Trauma Nursing Assessment Record (TNAR) Guide for Use

BACKGROUND

Development of the Trauma Nursing Assessment Record (TNAR) was designed to mirror the language and a systematic approach of the Trauma Nursing Core Course (TNCC) and Advanced Trauma Life Support (ATLS) curriculum.

This document is an interdisciplinary tool that aids in identification of life-threatening injuries and prompts supporting interventions outlined in these. Using the C_ABCD format, this document guides the assessment, interventions, and diagnostics that are imperative to safe and timely care of the injured patient.

Population for Use:

The TNAR assessment tool should be used for both **Adult and Pediatric patients** (less than 17 years of age) with a **Canadian Triage and Acuity Scale (CTAS) acuity Level 1-3** with a major mechanism of injury as outlined by the Centers for Disease Control and Prevention) CDC Field Triage Guidelines (2012)

Rationale for the use of TNAR:

- To establish a comprehensive baseline assessment with guidance of appropriate clinical interventions
- To standardize information collection to communicate relevant findings across disciplines in a quick and efficient manner
- To reinforce a standard of trauma nursing assessment framework for trauma patient assessment at both rural and urban trauma centres

TNAR use and completion will be evaluated by Trauma Services BC (TSBC) and BC Trauma Registry (BCTR) to establish performance and compliance metrics will be collected and monitored for alignment with intent and outcome.

Black or Blue ink ONLY is to be used for documenting on this form.

Reference: CDC; Guidelines for field Triage of Injured Patient's-Recommendations of the National expert Panel on Field Triage. 2011; Morbidity and Mortality Weekly report: January 13. 2012; page 8, BOX 2.



1. Patient Identification

- 2. Every page the health record must include a minimum of four (4) recognized patient identifiers.
 - a. Name
 - b. Date of Birth
 - c. PHN
 - d. MRN (Medical Record Number)

TRAUMA NURSING ASSESSMENT RECORD	Place (Trauma Team Activation (TTA) refers to communication with trauma assigned team
CHIEF COMPLAINT		members, specific services and departments where CTAS level 1- 3 patients have met specific physiological anatomical and mechanism of
TRAUMA TEAM ACTIVATION Yes No CTAS LEVELA	Approx	injury criteria.

- 3. Prehospital information
 - Clearly document incident date and time and mode of arrival for the patient.

Incident Date: Transported By:	Incident Time: Fixed Wing	Arrival Time:	Police Walk In Other
History By: Self Friend	Family Police BCEHS	Other Transferred From: Scene	Facility Other

Incident date, time and arrival time are imperative for determining the time it took for the patient to reach definitive care.

PRE-HOSPITAL INFORMATION - MECHANIS	SM OF INJURY	It is imperative to include vehicular collision details
VEHICULAR COLLISION	COLLISION DETAILS	and whether any
MVC - Pedestrian MVC - Bicyclist	Estimated speedkm/h	protoctive devices
Motor vehicle Motorcycle	Thrownm/ft Run Over	protective devices
	MVC: Single Multiple	were used.
	Rollover Intrusion	
Boat	Ejected/separatedm/tt	Images maybe
	Extricationnrs/mins by:	used to support
SPORTS/RECREATION		MOI description
Bicycle - Electric Bicycle - Pedal	Death(s) in same venicle	
Scooter - Electric Scooter - Push	PROTECTIVE DEVICES	
Ski Snowboard	Seatbelt Used Not Used	
Other ped conveyance	Helmet Used Not Used	
Other sports/rec	Car seat Used Not Used	
PENETRATING	Airbag deployed 🗌 Front 🗌 Side	
Firearm/GSW Stabbed with	Other protective device(s) Used	
OTHER	Unknown protective device(s)	
	THERMAL/BURN	
	Fire Exposure	Burns to reflect
□ Fall m/ft □ Crush	Electrical Voltage	AC on DC ourrout
Blunt Assault Other	Other Thermal	AC or DC current.



