the local medical officer of health in accordance with the Public Health Act and the Communicable Diseases Regulation (AR 238/85),

(b) if any body fluids of the patient have contaminated the ambulance, the ambulance is decontaminated in accordance with the methods under the Communicable Diseases Regulation (AR 238/85) and any directions of the local medical officer of health, and

(c) if the pathogen is airborne, the patient is provided with a mask.

Personal property

19(1) If, in the course of providing ambulance services, an operator or ambulance attendant accepts property of the patient for safekeeping, the operator or ambulance attendant must take reasonable care to ensure its safekeeping.

(2) An ambulance attendant must

(a) immediately at the end of an ambulance trip, search the ambulance for any property lost or left by any passenger, and

(b) deliver any property found

(i) to the patient or passenger who lost or left the property,

(ii) to the nearest police station or to the approved facility to which the patient or passenger was taken, or
(iii) to a medical examiner or the medical examiner’s representative if the patient died in the ambulance and the death requires notification under the *Fatality Inquiries Act*.

**Repeal**

20 The *Staff, Vehicle and Equipment Regulation* (AR 4/94) is repealed.

**Expiry**

21 For the purpose of ensuring that this Regulation is reviewed for ongoing relevancy and necessity, with the option that it may be repassed in its present or an amended form following a review, this Regulation expires on March 31, 2021.

**Coming into force**

22 This Regulation comes into force on March 1, 1999.

**Schedule**

**Minimum Vehicle Standards for Ambulances**

1 In this Schedule,

(a) “AMD Standard 00-” means those standards for testing the construction and safety of ambulances that are published from time to time by the Ambulance Manufacturers Division of the National Truck Equipment Association;

(b) “primary response unit” means the ambulance that a licensed operator intends to use first in response to an emergency or non-emergency;

(c) “secondary response unit” means an ambulance used by a licensed operator that is available to respond to a request for assistance if all of the operator’s primary response units are deployed.

2 The patient compartment of an ambulance must have the following:

(a) not less than 127 cm between the finished floor and the ceiling;
(b) not less than 300 cm between the bulkhead partition immediately behind the driver’s seat and the inside of the rear doors;

(c) seating for at least one attendant, with at least one rear-facing seat located immediately in front of the forward edge of the main cot;

(d) not less than 68 cm between the backrest of the rear-facing attendant’s seat and the forward edge of the main cot;

(e) not less than 25 cm between the rear edge of the main cot and the inside of the rear doors;

(f) a clear aisle of not less than 25 cm in width between the main cot and the squad bench;

(g) space and facilities for the placing, securing and transporting of 2 patients in a recumbent position;

(h) readily accessible space for the storing and securing of equipment and supplies appropriate to the required level of service;

(i) interior surfaces that are in good repair, easily cleaned and sanitized and free of sharp edges and projections;

(j) no fewer than 4 fluorescent, fibre optic or dual-intensity incandescent ceiling lights controlled by 2 separate electrical circuits.

3 The exterior of an ambulance must have the following:

(a) flashing or rotating emergency warning lights that are visible from all directions, including

   (i) a forward-facing lightbar or strobe heads mounted not less than 180 cm above the ground, wired to a separate, dedicated electrical circuit and displaying not fewer than 2 red beams,

   (ii) 2 identical, red warning lights mounted on the front plane of the vehicle, below the lower edge of the windshield, not less than 75 cm above the ground and not less than 45 cm apart when measured at the centre line of each lamp,

   (iii) one or more side-facing, red warning lights mounted on the left and right sides of the vehicle not less than 180 cm above the ground,
(iv) not fewer than 2 identical, red warning lights mounted on the rear plane of the vehicle, not less than 180 cm above the ground and so that no fewer than 2 beams are fully visible directly behind the vehicle when the rear doors are open, and

(v) one or more red warning lights mounted as near as is practical to the front edge of each of the left and right front fenders to serve as intersection warning devices;

(b) one or more floodlights mounted on the rear plane of the vehicle not less than 180 cm above the ground and designed so as to illuminate the area at the rear of the vehicle in an unobstructed manner when the rear doors are open;

(c) one or more floodlights mounted on each side of the vehicle not less than 180 cm above the ground, designed to adequately light the general area on each side of the vehicle and controllable individually from the driver’s switch console;

(d) the word “AMBULANCE” in reverse placed on the front of the vehicle in legible, capitalized, reflective, blue letters that are at least 10 cm in height and have a minimum stroke width of 1.5 cm;

(e) the word “AMBULANCE” placed on the rear of the vehicle in legible, capitalized, reflective, blue letters that are at least 15 cm in height and have a minimum stroke width of 2.5 cm;

(f) a blue, reflective “Star of Life” symbol with a diameter of at least 30 cm placed on each side of the vehicle;

(g) an ambulance unit number, as assigned by the Registrar, placed on the upper rear corners of each side and on the rear of the vehicle in legible, blue figures that are at least 10 cm in height and have a minimum stroke width of 1.35 cm.

