

ANNUAL REPORT

2022/23

TRAUMA NOVA SCOTIA

NS HEALTH TRAUMA PROGRAM

ACKNOWLEDGEMENT

The NSH Trauma Program (Trauma Nova Scotia) is a provincial program operated and managed under Nova Scotia Health. Trauma Nova Scotia oversees the Nova Scotia Trauma Registry (NSTR) which is under the custodianship of the NS Department of Health and Wellness. This 2022/23 Annual Report was prepared using data from the NSTR for the 2021/22 fiscal year under the direction of the Senior Medical Director and NSH Trauma Program Director, together with the Manager and Staff. The NSH Trauma Program Registry Team collects data on major trauma patients from the 2 tertiary care centers in Halifax, the 8 regional hospitals across NS, and the NS Medical Examiner Service. We are grateful to these sites for their ongoing support.

Questions regarding this report can be directed to Bree Gillis, Program Manager.
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NOVA SCOTIA HEALTH TRAUMA PROGRAM

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LAND ACKNOWLEDGEMENT

We acknowledge that Nova Scotia Health is located in Mi'kma'ki, the ancestral and unceded territory of the Mi'kmaq People. Our relationship is based on a series of Peace and Friendship treaties between the Mi'kmaq Nation and the Crown, dating back to 1725. In Nova Scotia, we recognize that we are all treaty people. We also acknowledge that people of African descent have been in Nova Scotia for over 400 years, and we honour and offer gratitude to those ancestors of African descent who came before us to this land.

EXECUTIVE LEADERSHIP MESSAGE



VICE PRESIDENT OF OPERATIONS, CENTRAL ZONE

Eileen MacGibbon

I'd like to congratulate Dan Cashen, Dr. Rob Green and all members of the Nova Scotia Health Trauma Program on an active and successful year. It is a point of pride for the Nova Scotia Health executive team to see the expertise of the Trauma Program shared across the province, continually raising the bar for trauma care for Nova Scotians who depend on it in some of their most difficult times. Your focus on education and outreach is such an asset to our organization. My colleagues and I look forward to more of your innovative approaches to excellence in trauma care in the current year

Eileen MacGibbon MBA

Vice President of Operations, Central Zone

NS Health

SENIOR LEADERSHIP MESSAGE



SENIOR MEDICAL DIRECTOR

Dr. Robert S. Green

DIRECTOR

Dan Cashen

We are pleased to present the 2022/23 Trauma Nova Scotia annual report, highlighting the remarkable progress and achievements we made over the past year. As the senior leaders in the program, we are immensely proud of the dedication and passion that each member of our team has displayed in enabling the program to realize our vision of being a national leader in integrated trauma care.

Education remains a cornerstone of our program. We continue to invest in the professional development of trauma clinicians in Nova Scotia to ensure they are equipped with the latest knowledge and skills. Our Advanced Trauma Life Support (ATLS) offerings enhance the skills of physicians, nurses, paramedics, and allied health professionals. This year, thanks to our partners at the QEII Foundation, we will see the return of the Provincial Trauma Course to all regional hospitals in Nova Scotia. The course is instrumental in fostering collaboration and knowledge sharing across our province.

On October 17th 2022, we introduced our innovative Trauma Consult service to the province. Our dedicated team of Registered Nurses and Physicians have worked tirelessly to improve trauma care for all inpatients at the QEII HSC and continue to see patients from all over Nova Scotia. By providing timely and specialized consultations, we aim to improve patient outcomes and ensure every trauma patient receives the high-quality care they deserve. Our commitment to excellence and collaboration has strengthened relationships with other departments and healthcare professionals, enabling a multidisciplinary approach to patient care. In this annual report, we have some initial outcomes to report that show a positive change with the implementation of the consult service, and we hope to see further improvement over the next year.

The Nova Scotia Trauma Registry (NSTR) stands as a testament to our program's legacy and commitment to advancing trauma care. As one of the oldest and most robust Trauma Registries in North America, it serves as a valuable resource for data collection and analysis. The meticulous work carried out by our dedicated registry specialists has enabled us to identify trends, conduct meaningful research, and drive positive change for the trauma system in Nova Scotia. The insights gained from our registry have not only enhanced patient care within our own province but have contributed to the broader landscape of knowledge of trauma management.

Looking ahead, we remain dedicated to our mission of delivering exceptional trauma care and making a lasting impact. Our program will continue to evolve and ensure that our team remains at the forefront of advancements in trauma care provision, and expands our reach to improve trauma care beyond the level 1 trauma centers.

We extend our deepest gratitude to our team for their unwavering commitment and tireless efforts. We also thank our partners who have shared our achievements this past year, and who will help us to build on those successes into the next year.

As always, we appreciate your comments and feedback. Please feel free to contact us via our [website](#) with any questions, comments, or concerns.