PRE-HOS	PITAL TREA	TMENT	SAND	INTER\	/ENTIC	ONS		Not	applica	ble
LAST VITA	LS: Time: _ BP:	P	_ (H <mark>H</mark> :N : _	1M)	CPR	in progre FiO	ss Blood Glue 2: RR:	cose:	Temp: _	
AIRWAY Oral Nasal ETT Other:	SPINAL C-collar Spine boa Clam she Straps Head tape Head rol Other:	BRI S rd r C ed Is N - - - - - - - - - - - - -	EATHIN Spontane espiratic fentilated Dxygen: L/ Nasal proL/ Nasal proL/ Non-rebr mask Bag-valv mask/ass L/	G eous ons d min ongs nin eather _L/min e sisting nin	CIRC Bla Pe Ce Int Pe Tir To To Tir Lo Bla	ULATIO eeding cc Colour: ripheral line raosseou lvic bind me: urniquet me: cation: boot transumber of	N CPR ontrol lines x is x er applied (HH:MM) applied (HH:MM) sfusion units:	NEUR(_ LOC _ GCS _ Pup _ A = orie _ V = vert _ P = pair _ U =	OLOGIC C at sce S: ils R: L: Alert/ intated Respor bal Respor bal Respor	ne nds transfer
INTERVEN	ITIONS		ACCE	SS		LA	ST PRE-ARRIV	AL ME	DICATIO	N
Chest tub Needle de	ecompressions:	IV Site	Gauge	Fluid	TBA (mL)	Time (HH:MM)	Medicati	on	Dose	Route
NG Blood g	OG lucose /catheter									

Pre-hospital treatments and interventions do provide information relevant to the care of the injured trauma patient prior to arrival at the first care facility. The interventions will be determined by the level of injury sustained on scene or what has been found by the EHS provider. When assessing for uncontrolled massive hemorrhage, interventions such as tourniquet, pelvic binding and pre-hospital transfusion are critical to preventing mortality within the prehospital setting.

4. Trauma Team Activation

The trauma team activation is required for any patient who meets (assumed, suspected, or confirmed) the following criteria:

- An adult that has met the major Mechanism of Injury (MOI) criteria within the last 24 hours with one or more of the physiological and /or anatomical criteria.
- A child (less than 16 years of age) that has met major trauma MOI criteria within the last 24 hours or any trauma mechanism with one or more physiological and/or anatomical criteria.
- Patients who meet TTA criteria MUST have a TTA initiated within 30 min of the patient arrival to the emergency department.

Trauma	team composition and response may vary across all	
regions	and facilities.	
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<u>Level 1 response</u> reflects the highest level of activation and may include the following:

- ER team and/or
- Trauma Team Leader (TTL)
- Trauma Nurse Leader
- Nurse 1 and Nurse 2
- Multispecialty team plus or minus a specialist involvement and specialist services such as transfusion, interventional radiology, and surgery.

<u>Level 2 response</u> will be determined by the site and resources available to respond such as:

- o ER team and/or
- o **Respiratory**
- o X-ray
- o Trauma Consulting Services

Provincial Health Services Authority

TRAUMA TEAM ACTIVATION (TTA)					
Level 1 Level 2					
TTA Called at: Arrived at:					
Prehospital:					
On ED Arrival:					
Post Arrival to ED:					
Trauma Team-Leader (TTL):					
TTL Called at: Arrived at:					
TNL ED Physician					
Nurse #1 Nurse #2					
Respiratory Therapist Trauma Consult					

http://www.phsa.ca/Documents/Trauma-Services/Provincial%20Trauma%20Team %20Activation%20Standard.pdf

5. Primary Survey

The time of the primary assessment is documented here and is ideally done **within 15 min** of arrival of the patient.

PRIMARY SURVEY	
Time: Done By: Recorder's Signature:	
BLEEDING	
No signs of uncontrolled external bleeding Uncontrolled external bleeding noted from:	

The <u>Primary Survey</u> is to be completed by the Trauma Team Lead (TTL) or by the ED physician or NP who has assumed that role.

Assessing for uncontrolled external bleeding is done immediately and any necessary lifesaving interventions should be completed and documented here.