4 The windows on the rear doors of an ambulance must allow at least 80% light transmission when the rear doors are open and the emergency warning lights on the back of the ambulance show through the windows.

5(1) In this section, “H-V axis” in respect of a light means the horizontal-vertical axis at the centre of the light.
(2) The flashing or rotating emergency warning lights on the exterior of an ambulance must

(a) flash on and off at a rate of 75-80 times per minute;

(b) have an illuminated viewing area of not less than 129 cm²;

(c) project a beam spread of at least 5 degrees up and down and at least 45 degrees left and right of the H-V axis of the light;

(d) during daytime operation, produce at least

   (i) 1200 candela at the H-V axis, and

   (ii) 75 candela at all points 5 degrees up and down and 45 degrees left and right of the H-V axis;

(e) during nighttime operation, produce at least 30% of the intensities specified in clause (d);

(f) have been tested by the manufacturer of the lights to determine effective intensities in accordance with the Illumination Engineering Society’s Guide for Calculating the Effective Intensity of Flashing Lights, and the manufacturer’s test documentation for the applicable lights must be available to the Registrar on request.

6 The driver’s cab of an ambulance must have the following:

(a) a central switch console that

   (i) is positioned not more than 30 mm above the upper edge of the dashboard,

   (ii) contains control switches for all emergency warning and accessory devices, and

   (iii) is readily accessible to the driver and is operable by the driver when seated in the driving position;

(b) controls for an audio warning device that

   (i) is capable of automatically producing continuous multiple tones at rates of between 10 and 250 cycles per minute and within a frequency range of 500 to 2000 Hz, and

   (ii) is capable of powering one or more, forward-facing, 100-watt siren speakers to provide a minimum output level of 123 dBA at 3 m;
(c) one or more flashing warning lights that are activated whenever a door to the patient compartment or an exterior storage compartment is open.

7 The low voltage electrical system of an ambulance must have

(a) 2 or more 12-volt batteries that are wired to provide starting motor circuitry in a manner approved by the chassis manufacturer,

(b) a battery disconnect device, a labelled “Battery Disconnect” switch and an indicator light, clearly visible to the driver, to indicate that the batteries are on,

(c) a generating system that has a cold, high speed rating of not less than 165 amperes and an operational rating of not less than 135 amperes at 14 volts with an underhood temperature of 93°C, and

(d) been tested by the final stage manufacturer in accordance with “AMD Standard 005, Ambulance 12-volt DC Electrical Systems Test” to determine the generating system reserve when under full electrical load.

8 A tag must be permanently attached to the vehicle in an easily accessible location by the final stage manufacturer certifying that the electrical system has been tested in accordance with section 7(d) and that the total electrical load of all electrical components does not exceed the ambulance’s generating capacity.

9 In addition to the requirements of section 7, the electrical system of an ambulance may include a battery isolator and a switching device to select the batteries, either simultaneously or independently, if power for the ambulance conversion is routed directly from the generating system, through the isolator, to the load.

10 The ambulance conversion and accessory electrical equipment wiring must be

(a) served by circuits distinct from the vehicle chassis circuits and protected by circuit breakers,

(b) permanently colour coded and numbered or marked along its length with easily read letters or numbers to identify function,

(c) located in accessible, enclosed and protected locations,

(d) routed in conduit or high temperature looms rated at 149°C, and
(e) protected by grommets where it passes through apertures on the body.

11 An ambulance must not be operated in any situation if the manufacturer’s ratings for gross axle weight or gross vehicle weight are exceeded.

12 All modular ambulance bodies and altered (raised roof) van ambulances must be certified by the final stage manufacturer as meeting “AMD Standard 001, Static Load for Ambulance Body Structure Test”, and test documentation for the applicable structure must be available to the Registrar on request.