Dr. Robert S. Green
Senior Medical Director
Trauma Nova Scotia

Dan Cashen
Director
Trauma Nova Scotia

ABOUT TRAUMA NOVA SCOTIA

HISTORY

In 1997, Emergency Health Services (EHS) launched the Nova Scotia Trauma Program (NSTP) under the strategic direction of the NS Department of Health and Wellness (DHW) with a mandate to facilitate the provision of optimal trauma care through leadership in patient care, education, research, injury prevention and the continuous development and improvement of our trauma system. The trauma program manages the Nova Scotia Trauma Registry (NSTR) which captures data on all major traumas in the province. NSTR data collection

started 1994 at the QEII. In 1997, the program started collecting pediatric trauma data from the IWK Health Centre. Data collection expanded to the provincial level in 2000 when program staff started collecting data from all 8 regional hospitals across the province and from the NS Medical Examiner Service. The trauma program was rebranded under DHW as Trauma Nova Scotia in 2013. In 2019, Trauma Nova Scotia joined NS Health while DHW remained the custodian of the NSTR.

STRATEGIC PARTNERS

Trauma Nova Scotia maintains strategic partnerships with the provincial trauma program in New Brunswick (Trauma NB) and with trauma care professionals in PEI. The QEII serves as the adult referral site for major trauma patients from PEI and on occasion from New Brunswick and Newfoundland. The IWK Health Centre serves as the pediatric referral site for the Maritimes.

16

OUT OF PROVINCE TRAUMA TEAM ACTIVATIONS IN 2021/22

OUR VISION

Nationally recognized leader in integrated trauma care, incorporating patient-centred clinical excellence, innovative education, practice-changing research, and reflective healthcare policy

OUR MISSION



Lead collaboration

with regional and community sites to ensure a highly efficient, effective, and integrated trauma system for all generations of Nova Scotians

• • • • •



Provide trauma education

across all healthcare disciplines at the local, regional and provincial levels

• • • • •



Ensure excellence

in compassionate, patient-centred care from the time of injury through to recovery

• • • • •



Facilitate quality improvement

initiatives and inform provincial policy by collecting and analysing data on all major trauma patients in NS

• • • • •



Actively perform research

using data from the NSTR to build a foundation for evidence-based trauma care

• • • • •



Lead injury prevention initiatives

together with other key stakeholders in NS and across Canada

• • • • •

OUR VALUES



Innovation

Explore new and creative initiatives to deliver evidence-based trauma care

• • • • •



Collaboration

Work with internal and external stakeholders to provide excellent patient-centred care

• • • • •



Integrity

Uphold the highest standards of care through honesty, fairness and transparency

• • • • •



Critical Thinking

Interpret local data to make informed strategic decisions

• • • • •



Excellence

Constantly advancing through continuous process improvement

• • • • •



QEII TRAUMA CONSULT SERVICE

Major traumas in NS (and complex cases from NB and PEI) are transferred to the QEII ED and admitted to various services including Orthopedics, General Surgery, Critical Care, Thoracic Surgery, and Neurosurgery. In the absence of a dedicated Trauma Unit, the TC Service aims to coordinate patients across multiple services to facilitate and enhance patient access and flow through the healthcare system.

ANTICIPATED BENEFITS

QEII HSC TRAUMA CONSULT SERVICE

In Nova Scotia, the QEII is the primary trauma centre for adult patients and is where all major trauma patients are transferred for life-saving treatment and support. Trauma inpatients are at significant risk for missed and/or underappreciated injuries during hospitalization, and often require coordination of multiple services to address injuries across different body systems. Accreditation Canada standards require Level 1 trauma centres such as the QEII to have a dedicated unit to care for trauma patients admitted to hospital. Due to space and resource limitations, such a unit does not exist at the QEII. To address this gap in care, Trauma Nova Scotia worked with stakeholders and with support from the QEII Foundation to develop and implement an Inpatient Trauma Consult (TC) Service which was successfully launched on October 17th 2022.

With this new service, a dedicated TC Physician and Nurse work daily to assess and coordinate with inpatient services on the care of trauma patients, enhance communication between surgical services and with patients and their families, and address critical issues facing trauma patients such as rehabilitation. The TC Service ensures all patient injuries are identified and documented, that a tertiary survey is completed on every patient within the first few days of admission, and that all required services are up to date and on the same page. The service helps expedite admissions from the ED and develops early pathways for Rehabilitation, Geriatrics, and Mental Health & Addiction consults in appropriate patients. For patients nearing discharge, the service assists with discharge planning and helps coordinate follow-up care with other services. The TC Service also follows up directly with all trauma patients after QEII discharge through a Virtual Follow Up Clinic.



Improved System Flow

- Increased access and flow from ED into ICU and wards
- Reduced length of stay for trauma inpatients
- Increased ICU/IMCU flow and repatriations



Reduced Healthcare Costs

- Dedicated trauma expertise will improve and standardize the model of trauma care, leading to greater efficiencies
- Improved outcomes will lead to long-term cost savings for our healthcare system



Increased Quality of Care

- Decreased complications
- Shorter lengths of stay
- Decreased morbidity & mortality
- Enhanced communication
- Higher patient & provider satisfaction



"This service is a novel approach to addressing the specific needs of the growing number of trauma patients that we see in Nova Scotia each year. We're excited to bring the expertise of our team and support teams caring for trauma patients at the QEII, and the entire province."