Pelvis Stable Pelvis Unstable Abdominal Assessment Signs of Internal Bleeding Soft Rigid Amputations:

6. Airway Assessment and Interventions.

The airway assessment is completed on the left side of the TNAR, and any corresponding airway interventions are documented on the right.

AIRWAY ASSESSMENT			AIRWAY INTERVENTIONS
Vocalization:	None		Oral Airway #: Time:
	Speaking		Suctioned for:
	Moaning		Intubated: Oral Other:
	Yelling		Size: Time: cm at the 🗌 teeth 🗌 gums
	Crying Strong	Weak	Airway Adjunct: Size:
			Time:
Patency:	Clear	<u> </u>	
	Stridor		Any airway assessments or interventions must be
	Obstructed	<u>`</u>	charted in this section.
C-Spine:	Hard Collar		
e opinioi	Neck Immobilizer		Ensuring spinal motion restrictions is imperative in
	Head taped		high MOI trauma natients. Identify time and type of
	Other Collar:		device in this section.

7. Breathing Assessment and Interventions

The breathing assessment is completed on the left side of the TNAR, and any emergent or life-threatening interventions are documented on the right. I

BREATHING ASSESSMENT BREATH SOUNDS	BREATHING INTERVENTIONS	If needle
Spontaneous N NORMAL No spontaneous effort L Ventilated R Chest Motion: Depth: Quality: A ABSENT Regular Normal Symmetrical Shallow Laboured Irregular Deep Stridor	Oxygen% L/min NRM Simple Face Mask Nasal prongs Bagged with 100% O2 ETCO2 Placed on Ventilator Time: Initial Settings: Mode:TV:RO2;RR:PEEP: Needle Thoracostomy Time: Location:Performed By:	thoracostomy's or chest tubes are needed ensure to document size, location and who has performed the
Cyanosis - Location: Central Peripheral Perioral	Chest Tube Insertion TIME SIDE SIZE(FR) PERFORMED BY	procedure in this on.
Trachea: Midline Deviated R L FAST/POCUS: Lung sliding	R/L R/L	

8. Circulation Assessment and Interventions

Early identification of massive hemorrhage is critical in trauma. If any Massive Hemorrhage Protocols,



pelvic binding or tourniquets are required, ensure to document time of initiation and location.

CIRCULATION ASSESSMENT		CIRCULATION INTERVENTIONS	•
Radial Femoral Caroti	d	CPR Initiated Time:	See Resuscitation Record
Palpable Not palapable Weak		IVs (see Fluid Balance Section)	□ 10:
Normal Bounding Other:		CVC Type:	Location:
☐ Regular ☐ Irregular			Time:
Cap refill < 3 secs		Massive Hemorrhage / Trauma Exsa	anguination Protocol:
FAST/POCUS: Positive Negative		Time Initiating:	.
Ohio Colore		Time 1st Product: 1	Time Stopped:
Skin lemperature: Skin Colour:		Pericardiocentesis Performed By:	Time:
Hot Wet Pale	Mottled	Thoracostomy Performed By:	Time:
Cool Flushed		Aortic Cross Clamp Time on:	
		Deep Wounds Wound Packing	
Location of uncontrolled hemorrhage:		Pelvic Binding Binder Device	Sheet Applied Time:
		Pressure Dressing to:	
		Tourniquet Applied Time:	Location:

9. Disability Assessment and Interventions

Ensure AVPU is clearly documented on the TNAR if there are any behavioral changes. Baseline extremity movement is imperative when caring for patients who are at risk for spinal trauma. NEW-disability interventions including any seizure precautions initiated or Head of Bed elevation for those patients who may have a suspected traumatic brain injury.

