



Horizon Health Network | Vitalité Health Network | Ambulance NB | New Brunswick Department of Health
Réseau de santé Horizon | Réseau de santé Vitalité | Ministère de la santé du Nouveau-Brunswick

Guidance During COVID-19 Pandemic Response

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Guidance During COVID-19 Pandemic Response

Introduction

Response to the COVID-19 coronavirus is challenging Regional Health Authorities, EMS agencies and Public Health Authorities alike. We are sensitive to that challenge. This document has been created to provide recommendations on matters specific to the care of trauma patients with serious and critical injuries in the setting of COVID-19.

It is not our role or intention to duplicate or contradict existing guidance that applies to EMS and acute care, surgical care, critical care or other components of the healthcare system that include trauma. Instead, it is our intention to offer tangible, relevant and trauma-specific guidance that helps ensure continued strength in the delivery of care to those with serious and critical injuries.

As a result, we have divided our work into two broad sections:

- Section A applies to the management of individuals with serious and critical injuries in the setting of COVID-19.
- Section B addresses system-level considerations to help ensure both clarity and continuity of services for all seriously and critically injured patients, as well as important contextual advice for injury prevention, learning and research.

Wherever possible, we reference current, national and/or provincial level guidelines, and can provide these references on request. We further commit to reviewing and updating this document throughout New Brunswick's response to the COVID-19 pandemic, posting the updated copy on the NB Trauma Program's public website and communicating important changes to provincial and regional Emergency Operations Centres.

Section A

Clinical Care of Major Trauma Patients in the Setting of COVID-19

1. EMS Response and Initial Assessment

Recommendation	Rationale	Priority Recipients of Approved Recommendations
Donning PPE in accordance with current guidelines remains the first priority upon arrival at any injured patient(s).	Despite the apparent and often visual urgency to care for seriously or critically injured patients, protecting paramedic safety remains the top priority	EM-ANB

2. Field Trauma Triage and Transport to First Hospital

Recommendation	Rationale	Priority Recipients of Approved Recommendations
Sequence of activity: Paramedics should first complete the Paramedic COVID-19 screening tool and determine the recommended destination for the patient before applying Field Trauma Triage Guidelines.	The COVID-19 paramedic screening tool borrows language from the Field Trauma Triage Guidelines to ensure direct transport to the closest available Emergency Department for patients meeting Immediate Life Threat criteria. Later components of the Field Trauma Triage criteria are secondary in importance to COVID-19 bypass requirements	EM-ANB

Recommendation	Rationale	Priority Recipients of Approved Recommendations
EM-ANB is strongly encouraged to ensure that early hospital prenotification occurs for all trauma patients, in accordance with their current Operational Requirements for trauma care.	Early prenotification maximizes the time for both PPE donning and team preparation prior to patient arrival.	EM-ANB

3. Priorities for Care in the ED Setting at First Hospital

Recommendations	Rationale	Priority Recipients of Approved Recommendations
Minimize the size of the team within the trauma room; taking time to plan who enters the patient room is valuable, even if the patient is severely injured.	Major trauma patients frequently bring many members of the core and extended care team into the resuscitation room. In the setting of infectious disease, restricting access to only those who are required to provide direct patient care reduces the risk of infection of other staff.	Emergency Departments/Networks, via Horizon and Vitalité Emergency Operations Centres
When required to ensure airway patency or conducting other Aerosol Generating Medical Procedure, allow for adequate team preparation and follow local guidance for team/location of procedure.	There are no clinical presentations in the emergency care of the seriously and critically injured that takes priority over appropriate provider PPE and team preparation.	EM-ANB Emergency Departments/Networks, Surgical Department/Networks and Anesthesia Departments/Networks, via Horizon and Vitalité Emergency Operations Centres
Avoid reflexive replacement of iGel or other supraglottic device with an endotracheal tube. If the airway is patent, taking the time to plan a safe endotracheal intubation, including PPE donning and doffing, is recommended.	Endotracheal intubation remains the “gold standard” for airway protection. However, automatically replacing an iGel or other supraglottic device that is protecting the patient’s airway may introduce avoidable aerosolization, particularly if a perception of urgency introduces the potential to miss important PPE.	EM-ANB Emergency Departments/Networks, Surgical Department/Networks and Anesthesia Departments/Networks, via Horizon and Vitalité Emergency Operations Centres