Dr. Robert Green, TC Physician & Trauma Team Leader

TRAUMA CONSULT SERVICE

OUTCOME REPORT: OCTOBER 2022 - APRIL 2023

220

TRAUMA TEAM
ACTIVATIONS



144

TRAUMA ADMISSIONS
TO THE QEII



261

PATIENT AND PROVIDER
SURVEY RESPONSES



VIRTUAL FOLLOW UP CLINIC

When trauma patients are discharged from hospital, they are able to follow up with the TC Service using a virtual platform, thus making trauma care more accessible for patients throughout the Maritimes.

IMPACT STATEMENTS

As part of a quality survey, statements were collected from members of the healthcare team providing patient care, and from trauma patients and their families. The feedback has been overwhelmingly positive and provides insight into the impact of the first 6 months of the TC Service.

"My family and I found the team to be an incredible support with a consistently positive impact during my time in the hospital. We can't imagine what it would have been like without them."

"The communication daily by the Trauma Consult Team was very helpful to bedside nursing staff, offered excellent insight, education and advice to guide daily nursing care of the trauma patient."

Trauma Nova Scotia continues to improve the care of trauma inpatients at the QEII and looks forward to sharing data collected at the 1-year anniversary of the TC Service.



Shown: Members of the QEII TC Service and Trauma Team

OUTCOME

2019

2023



AVERAGE HOSPITAL
LENGTH OF STAY

21.7 DAYS

12.9 DAYS



AVERAGE ICU
LENGTH OF STAY

8.9 DAYS

5.5 DAYS



AVERAGE PATIENT & PROVIDER
SATISFACTION WITH SERVICE

N/A

QUALITY OF CARE
TIMELINESS OF CARE



ADULT TRAUMA TEAM ACTIVATION

The Adult Trauma Team at the QEII is comprised of Trauma Team Leaders (TTLs), Resident TTLs (rTTLs), and Trauma Team Members from various specialties. The criteria for TTA include physiological, anatomical, mechanistic and logistical considerations.

These criteria were updated in July 2022 when all TTAs at the QEII began utilizing **new Tiered TTA Criteria**. The purpose of this updated TTA criteria was to better ensure that the make-up of the Trauma Team is tailored to the needs of each major trauma patient, as opposed to an all or nothing TTA as was done previously.

PEDIATRIC TRAUMA TEAM ACTIVATION

The Pediatric Trauma Team at the IWK Health Centre includes TTLs, rTTLs, and Trauma Team Members from various specialties. TTL coverage at the IWK is provided 24/7 by a stable pool of Physicians from General and Thoracic Surgery, Orthopedic Surgery, and Emergency Medicine.

This year, we welcomed 2 new TTLs to our group, increasing the total number of Physicians who provide TTL coverage at the IWK to 11. We are currently planning to add an additional 2 TTLs to our group in the Fall of 2023.

ADULT MAJOR TRAUMA PATIENT TRANSPORTED TO THE QEII

YES **TTA?** NO

TTL DETERMINES OPTIMAL LEVEL OF TRAUMA RESPONSE

RED TIER

- Activation of the entire Trauma Team
- The TTL may downgrade the patient to Yellow Trauma at any point during care

YELLOW TIER

- Core group of trauma team members are activated
- TTL determines if additional team members should be present
- TTL may upgrade to Red Trauma or downgrade to Green Trauma at any point

GREEN TIER

- Patient is seen by the ED Physician who consults with the TTL if appropriate
- ED Physician may upgrade to a Yellow or Red Trauma at any point

NON-TTA

- Major trauma patients who do not meet the criteria for Trauma Team Activation are seen in the Emergency Department by the ED Physician

HIGHER

TRAUMA SEVERITY

LOWER

CHILDREN'S EMERGENCY



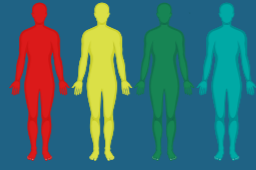
IWK TRAUMA TEAM

The IWK Trauma Care Program continues to provide specialized multidisciplinary trauma assessment, resuscitation, stabilization, and management to children and youth who have sustained a traumatic injury. All children and youth under the age of 16 experiencing physical trauma and meeting IWK TTA criteria are covered by the IWK's TTA Criteria policy. The IWK accepts pediatric major trauma patients for care from Nova Scotia, Prince Edward Island, and New Brunswick.

The Trauma Team works under the direction of the TTL to provide exemplary care, operating under the principles of Advanced Trauma Life Support (ATLS). Last year, the IWK TTA policy was updated and revised to include a second tier of trauma response - an "ED trauma alert" - as well as a "Trauma Consult" option for TTL consult on patients being transferred to the IWK. A staff survey was sent out to ensure stakeholder involvement and approval, and positive feedback was received regarding the new TTA policy and criteria.

