

TITLE

BODY ARMOUR THIRD PARTY EXTERNAL CARRIER

SCOPE

Provincial: Emergency Medical Services

DOCUMENT

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APPROVAL AUTHORITY

Senior Provincial Director and Chief Paramedic

INITIAL EFFECTIVE DATE

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SPONSOR

Associate Executive Director, EMS Business Standards and Operational Support

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Not applicable

PARENT DOCUMENT TITLE, TYPE, AND NUMBER

Managing Uniform Standards Policy (#SWE-EMS-01)

SCHEDULED REVIEW DATE

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NOTE: The first appearance of terms in bold in the body of this document (except titles) are defined terms – please refer to the Definitions section.

If you have any questions or comments regarding the information in this document, please contact Policy Services at policy@ahs.ca. The Policy Services website is the official source of current approved policies, procedures, directives, standards, protocols, and guidelines.

OBJECTIVES

- To outline the specifications required in order to purchase aftermarket (third party) external body armour carriers (carriers).
- To supersede all previous procedures, processes, local service standards (LSS) or directives published by Alberta Health Services (AHS) Emergency Medical Services (EMS) in respect to third party external body armour carriers.

PRINCIPLES

All third part external carriers must be approved by an authorized **EMS Uniform Representative** before being worn at work.

Third party external carriers are an employee paid optional item. Employees can purchase any carrier that meets the specifications listed in this directive.

Employees must wear their duty uniform with a standard duty belt during their third party external body armour carrier fit assessment (see Appendix A).

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. Mandatory Specifications

1.1 External body armour carriers must have the following components:

- a) be dark navy blue (preferred) or black in color, no camouflage print allowed.
- b) be complete with identifiers (patches) such as "PARAMEDIC" or "EMS" on the front and back of the carrier. This could include Velcro® (hook and loop material) with patches or patches sewn onto the carrier, or "PARAMEDIC" or "EMS" silk screened to the front and the back of the carrier.
 - (i) front patch standard size shall be approximately 2.5 cm in height and 10 cm in length and located to either the left or right of centre in the general area of the clavicle.
 - (ii) rear patches are significantly larger than the front patches and are located on the upper centre area of the carrier and approximately 10 cm in height and 20-25 cm in length.
 - (iii) MOLLE webbing: MODular Lightweight Load-carrying Equipment (pronounced MOLLY): External carriers can be equipped with or without MOLLE webbing. MOLLE uses rows of heavy-duty nylon that is stitched onto the external carrier to allow for the attachment of various MOLLE compatible pouches and accessories. Standard webbing is 2.5 cm wide but can vary in width and length. The EMS standard for MOLLE webbing (specialty teams excluded) is three rows of webbing stitched to the bottom half of the front panel. Third party external carriers should have limited MOLLE and therefore not be "Military" in appearance.

2. Optional Specifications (recommended)

2.1 It is recommended but not mandatory that carriers have the following components:

- a) adjustable shoulder straps to raise/lower the carrier to acquire the proper fit as necessary.
- b) adjustable side panels or cummerbund.
- c) constructed of material that is both water and chemical resistant.
- d) breathable mesh inner panels.

3. Fit Criteria/Compliance

NOTE: The importance of having a properly fitted carrier shall not be underestimated. A carrier that does not fit properly will not only be uncomfortable, but may alter protection causing the body armour to not properly protect the paramedic. Body armour is designed to protect vital organs, so a properly fitted external body armour carrier will house the body armour in such a way that it will cover the rib cage, front and back. It will allow for a full range of movement and should not be a hindrance to any activity. While it may be tempting to get a larger carrier with the idea of adding more ballistic protection, most body armour wearers end up either not wearing their gear or they are miserable wearing a carrier that is too big.

3.1 Body armour must fit reasonable into the external carrier to be approved. Where the armour is noted to fit too loosely, sits too low, or is cramped into the carrier, it will fail the fit test. The following measurements serve as a guideline to accommodate for a variety of styles, sizes and particulars of the carrier chosen.

a) Front Panel

(i) Standing: Stand comfortably with arms lowered to the sides.

