



Ontario Emergency Medical Services Section 21 Sub Committee

Emergency Medical Services Guidance Note #5

Issue: TRAFFIC SAFETY AND WORKER VISIBILITY

PREAMBLE

Emergency Medical Services (EMS) workers (paramedics) performing their duties while responding to emergencies/unplanned events on highways and roadways are at risk of being injured as a result of traffic hazards, especially in the vicinity of moving vehicles or air ambulances. EMS employers should identify the hazards to which EMS workers are exposed to at these unplanned events and implement appropriate health and safety measures to protect workers.

OCCUPATIONAL HEALTH AND SAFETY PRECAUTIONS AND CONTROL MEASURES

EMS employers are responsible for assessing the hazards from vehicular and air ambulance traffic and implementing traffic safety measures to protect workers. A comprehensive traffic safety program should include an assessment of the risks workers are exposed to and implement measures and procedures appropriate in the circumstances (e.g. warning lights, signs, worker location, vehicle position, barriers or other safeguards to protect workers, personal protective equipment, coordination with other emergency response personnel, etc.).

The Ministry of Transportation produces the Ontario Traffic Manual, Book 7 – Temporary Conditions. Appendix 1 of Book 7 provides best practice guidance for first responders on temporary traffic control for unplanned events. This Guidance Note references the Book 7 best practice guidance for first responders with respect to unplanned events and traffic safety. Book 7 defines an unplanned event as any incident that occurs without advance notice of time and location which disrupts normal traffic flow and/or presents a hazard to road users.

The adequacy of the Book 7 layouts and traffic safety measures should be assessed by EMS employers when developing a comprehensive traffic safety plan. It is recommended that local Police and Fire Services be consulted in the development of the traffic safety plan, including an Incident Command protocol, as unplanned events require prompt scene management by all first responders. Paramedics are to be provided with information and instruction regarding the traffic safety plan where traffic affects their health and safety.



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Traffic Safety

Traffic safety and control is one component of Incident Management at emergency scenes. When EMS is the first to arrive on the scene and establishes Command, it is important that the incident scene be protected and contained in order to provide a safe work area for responders while minimizing the chance of secondary traffic incidents. Upon arrival, responders should conduct an initial scene assessment to estimate the magnitude of the incident and the expected duration for recovery. The securing of a scene takes time, and set-up should be a progressive activity based on personnel, equipment, and the critical needs of the incident. It is recognized that the responsibility for Incident Command may change among the first responders present as the incident progresses.

Where there is encroachment into a live traffic lane, traffic control can only be provided by persons qualified under the *Highway Traffic Act* (HTA) to provide traffic control (a “traffic control person” as defined by the HTA, a police officer or firefighter). Paramedics are not legislated by the HTA to provide traffic control. If a traffic control person, police officer or firefighter is not already present, ask dispatch to notify the police/road authority/fire department as appropriate that traffic control is required. Response vehicles are to park in a safe location until initial traffic control is established.

An emergency traffic control zone can be established by slowly coming to a stop and positioning the emergency response vehicle to provide initial safety to the scene. To enhance the safety of paramedics, flashing lights should remain on (Note: use of flashing lights must comply with the *Highway Traffic Act*). EMS workers leaving the vehicle are to wear the appropriate personal protective equipment as noted in this Guidance Note. Placement of traffic control devices (e.g. cones and/or flares) can commence; note that the placement of such devices is impacted by the expected duration of the incident, location, traffic conditions (i.e. volume, speed), weather, and visibility.

Additional responder vehicles arriving on scene can be positioned to enhance the traffic control zone and enhanced traffic control measures (e.g. warning signs, flares, cones, traffic control personnel as noted above, using traffic control devices where appropriate, etc.) can be implemented as required to maintain a safe work area for workers.

All safety procedures are to remain in place until the incident response for EMS is terminated (i.e. patients have been moved from the scene into the patient compartment and workers are positioned safely inside the vehicle or air ambulance) and patient transport has commenced.

Book 7 can be consulted by EMS employers regarding the best practices for the progression of traffic control at unplanned events; these best practices can be incorporated into the EMS employer’s comprehensive traffic safety program.



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Helicopters

Helicopters (i.e. air ambulance, police, Ministry of Natural Resources) can present a hazard to responders at emergency scenes. Paramedics are to be provided with information and instruction regarding the Ministry of Health and Long-Term Care (MOHLTC) Emergency Health Services Branch Field Trauma Triage and Air Ambulance Utilization Standards. These standards provide information regarding appropriate landing site selection and scene preparation for an incoming helicopter to a scene. Additional guidance on helicopter safety is available from Ornge; the Helicopter Safety Sheet noted below provides additional information for EMS employers and workers with respect to approaching or leaving a helicopter.

In situations where an air ambulance is responding to the scene, Incident Command should designate one person (selected from the police, fire, or EMS personnel) as the Landing Site Coordinator who will ensure all responders follow the best practices identified in the MOHLTC Field Trauma Triage and Air Ambulance Utilization Standards. In some instances, a secondary site may need to be secured to facilitate a helicopter response if landing at the actual scene is not possible, or if a modified scene response is chosen to be most appropriate for the situation. Whenever possible, it is a good practice for the land EMS crew, supervisor/superintendent or commander to switch to the Provincial Common Frequency (150.100 MHz) for the final approach of the helicopter to a scene for updates and identification of hazards identified by either air or ground crews.