ADULT TRAUMA STATISTICS

ALL PATIENTS
APR 1 2021 - MAR 31 2022

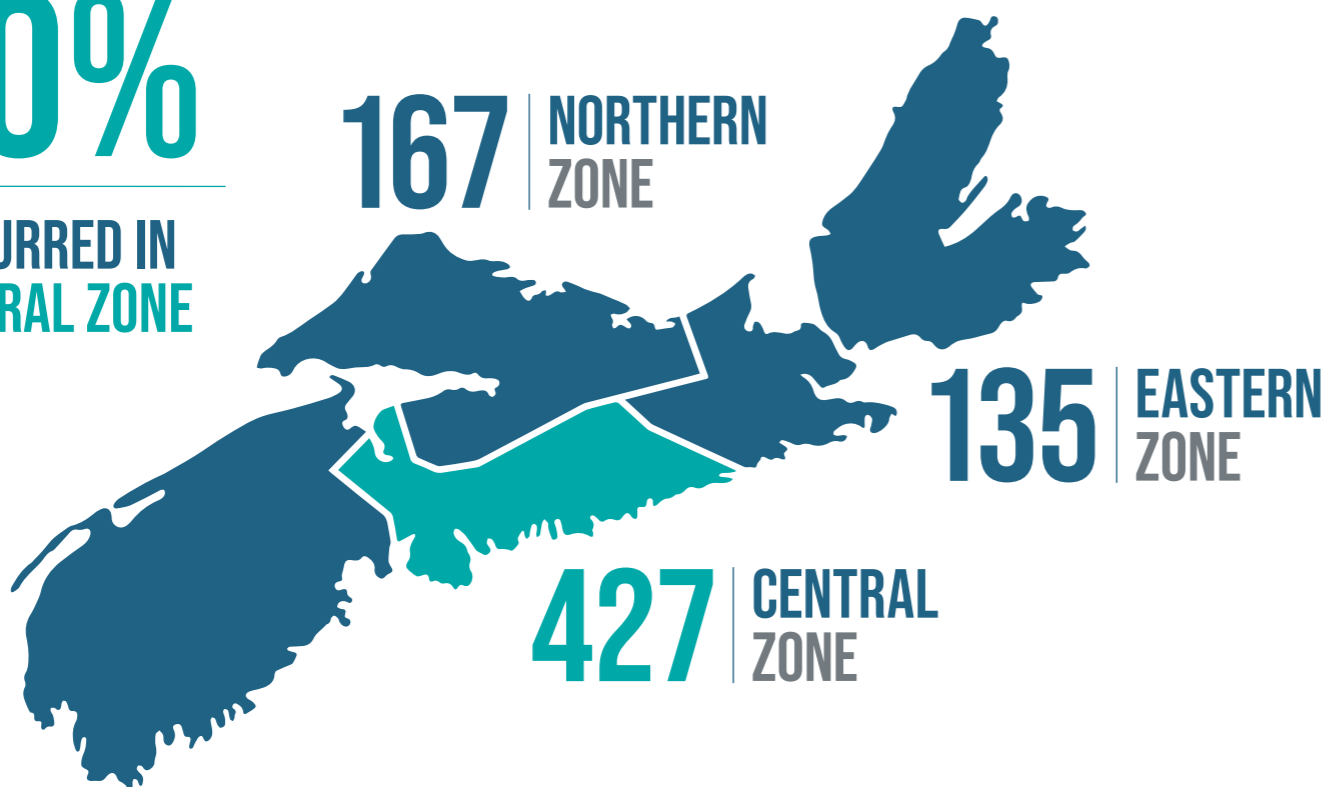


1068

ADULT MAJOR TRAUMAS

INJURY LOCATION

40%
OCCURRED IN CENTRAL ZONE

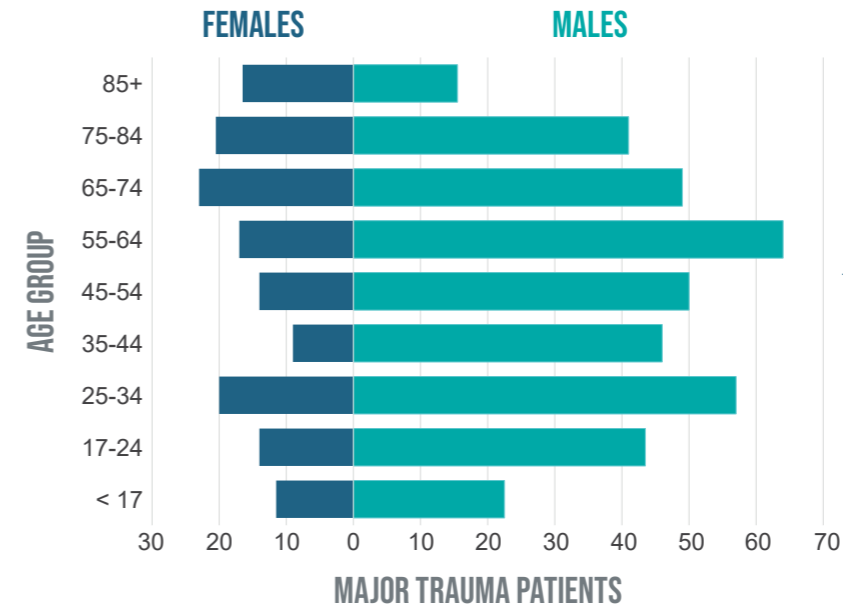


204 WESTERN ZONE

38 OUTSIDE OF PROVINCE*

*INJURY LOCATION WAS UNAVAILABLE FOR 97 PATIENTS

DEMOGRAPHICS AND OUTCOMES



73%
OF PATIENTS WERE MALE*