4. Confirmation of Aerosol Generating Medical Procedures (AGMPs) specific to trauma care

Recommendation	Rationale	Priority Recipients of Approved Recommendations
<p>That, consistent with advice from the New Brunswick Pandemic Task Force, the following be adopted as Aerosol Generating Medical Procedures (AGMPs):</p> <ul style="list-style-type: none"> • Needle decompression of the chest • Finger thoracostomy • Chest tube insertion • Resuscitative thoracotomy • Open wounds of the airway (including face, neck and/or chest) 	<p>National and international trauma literature on the generation of aerosols for these trauma-specific procedures remains mixed; review and approval by the NB Pandemic Task Force is appreciated.</p> <p>Within RHAs and EM-ANB, providing clarity on these specific procedures will help ensure application of appropriate PPE for all members of the care team, in all care settings.</p>	<p>EM-ANB, via Horizon and Vitalité Emergency Operations Centres</p>

Section B

Trauma System Considerations

1. Transfer of seriously and critically injured patients between hospitals

Recommendation	Rationale	Priority Recipients of Approved Recommendations
Sites caring for trauma patients are strongly encouraged to review the Trauma Transfer Guidelines posted in the ED before calling the Toll Free Trauma Referral System for assistance.	Transfer of trauma patients should be limited to those qualifying under current guidelines.	Emergency Departments/Networks, via Horizon and Vitalité Emergency Operations Centres
Interfacility transfer for qualifying patients continue to be arranged through the Toll-Free Trauma Referral System.	Ensuring a central point for coordination of all urgent trauma transfers can help verify COVID-19 screening and communication requirements are met, at no incremental cost and minimal additional effort	Emergency Departments/Networks, via Horizon and Vitalité Emergency Operations Centres
TCPs encourage level III designated centres to provide ongoing care for patients who fail to meet any Trauma Transfer Guideline criteria; transfer out of Level V designated centres is recommended for all patients requiring admission.	<p>Transfer out of Level III trauma centres is appropriate only when local resources are not sufficient to meet emergency and/or inpatient care requirements.</p> <p>Ensuring that trauma patients are not admitted to Level V centres helps prevent inadvertent admission of a patient who is later determined to be COVID-19 positive</p>	<p>Emergency Departments/Networks, via Horizon and Vitalité Emergency Operations Centres</p> <p>NB Trauma Program Trauma Control Physicians</p>

Recommendation	Rationale	Priority Recipients of Approved Recommendations
<p>While COVID-19 <i>screening</i> should be completed, documented and communicated to all care providers involved in the transfer of a major trauma patients, including the Trauma Control Physician, COVID-19 <i>testing</i> of patients prior to transfer is not indicated.</p>	<p>Completing and communicating the results of COVID-19 screening determines the level of PPE that is indicated.</p> <p>COVID-19 testing of major trauma patients prior to transfer does not alter early treatment of the patient or offer additional protection for the care team. Testing may also inadvertently delay necessary transfers, pending results.</p>	<p>Emergency Departments/Networks, via Horizon and Vitalité Emergency Operations Centres</p> <p>NB Trauma Program Trauma Control Physicians</p>
<p>COVID-19 screening results do not influence the destination for urgent trauma transfers within New Brunswick.</p>	<p>Destination choices for major trauma patients are appropriately guided by acuity and available clinical services, as all Regional Hospitals are able to provide care to suspected and confirmed COVID-19 patients.</p>	<p>NB Trauma Program Trauma Control Physicians</p>
<p>Transferring trauma patients between Level III, II or I designated centres for isolated orthopedic trauma* is discouraged.</p> <ul style="list-style-type: none"> For trauma patients with isolated orthopedic injuries in the Moncton area, TCPs follow guidance developed in consultation with local orthopedic surgery services (Appendix A) For trauma patients with isolated orthopedic injuries in all other areas of the province, local orthopedic surgeons provide bedside consultation and care. If care requirements exceed the usual scope of practice of the local orthopedic surgeon, contact with the Toll Free Trauma Referral System is encouraged. Such calls will result in a conference call between the local orthopedic surgeon, the TCP and 	<p>Preventing avoidable transfer of injured patients is important to help reduce the risk of disease spread among both patients and care providers.</p>	<p>NB Trauma Program Trauma Control Physicians</p>