DISABILITY ASSES	SMENT		DISABILITY INTERVENTIONS
Alert	Aggressive		Head of Bed elevation 20-30 degrees
Verbal	Combative		Neuroprotective measures
Pain	Moving all limbs	Arms only	Selzure precautions BGM Value Time
Unresponsive	No movement	Legs only	

10. Expose and Environment Assessment and Interventions

If clothing has been removed for any reason during the trauma resuscitation you must indicate where these items have been stored. Consider items for Forensic Evidence and ensure they are properly stored and documented and whether any police involvement has occurred

occurred.			1	1
EXPOSE / ENVIRON	MENT	EXPOSE / ENVIRONMENT INTERVENTIONS	- 1	
Clothes removed	Forensic Police ID Badge:	Warm Blankets applied Core temperature monitoring	-1	
Overt Injury	Bleeding	External warmer applied		(
Location:		V fluids administered via warmer Warmed IV Fluid infused	l.	_

Hypothermia can be detrimental to trauma patients. **Ensure all methods** used to maintain hermodynamic nonitoring is charted here.

11. Secondary Survey

A secondary survey must be completed on all CTAS 1-3 injured patients. This provides a comprehensive look at all bodily systems and helps to prevent missed injuries from occurring. This is routinely done by the trauma team leader, designated team lead or ED physician.





13. Chest Assessment and Interventions

Chest wall integrity and movement and any associated interventions are documented in this section including heart and breath sounds. **NEW**- Focus Assessment with Sonography in Trauma (FAST) or point of care ultrasound (POCUS) has been added here. This will help clinicians determine injury severity and findings should be documented accordingly.



14. Abdomen/Flank and Pelvic and Genital Injuries



A comprehensive abdominal assessment is required in all trauma patients. Many trauma patients can exsanguinate into their abdominal cavity resulting in hypovolemic shock. The absence of abdominal pain or tenderness does not exclude injury. **NEW** FAST/POCUS

1	ABDOMEN/FLANKS ASSESSMENT	ABDOMEN/FLANKS INTERVENTIONS
	No Injuries noted Altered skin Integrity (See Trauma Diagram)	Cleaned Dressing Applied
	Soft Rigid Bowel sounds: Absent Present	Closed by: Via: Time:
	Tender Distended	NG R L OG cm at teeth:
	FAST/POCUS:	By: Size: Time:
	PELVIS & GENITAL ASSESSMENT	PELVIS & GENITAL INTERVENTIONS
	PELVIS & GENITAL ASSESSMENT No Injuries noted Altered skin Integrity (See Trauma Diagram)	PELVIS & GENITAL INTERVENTIONS Cleaned Dressing Applied
	PELVIS & GENITAL ASSESSMENT No injuries noted Altered skin Integrity (See Trauma Diagram) Stable Unstable Rectal bleeding Vaginal bleeding	PELVIS & GENITAL INTERVENTIONS Cleaned Dressing Applied Closed by: Via: Time:
	PELVIS & GENITAL ASSESSMENT No Injuries noted Altered skin Integrity (See Trauma Diagram) Stable Unstable Rectal bleeding Vaginal bleeding Blood at meatus Scrotal hematoma Lablal hematoma	PELVIS & GENITAL INTERVENTIONS Cleaned Dressing Applied Closed by: Via: Time: Foley catheter inserted By: Size: Time:
	PELVIS & GENITAL ASSESSMENT No Injuries noted Altered skin Integrity (See Trauma Diagram) Stable Unstable Rectal bleeding Vaginal bleeding Blood at meatus Scrotal hematoma Lablal hematoma Priapism Priapism	PELVIS & GENITAL INTERVENTIONS Cleaned Dressing Applied Closed by: Via: Time: Foley catheter inserted By: Size: Time: Urine: Clear Cloudy Bloody Other:

Unexplained hypotension is strong indicator of pelvic fracture. Pelvic binding or assessments should have been completed in the primary assessment but could be done here if not already completed.

15. Extremity Assessment and Interventions

Musculoskeletal injuries are very common in trauma patients. Often these are time sensitive and can impede life or limb functions.

EXTREMITIES ASSESSMENT	EXTREMITIES INTERVENTIONS		
No injuries noted Altered skin integrity (See Trauma Diagram)	Cleaned Dressing Applied See Procedural Sedation Record		
Upper extremity:	Closed by: Via: Time:		
Deformity present Location:	Back Slab Splint applied Pulse after application		
Tondar Logation			
	by Inne Locator		
Lower extremity:	Reduction: Timg i		
Lower extremity: Deformity present Location:	Reduction: Time i Tourniquet Released By: The		
Deformity present Location: Tender Location:	Reduction: Time Tourniquet Released By: Time Tourniquet Reapplied By: Time		

Time of limb or joint reductions should be documented here.