*NOTE: ALL REFERENCES TO SEX REFER TO BIOLOGICAL SEX

MORTALITY*

23%
DIED AT SCENE OR DURING TRANSPORT

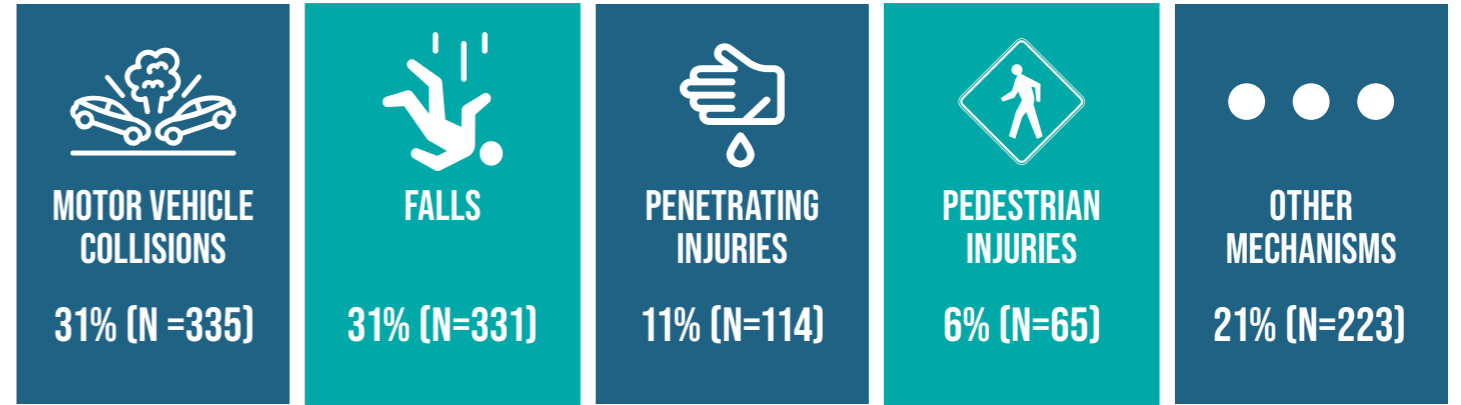
3%
DIED IN EMERGENCY DEPARTMENT

8%
DIED IN HOSPITAL (EXCLUDING ED DEATHS)

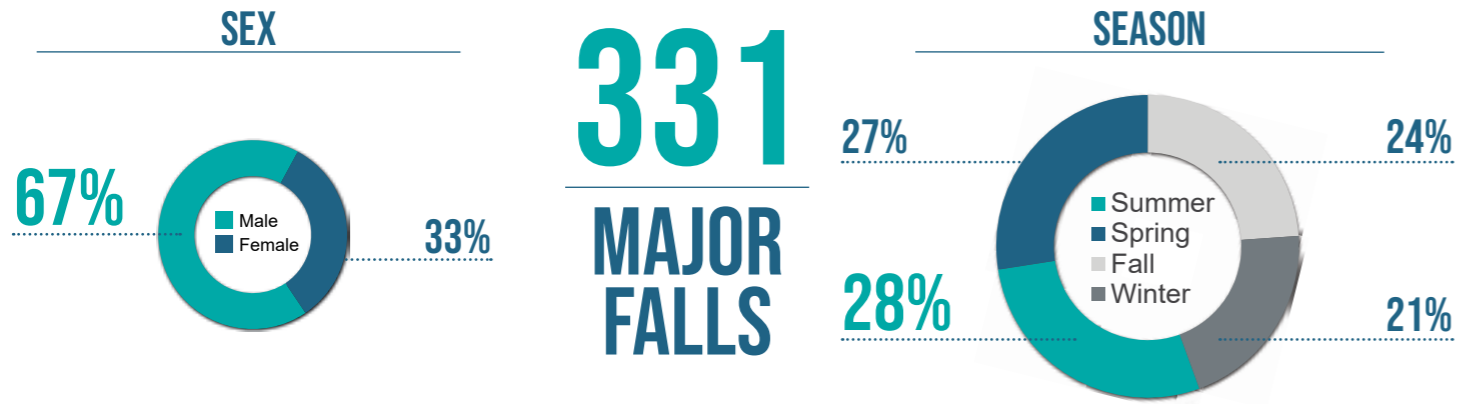
*% OF ALL MAJOR TRAUMAS

INJURY MECHANISMS

62% OF INJURIES WERE CAUSED BY MOTOR VEHICLE COLLISIONS (31%) AND FALLS (31%)