Recommendation	Rationale	Priority Recipients of Approved Recommendations
<p>an orthopedic surgeon at the Level I or II designated trauma centre to review the case prior to authorizing transfer.</p> <p>* Isolated orthopedic trauma excludes trauma to the spine and/or pelvis</p>		
<p>Equipment and supplies, including blood products, continue to accompany trauma transfer patients as required</p>	<p>The requirement to ensure comprehensive care, including IV pumps, monitors, transport ventilators and blood products, exceeds any risk associated with COVID-19 transmission through use of these devices and supplies</p>	<p>Emergency Departments/Networks, via Horizon and Vitalité Emergency Operations Centres</p> <p>NB Trauma Program Trauma Control Physicians</p>
<p>Intubated patients require analgesia and sedation to achieve a RASS score of -4 during transfer.</p> <p>Care teams are encouraged to refer to NB Trauma Program guidance on Post-Intubation Analgesia and Sedation (available at www.NBTrauma.ca or within the ED)</p>	<p>Avoiding inadvertent extubation of the critically injured patient helps prevent generation of aerosols.</p>	<p>Emergency Departments/Networks, via Horizon and Vitalité Emergency Operations Centres</p>
<p>The Trauma Control Physician retains authority for the final decision on trauma transfer destinations.</p>	<p>Helps to minimize deviation from existing practice and policy</p>	<p>Emergency Departments/Networks, via Horizon and Vitalité Emergency Operations Centres</p>

Recommendation	Rationale	Priority Recipients of Approved Recommendations
Trauma Transfers leaving NB (into Quebec and Nova Scotia) can continue, provided the services required are not available within New Brunswick at the time of transfer.	Confirmed through existing provincial direction	NB Trauma Program Trauma Control Physicians
If delaying transfer will not influence patient outcome but will prevent transfer out of province, the TCP will avoid the out of province transfer	Reduces the complexities of interprovincial travel when it can be avoided without compromising patient care	Emergency Departments/Networks, via Horizon and Vitalité Emergency Operations Centres NB Trauma Program Trauma Control Physicians
Inbound trauma transfers from other jurisdictions (NS, PE and QC) continue, provided that: <ul style="list-style-type: none"> • The required services are not available in the sending province at the time of transfer OR • The life, limb or neurological status of the patient will be compromised by more distant transfer with the sending province. 	Confirmed through existing provincial direction	Emergency Departments/Networks, via Horizon and Vitalité Emergency Operations Centres

2. Research and Learning

Recommendation	Rationale	Priority Recipients of Approved Recommendations
Research into any of the following areas is encouraged: <ul style="list-style-type: none"> • Trauma volumes and severities in the setting of pandemic disease • Rates of specific injury types during social isolation • Rates of specific injury types as social isolation requirements are relaxed 	COVID-19 presents some unique research opportunities specific to trauma care and trauma system performance. Interested clinicians are encouraged to contact us for support in any area of related trauma research. <ul style="list-style-type: none"> • There is an open call for contributions on health promotion perspectives on the COVID-19 Pandemic. The deadline is in April 	Research Departments/Networks, via Horizon and Vitalité Emergency Operations Centres, for broad distribution NB Trauma Program

<ul style="list-style-type: none"> • Knowledge translation for changes in trauma care during pandemic disease • Roles for regional and provincial trauma systems in the setting of pandemic disease 	<p>for the next edition but there may be a similar open-call after the next issue: https://www.iuhpe.org/index.php/en/global-health-promotion/open-calls</p> <ul style="list-style-type: none"> • Articles or commentaries in English, French or Spanish are eligible for submission. • For researchers registered with the NB Health Research Foundation, funding for COVID-19 related projects is available. Contact the Foundation directly or login to the NBHRF website for details 	<p>Research Subcommittee, for broad distribution</p> <p>NB Health Research Foundation</p>
<p>Sites are encouraged to use simulation as a means of verifying adjusted trauma care practices and patient flow in the setting of COVID-19.</p> <ul style="list-style-type: none"> • Simulation can begin as tabletop exercises to model the flow of trauma patients as they enter the ED and are taken to Diagnostic Imaging, the OR, ICU and/or inpatient units. • Simulation should be undertaken across multiple shifts and at several different times of day/day of week. • Simulation is more effective with trained facilitators and repetition. Sites are encouraged to plan simulation events that expose team members to each critical phase of trauma care, including transfer to/from diagnostic imaging, the operating room (for Level I, II and III trauma centres) and for outbound transfers (for Level V trauma centres) 	<p>Simulation is of demonstrable value in embedding novel practices. In the setting of communicable disease, simulation allows care teams to practice donning of PPE, restricting care teams to essential providers only, psychomotor and team dynamics while wearing PPE and care transitions in novel care environments.</p>	<p>EM-ANB Emergency Departments/Networks, Surgical Department/Networks and Anesthesia Departments/Networks, via Horizon and Vitalité Emergency Operations Centres</p>