- The centre of the upper edge of the front panel should be located approximately 4 cm from the suprasternal notch at the base of the neck or close to the second button of a well-fitting uniform shirt.
- if the centre of the upper edge of the front panel is greater than 6 cm from the sternal notch, too much chest wall is exposed and this fit will not be approved.
- The lower edge of the front panel should be no more than 4 to 6 cm (or 2 to 3 finger widths) from the top of the duty belt. If it hangs any lower it may hinder movement, any higher and it will not properly protect all the vital organs.

(ii) Sitting: Sit comfortable with arms lowered to the sides.

- Coverage that vertically extends from the suprasternal notch at the base of the neck to the top of the duty belt indicates an ideal fit.

NOTE: if the body armour is too high or low on the torso, adjust the shoulder straps accordingly.

b) Rear Panel

(i) Standing: Standing relaxed with arms at your sides.

- The ballistic panel should rest 0.75cm to 2 cm off the top of the two piece duty belt.

- The panel then extends upwards to the most prominent vertebra at the base of the neck, or no higher than 11 cm down from the collar seam of a well-fitting duty shirt.
 - Having a space between the duty belt and the bottom of the back panel prevents the vest from riding up when going from a sitting to a standing position.
- c) Side Panels
- (i) Standing: Stand comfortably with arm lowered to the sides.
- Coverage that vertically extends approximately 7.5 cm from the lower boarder of the armpit to the top edge of the carrier is ideal.
 - The lower edge of each side extends vertically to near the top of the duty belt.
 - A 5 cm overlap of the front and back panels on both sides is desired.

DEFINITIONS

EMS Uniform Representative means an employee of the EMS Uniform Portfolio or EMS Clinical Operations division who has specialized training to accurately measure and fit body armour, including external carriers. Uniform Representatives are available in all five zones.

REFERENCES

- Appendix A: *Third Party External Carrier Fit Assessment/Approval Form*
- Non-Alberta Health Services Documents:
 - *Body Armour- Proper Fit, Care and Maintenance (2007)*
 - *Ballistic-Resistant Armour: A Guide to Proper Fit, Wear & Care*
 - *ASTM International Designation E3003-15: Standard Practice for Body Armour Wearer Measurement and Fitting of Armour.*
 - *Personal Armour Fit Assessment*, excerpted from E3003

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APPENDIX A

Third Party External Carrier Fit Assessment/Approval Form

Answers to all components of the approval form must be "YES" to be approved by EMS

Date: _____ Practitioner Name (print) _____

Zone _____ Immediate Supervisor's Name _____

Make/Model Exterior Carrier _____

Required Specifications	YES	NO
Dark Navy Blue or Black in colour-No military or camouflage print		
"PARAMEDIC" or "EMS" (Capital Lettering) front and back		
MOLLE Webbing (if equipped) is on the front panel only (avoid military appearance)		
Fit Test		
Front Panel		
Standing: The centre of the upper edge should be about 4cm from the suprasternal notch at the base of the neck or close to the second button of well-fitting uniform shirt. Note: If the centre of the upper edge of the front panel is greater than 6 cm from the sternal notch, too much chest wall is exposed and this fit will not be approved.		
Standing: The lower edge should be no more than 4 to 6 cm (2 to 3 finger widths) from the top of the duty belt.		
Sitting: Coverage that vertically extends from the base of the suprasternal notch to the top of the duty belt indicates an ideal fit.		
Back Panel		
Standing: The lower edge of the carrier rests .75 to 2 cm off the top edge of the two piece duty belt.		
Standing: The upper edge of the back panel rests 11 cm down from the collar seam of a well-fitting shirt.		
Sides		
Standing: coverage extends vertically from within 7.5 cm from the lower boarder of the armpit to the top edge of the carrier.		
Standing: the lower edge of each side extends vertically to near the top of the duty belt.		
APPROVED		

Approver's Name: _____