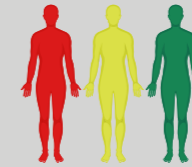


FALL-RELATED INJURY



MOST FALLS OCCURRED DURING SUMMER (28%), IN MALES (67%), AND IN 20-29 YEAR OLDS (31%)

ADULT TTA STATISTICS



TTA PATIENTS
APR 1 2021 - MAR 31 2022

437
QEII TRAUMA TEAM ACTIVATIONS

PENETRATING INJURY



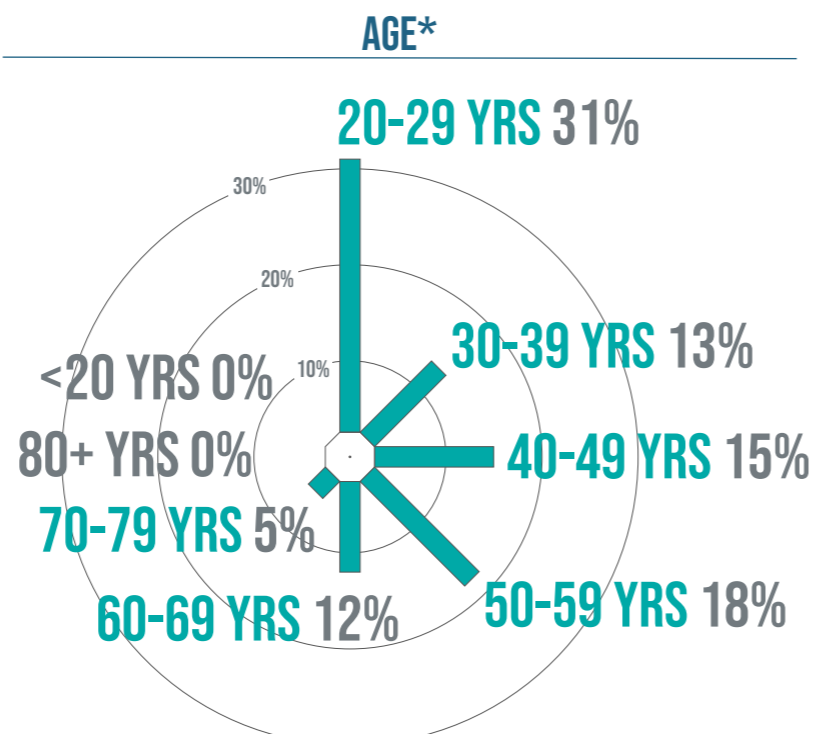
FIREARM INJURIES
49% (N=56)

MOST FIREARM INJURIES WERE IN 20-29 YR OLDS (27%) AND 40-49 YR OLDS (20%)

35-40% OF FIREARM INJURIES OCCURRED IN HALIFAX REGIONAL MUNICIPALITY

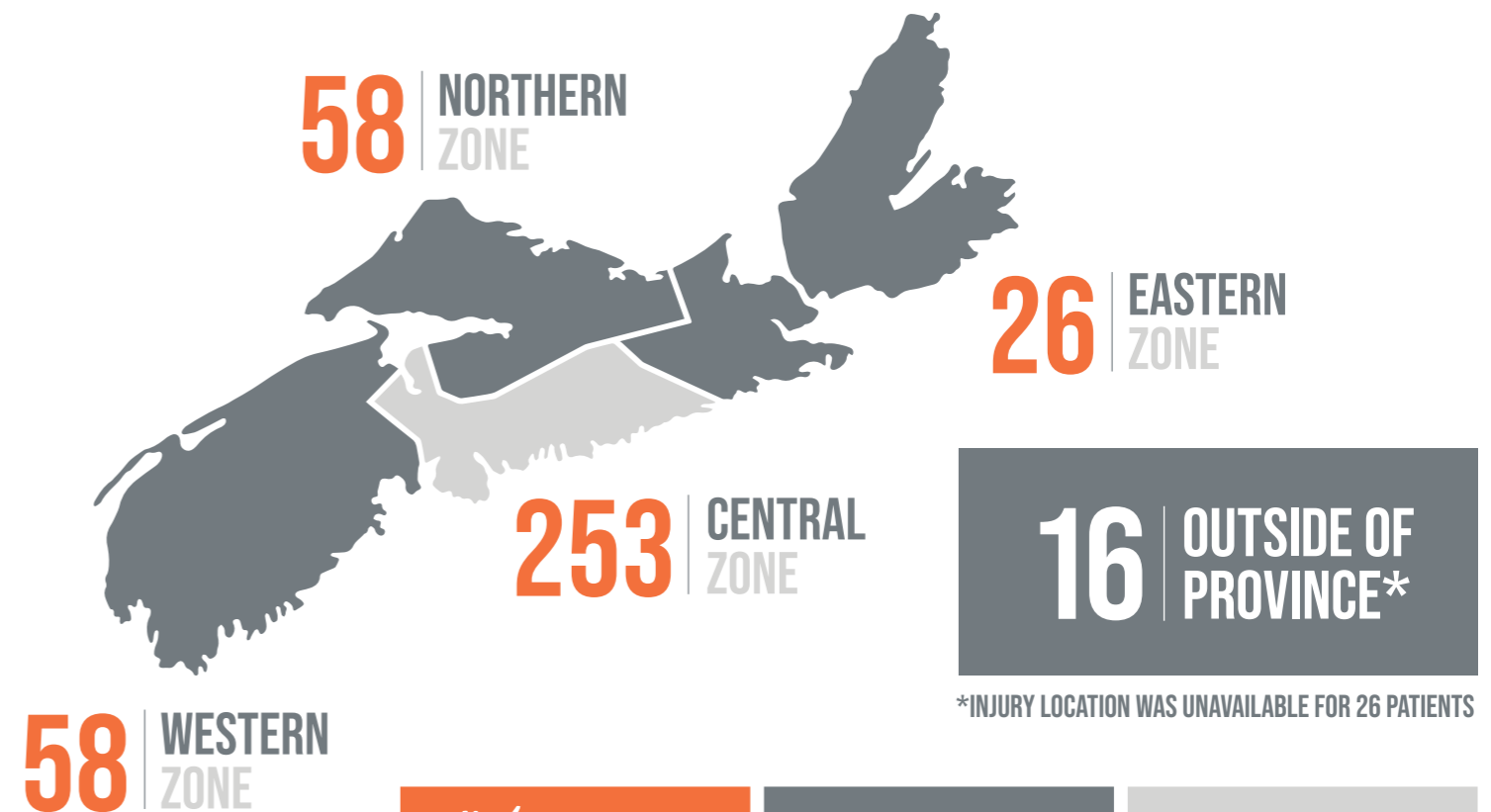
STABBING INJURIES
38% (N=43)