3. Injury Prevention

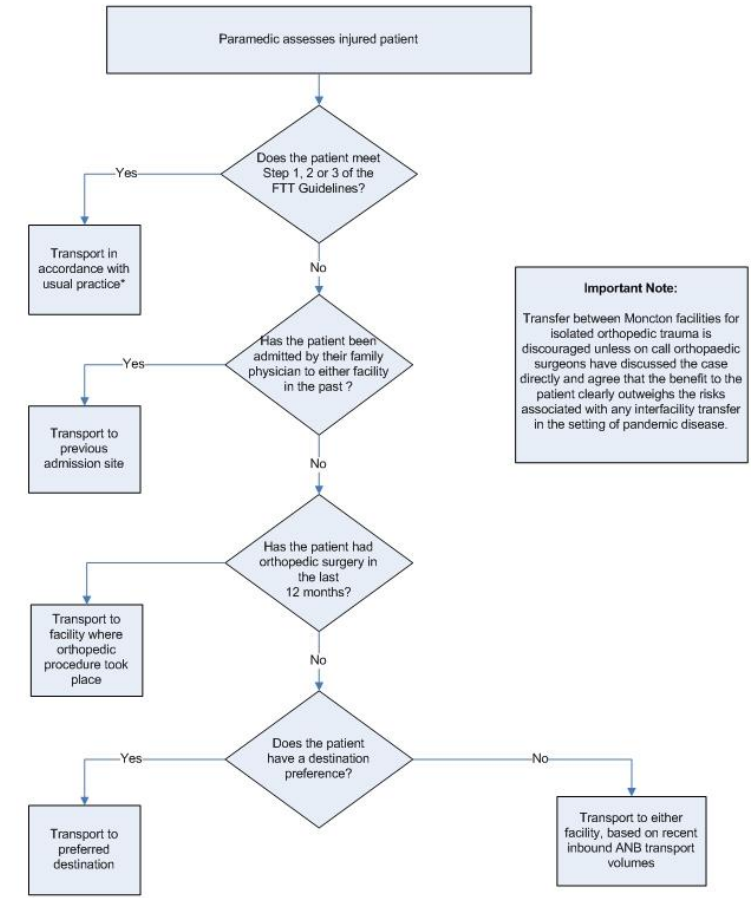
Recommendation	Rationale	Priority Recipients of Approved Recommendations
<p>During extended periods of restricted social activity, enhanced messaging on the following is recommended:</p> <ul style="list-style-type: none"> • Prevention of domestic violence and self-harm, including options for those at immediate risk • Prevention of child abuse, including options for children at immediate risk to contact support directly • Risk of falls in and around the home, particularly for seniors 	<p>There is growing evidence that periods of social isolation present risks of increased domestic violence, child abuse and crises in mental health. Failing to include options for those in need may result in avoidable injury</p> <p>Increasing numbers of residents in homes, coupled with reduced physical activity, presents increased risks of falls, particularly among seniors</p>	<p>EM-ANB, DH, Horizon and Vitalité Marketing and Communications Departments, via respective Emergency Operations Centres</p>
<p>As restrictions on social activity are lifted, enhanced public messaging to address the following concerns is recommended:</p> <ul style="list-style-type: none"> • Safe driving on highways, roads and streets <ul style="list-style-type: none"> ○ Prevention of distracted and impaired driving • Safe use of ATV and other off-road vehicles <ul style="list-style-type: none"> ○ Prevention of aggressive and impaired riding 	<p>An “echo effect” as restrictions are lifted is likely as New Brunswickers resume activities that have been precluded – areas for specific recommendations align with specific areas of risk and case experience in New Brunswick</p>	<p>EM-ANB, DH, Horizon and Vitalité Marketing and Communications Departments, via respective Emergency Operations Centres</p> <p>NB All-Terrain Vehicle Federation, via the NB Trauma Program</p>
<p>As employers resume normal operations, enhanced employee messaging related to safety in their workplaces is recommended</p>	<p>Risk of injury is heightened for workers returning after a period of absence</p>	<p>WorkSafeNB</p>

Appendix A – Guidance for Trauma Control Physicians



Management of Isolated Orthopaedic Trauma: TMH and GLDUHC

Implementation Date: March 30, 2020 Approved by Dr. T. Pische, Medical Director, NB Trauma Program



Important Note:
Transfer between Moncton facilities for isolated orthopaedic trauma is discouraged unless on call orthopaedic surgeons have discussed the case directly and agree that the benefit to the patient clearly outweighs the risks associated with any interfacility transfer in the setting of pandemic disease.

* Transport in accordance with usual practice* means: Polytrauma patients and patients with any evidence of head injury (scalp, face or neck wound and/or history of altered/ loss of consciousness) are transported only to TMH; if no evidence of head injury, patient may be transported to either centre.

For patients being transferred into the greater Moncton area via the Toll Free Trauma Referral System, the Trauma Control Physician may refer patients to either facility, based on their clinical presentation and the services known to be available at either site at the time of transfer