Worker Visibility/Personal Protective Equipment

Paramedics are to be provided with personal protective equipment to use when exposed to traffic hazards while responding to incidents on highways and roadways, such as:

- high visibility safety apparel to enhance worker visibility, and
- other personal protective equipment as appropriate for the response, such as gloves, mask/protective eyewear or face shield, gown/coveralls, and helmet.



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EMS employers are responsible for taking every precaution reasonable in the circumstances for the protection of a worker. This may include ensuring that workers who are exposed to traffic hazards are provided with and are wearing properly fitted high visibility safety apparel appropriate for the circumstances. The Canadian Standards Association Standard Z96-09 High Visibility Safety Apparel (which is referenced in the MOHLTC Emergency Health Services Branch, Provincial Equipment Standards for Ontario Ambulance Services, Standard #415 Vest, High Visibility) contains performance criteria which may assist EMS employers with the selection of the high visibility safety apparel (i.e. vests):

- background material in fluorescent yellow-green, fluorescent orange-red, fluorescent red, bright yellow-green or bright orange-red
- background colours which are in high contrast to the stripe colours for enhanced visibility under the most compromised lighting conditions
- combined-performance retro-reflective stripes/bands in fluorescent yellow-green, fluorescent orange-red or fluorescent red, or retro-reflective stripes/bands in silver or white
- stripes/bands in a distinctive, standardized pattern, and:
 - a symmetric “X” on the back extending from the shoulders to the waist
 - two vertical stripes on the front extending over the shoulders and down to the waist
 - a waist-level horizontal stripe extending entirely around the back to the bottom of the vertical stripes on the front
 - a total width of at least 5 centimetres throughout and at least 5 centimetres away from the edge of the garment
 - displayed in a way to ensure that some part of them is visible from all angles around the body
- large enough to be comfortably fastened over winter apparel
- fabric hook and loop fasteners
- side and back tear-away features, and
- the ability to accommodate belt-mounted equipment.

To enhance EMS vehicle visibility and to provide additional safety measures in low lighting/poor visibility conditions, it is recommended that employers use vehicle visibility packages that include lighting and/or retro-reflective striping to outline the vehicle, including the interior of patient compartment doors. This will assist oncoming traffic (i.e. drivers) in identifying emergency vehicles from a distance to ensure that a safe distance from emergency scenes is maintained.



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SOME RELEVANT OCCUPATIONAL HEALTH AND SAFETY ACT REQUIREMENTS

Employers are required by the *Occupational Health and Safety Act* (OHSA) to:

- Take every precaution reasonable in the circumstances for the protection of a worker - OHSA clause 25 (2)(h).
- Acquaint workers with any hazard in the work - OHSA clause 25 (2)(d).
- Equipment and protective devices provided by the employer are maintained in good condition- OHSA clause 25 (1)(b).
- Provide information, instruction and supervision to a worker to protect the health and safety of the worker - OHSA clause 25 (2)(a).

REFERENCES AND RESOURCE MATERIALS

Ministry of Transportation, Ontario Traffic Manual, Book 7 - Temporary Conditions – Appendix 1: Temporary Traffic Control for Unplanned Events

Highway Traffic Act

Canadian Standard Association (CSA) Standard CSA Z96-09 High Visibility Safety Apparel (Note: This CSA Standard is based on the identically titled American National Standards Institute Standard ANSI/ISEA 107 and is also designed to be in harmony with CEN EN 471)

Ministry of Health and Long-Term Care, Emergency Health Services Branch, Provincial Equipment Standards for Ontario Ambulance Services, Standard #415 Vest, High Visibility

Ministry of Health and Long-Term Care, Emergency Health Services Branch, Field Trauma Triage and Air Ambulance Utilization Standards, Issue Number 113 - Version 1.0

Ornge, Helicopter Safety: Approaching or Leaving a Helicopter

http://www.ornge.ca/programs/documents/ornge_helicopter_safety_sheet_.pdf

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This document should be shared with the workplace Joint Health and Safety Committee or Health and Safety Representative, incorporated into the workplace occupational health and safety policy and program where appropriate, and posted on the Public Services Health & Safety Association website and the websites of other interested stakeholders.

This Guidance Note has been prepared to assist the workplace parties in understanding their obligations under the Occupational Health and Safety Act (OHSA) and the regulations. It is not intended to replace the OHSA or the regulations and reference should always be made to the official version of the legislation.

It is the responsibility of the workplace parties to ensure compliance with the legislation. This Guidance note does not constitute legal advice. If you require assistance with respect to the interpretation of the legislation and its potential application in specific circumstances, please contact your legal counsel.

While this Guidance Note will also be available to Ministry of Labour inspectors, they will apply and enforce the OHSA and its regulations based on the facts as they may find them in the workplace. This Guidance Note does not affect their enforcement discretion in any way.