OTHER MECHANISMS
13% (N=15)



*DATA ON AGE UNAVAILABLE FOR 7 PATIENTS

INJURY LOCATION



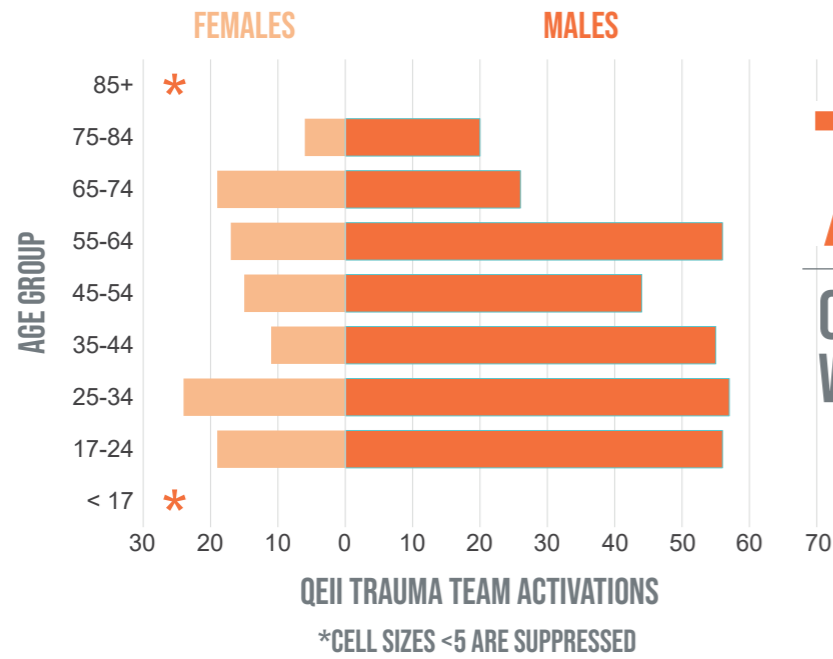
*INJURY LOCATION WAS UNAVAILABLE FOR 26 PATIENTS

DIRECT TRANSPORT FROM SCENE TO THE QEII
67% (N=294)

INTERMEDIATE FACILITY PRIOR TO QEII ARRIVAL
31% (N=136)

WALK INS AT THE QEII
2% (N=7)

DEMOGRAPHICS AND OUTCOMES



MORTALITY*

1.6%
DIED IN EMERGENCY DEPARTMENT

5.9%
DIED IN HOSPITAL (INCLUDING ED DEATHS)

4.3%
DIED IN HOSPITAL (EXCLUDING ED DEATHS)