Time of tourniquet application or release should be documented here.

Discontinued

16. Back (Posterior Surfaces) Assessment and Interventions

Time of log roll and posterior assessment is documented here. Removal of spinal immobilization precautions will be determined by the severity of injuries and associated symptoms.

precautions will be determined by the sevency of injuries and associated symptoms.			
BACK (POSTERIOR SURFACES) ASSESSMENT	BACK (POSTERIOR SURFACES) INTERVENTIONS	be charted	
No injuries noted Altered skin integrity (See Trauma Diagram) Cleaned Dressing Applied	here	
Logrolled Time: Rectal bleeding	Closed by: Via: Time:	nere.	
Tender Location:	Spinal Immobilization / SMR Cervical Thoracic		
Swelling Location:	Position Time: Lumbar		
Pre-foley rectal exam By:MD Time:	Discontinued by:	V	
Normal Flaccid Prostate: Normal High riding			

17. Clinical Graphics Record

The documentation of vital signs, neurological status, Glasgow Coma Scale, pain neurovascular status of all 4 limbs and the ability to move should be assessed and recorded every **15 min** for the first **2 hours**. Additionally, this should also be assessed and documented before and after every transition in care (i.e. before leaving the trauma bay for imaging, after moving to CT table and after moving back to the stretcher and upon return to the trauma bay). This may be done more frequently depending upon the patient's acuity level and injury severity. Once the initial resuscitation period is finished assessments maybe done every **30 min** for the next **4 hours**. If the patient is less than 16 years of age or younger age-appropriate **Pediatric Early Warning System** (PEWS) forms may be used upon cessation of the initial resuscitation period.





18. Consulting

Services The timely response and assessment of trauma patients by specialty services is critical to improving patient outcomes. The required response time for specialties is defined by the American College of

Surgeons Committee on Trauma but will be defined in your local Trauma Team Activation Standard Operating Procedure.

CONSULTING SERVICES				
Traumatology	Called at	Arrived at		
Other	Called at	Arrived at	-	
Other	Called at	Arrived at		
Other	Called at	Arrived at		
Other	Called at	Arrived at	o	

Traumatology must arrive within 15min of calling a TTA. Neurosurgery within 30 min of patient arrival or initial consult.

Orthopedics within 30 min of patient arrival or initial consult.

Arrived at

19. Medication Administration

The medication section is designed to prompt the administration of commonly prescribed medications for trauma patients. If additional medications are required, they should be documented in the narrative nursing notes.

Called at

TIME	MEDICATION / DOSE / ROUTE		INITIAL	TIME	MEDICATION / DOSE / ROUTE	INITIAL
	TXA					
	Tetanus / 0.5cc					
	Cefazolin					

20. Fluid Balance

This section should be used for documenting any PVAD or CVAD attempts and locations. In addition, any fluid administration or loss during the resuscitation can be documented here. The administration of blood products can be recorded here unless a health authority specific blood administration form exists.



FLUIDS			INPUT				OUTPUT	
TIME	SIZE/LOCATION	VOLUME	SOLUTIONS/RATE/MEDICATIONS	INITIAL	AMOUNT INFUSED	TIME	SOURCE	TOTAL
	TOTAL AMOUNT INFUSED TOTAL OUTPUT							

21. Nursing Record and Observations

Nursing observations need to be recorded frequently as determined by the patient's severity, however a every 30 minutes has been determined as the minimum standard requirement. Once the patient has reached hemodynamic stability or has been transferred to another location or department, the frequency can be decreased.

NURSING RECORD & OBSERVATIONS

22. Safety Screening

Safety screening within the trauma environment is essential. Many of our patients are at risk for increased substance use, abuse or violence. Once screening or potential risk has been assessed, refer to the associated health authority or site-specific resources to assist with ongoing care needs.