13 Doors to the patient compartment of an ambulance must be
   (a) located on the right side and at the rear,
   (b) equipped with handles so that they may be opened from either the interior or exterior of the vehicle,
   (c) designed to allow stretcher patients to be easily loaded and unloaded through the rear doors, and
   (d) designed and placed in such a manner that patients on a primary wheeled cot or a secondary stretcher may be unloaded through the right side door in the event that the rear doors are inoperable.

14 Patient compartment doors on modular ambulances must have latching mechanisms that are installed and certified by the final stage manufacturer as meeting “AMD Standard 002, Body Door Retention Components Test”, and test documentation for the installation must be available to the Registrar on request.

15 The primary cot must be secured in the ambulance by a crash stable cot fastener assembly that is installed and certified by the final stage manufacturer as meeting “AMD Standard 004, Litter Retention System Test”, and test documentation for the installation must be available to the Registrar on request.

16(1) The patient compartment must have an occupant restraint net that prevents an occupant of any side-facing seat on the curbside of the passenger compartment from striking the bulkhead during the rapid deceleration of the ambulance.

(2) The restraint net must be
   (a) positioned between the bulkhead of the passenger compartment and any side-facing seat on the curbside of the patient compartment,
   (b) located no more than 10 cm from,
(i) if the side-facing seat is a bench seat, the part of the forward edge of the base of the seat that is closest to the bulkhead, and

(ii) if the side-facing seat is a captain’s chair, the part of the seat’s cushion that is closest to the bulkhead,

(c) attached to at least 2 points, not less than 40 cm apart, on or near the ceiling and 2 points, not less than 30 cm apart, on or near the floor using low-profile, quick-release fasteners that allow the net to be easily removed,

(d) not less than 50 cm wide,

(e) constructed of cargo webbing that can be easily cleaned or an equivalent material that can be easily cleaned, and

(f) designed, constructed, installed and tested to withstand a load of not less than 13 300 Newtons.

17 All cabinets in the patient compartment of an ambulance must be securely bolted or welded to metal tapping plates or framing members that are welded to the body of the ambulance.

18 The patient compartment of an ambulance must be equipped with an environmental control system that

(a) consists of heating, ventilation and air conditioning components and is capable of maintaining the interior temperature at 20ºC when operated at outdoor temperatures between -35ºC and +35ºC,

(b) has controls that are easily accessible to the attendant, and

(c) is independent of the driver’s cab environment system.

19 An ambulance must be equipped with the following:

(a) an alarm that sounds when the vehicle is in reverse gear, but the alarm may be overridden by means of a switch on the driver’s switch console;

(b) a seat belt for each seating position in the vehicle;

(c) “NO SMOKING - OXYGEN EQUIPPED” signs conspicuously displayed in the driver’s cab and patient compartment;

(d) a piped medical oxygen system installed in the patient compartment consisting of
(i) a medical oxygen cylinder of not less than a 2000-litre capacity that is secured into a retaining device that has been designed, constructed, secured in a manner and tested to show that it meets the requirements of “AMD Standard 003, Oxygen Tank Retention System Test”,

(ii) a pressure-reducing regulator complete with a contents gauge and preset to 344.5 kilopascals,

(iii) non-ferrous piping or low pressure electrically conductive hose that is approved for medical oxygen,

(iv) not fewer than 2 self-sealing wall outlets, and

(v) a pressure compensated flow meter for each wall outlet that is being used to administer oxygen to a patient;

(e) a fixed, electrically powered suction system installed in the patient compartment consisting of

(i) a motor/pump assembly capable of providing not less than 20 litres per minute air flow and of achieving not less than 300 mm Hg vacuum within 4 seconds after the suction tube is closed,

(ii) a transparent collection jar with a capacity of not less than 1000 ml,

(iii) a vacuum control and shut-off valve,

(iv) a vacuum indicator gauge, and

(v) 3 metres of transparent suction tubing;

(f) a puncture-proof sharps container for discarded needles and scalpels that is securely installed within the patient compartment of the vehicle.

20(1) When an ambulance that is a primary response unit is not in use, it must be stored inside a heated building if the outdoor temperature is below 0ºC.

(2) When any ambulance is not in use, the interior temperature of the ambulance must be maintained above 10ºC.

(3) If an interior heater is used in an ambulance to maintain the interior temperature above 10ºC, the interior heater must

(a) be permanently installed in a protective metal mounting box within a cabinet in the patient compartment,
(b) be equipped with a thermostat, and

(c) if powered by 120 volt AC, be permanently and directly wired through a ground-fault interrupt breaker to a shoreline connection on the exterior of the ambulance and have an automatically resetting high temperature cutout switch.