23. Personal Belongings

In this section ensure that the disposition of belongings is recorded here. If the clothing was cut off indicate where this occurred and if they were kept for forensic evidence. If forensic evidence is required refer to local or regional health authority policies.



	<u> </u>	
PERSONAL BELONGINGS		
Dentures Upper Lower Partial Hearing Ald x	CLOTHES	VALUABLES
Eyeglasses Contact Lenses	Cut off: ED At scene	Forensic See belongings envelope
Medications Prosthesis:	Bedside	Bedside
Jewellery: Bracelet x Ring x Watch x	Family/friend:	Family/friend:
Earrings x pairs Necklace x	Safekeeping	Safekeeping
Cellphone Pendant x Money/Valuables		
	OUTSIDE AGENCIES	
DISPOSITION	Police #:	BCEHS #:

22. Disposition

Indicate the time that the patient left the Emergency Department, identify the time, that the patient was **ADMITTED**, **TRANSFERRED**, **DECEASED** or **Discharged (D/C) Home**.

DISPOSITION Time:	_	Police #:	BCEHS #:
A. In-House	B. Morgue	C. Transfer	D. D/C Home
OR	Death pronounced time:	PTN Contacted Time:	Accompanied by:
Ward:	By:	Accepting Site:	Prescription
	Coroner notified time:	Completed Trauma Transfer Form	Ald(es)
Interventional Radiology		Via: Fixed Wing Air/Ground	Discharge Medications:
		Helicopter Ground	

Developed By	Revised By	Date	Approved By
Interdisciplinary Trauma Network of BC Working Group	Interdisciplinary Trauma Network of BC Working Group	June 2017	TSBC-2017
Interdisciplinary Trauma Network of BC Working Group	Interdisciplinary Trauma Network of BC Working Group	March 2018	TSBC-2018
Interdisciplinary Trauma Network of BC Working Group	Interdisciplinary Trauma Network of BC Working Group	April 2025	TSBC-2025



Appendix A – Abbreviations

ABG	Arterial Blood Gas
ATLS	Advanced Trauma Life Support
ATV	All Terrain Vehicle
Audit-C	Alcohol Use disorders Identification Test scored out of 12. The higher the
	score the more likely that the patient's drinking is affecting his/her health
	and safety.
BP	Blood Pressure
CCT/CMCCT	Critical Care Transport
CPR	Cardiopulmonary Resuscitation
CNS	Central Nervous System
CVC	Central Venous Catheter
CVS	Cardiovascular System
Dors. Ped.	Dorsalis Pedis Pulse
ED	Emergency Department
EHS	Emergency Health Services
ETT	Endotracheal Tube
Exp.	Expiry Date
FiO ₂	Fraction of Inspired Oxygen/Oxygen delivery rate
GCS	Glasgow Coma Score
GI	Gastrointestinal System
G.S.W.	Gun Shot Wound
GU	Genitourinary System
HIV	Humanimmunodeficiency Virus
ICU	Intensive Care Unit
IM	Intramuscular
IV	Intravenous
JVP	Jugular Venous Pressure
LOC	Loss of Consciousness
MRN	Medical Record Number
MRSA	Methicillin-resistant Staphylococcus Aureus
MVC	Motor Vehicle Collision
NRM	Non-rebreather Mask
OR	Operating Room
Р	Pulse Rate
PEEP	Positive End-expiratory Pressure
PEWS	Pediatric Early Warning Signs
PHN	Personal Health Number
PO	By mouth
PRN	When necessary / as needed
PTN	Patient Transfer Network
Pos. Tib.	Posterior Tibialis
R/RR	Respiratory Rate
RASS	Richmond Agitation and Sedation Scale
RN	Registered Nurse
	-



RT	Respiratory Therapist
\$.G.W.	Shot Gun Wound
SpO ₂	Pulse Oximetry/Oxygen Saturation
TNAR	Trauma Nursing Assessment Record
TNCC	Trauma Nursing Core Course
TNL	Trauma Nurse Leader
TTA	Trauma Team Activation
TV	Tidal Volume
VRE	Vancomycin Resistant Enterococcus
VS	Vital Signs