*% OF ALL QEII TRAUMA TEAM ACTIVATIONS

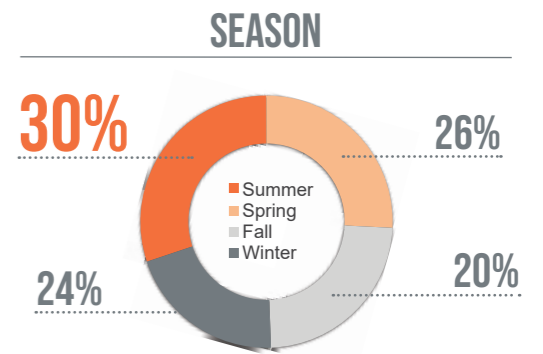
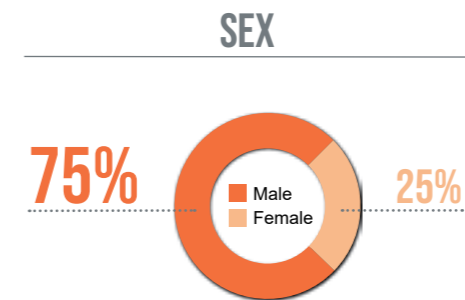
INJURY MECHANISMS



68% OF INJURIES WERE CAUSED BY MOTOR VEHICLE COLLISIONS (47%) AND FALLS (21%)

FALL-RELATED INJURY

93
TRAUMA TEAM ACTIVATIONS

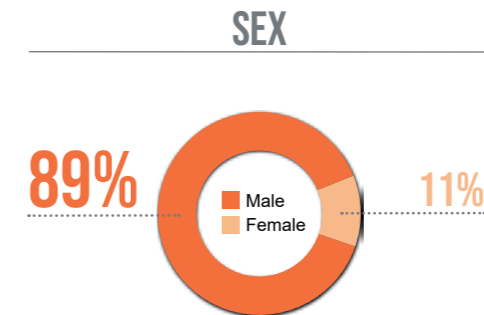


MOST FALLS REQUIRING TTA OCCURRED DURING THE SUMMER (30%) AND IN MALES (75%)



PENETRATING INJURY

44
TRAUMA TEAM ACTIVATIONS



INJURY LOCATION

73% URBAN
16% RURAL
11% UNKNOWN



FIREARM INJURIES
20% (N=9)

ALL INJURIES WERE IN 20-29 YR OLDS (SUPPRESSED) AND 30-39 YR OLDS (N<5)

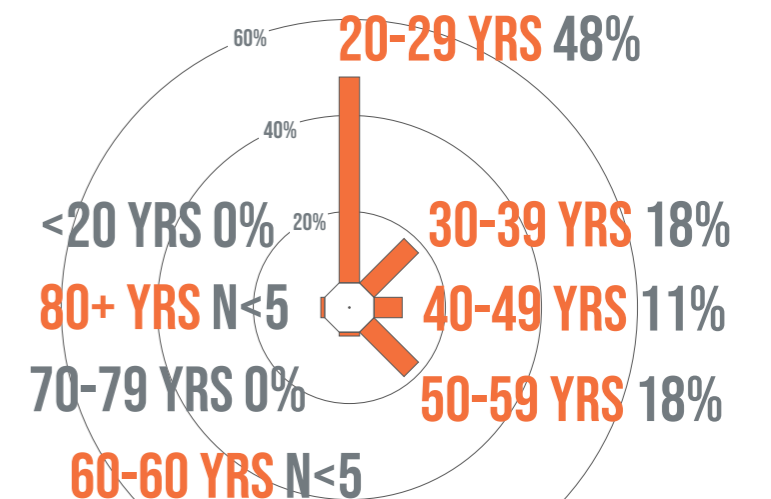
ALL INJURIES OCCURRED IN HALIFAX REGIONAL MUNICIPALITY



STABBING INJURIES
N*

OTHER MECHANISMS
N<5

AGE



*SUPPRESSED TO PREVENT CALCULATION

PEDIATRIC TRAUMA STATISTICS

ALL PATIENTS
APR 1 2021 - MAR 31 2022

62 PEDIATRIC MAJOR TRAUMAS

INJURY MECHANISMS



MOTOR VEHICLE COLLISIONS
31% (N=19)



ATV/DIRTBIKE INJURIES
26% (N=16)



PEDESTRIAN INJURIES
14% (N=9)



FALLS
10% (N=6)



OTHER MECHANISMS
19% (N=12)



MOST PEDIATRIC TRAUMAS WERE CAUSED BY MOTOR VEHICLE COLLISIONS (31%), FOLLOWED BY ALL-TERRAIN VEHICLES AND DIRTBIKES (26%)



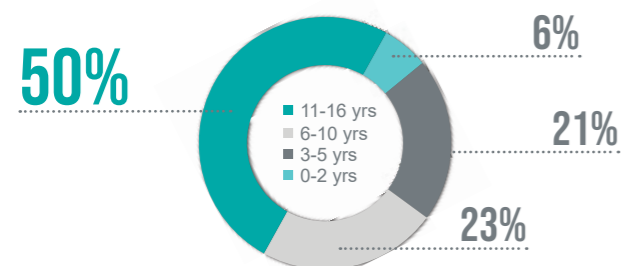
DEMOGRAPHICS/OUTCOMES

42 IWK TRAUMA TEAM ACTIVATIONS

12 ED TRAUMA ALERTS

8 TTL TRAUMA CONSULTS

AGE



MORTALITY

N<5
DIED IN EMERGENCY DEPARTMENT

N<5
DIED IN HOSPITAL (INCLUDING ED DEATHS)

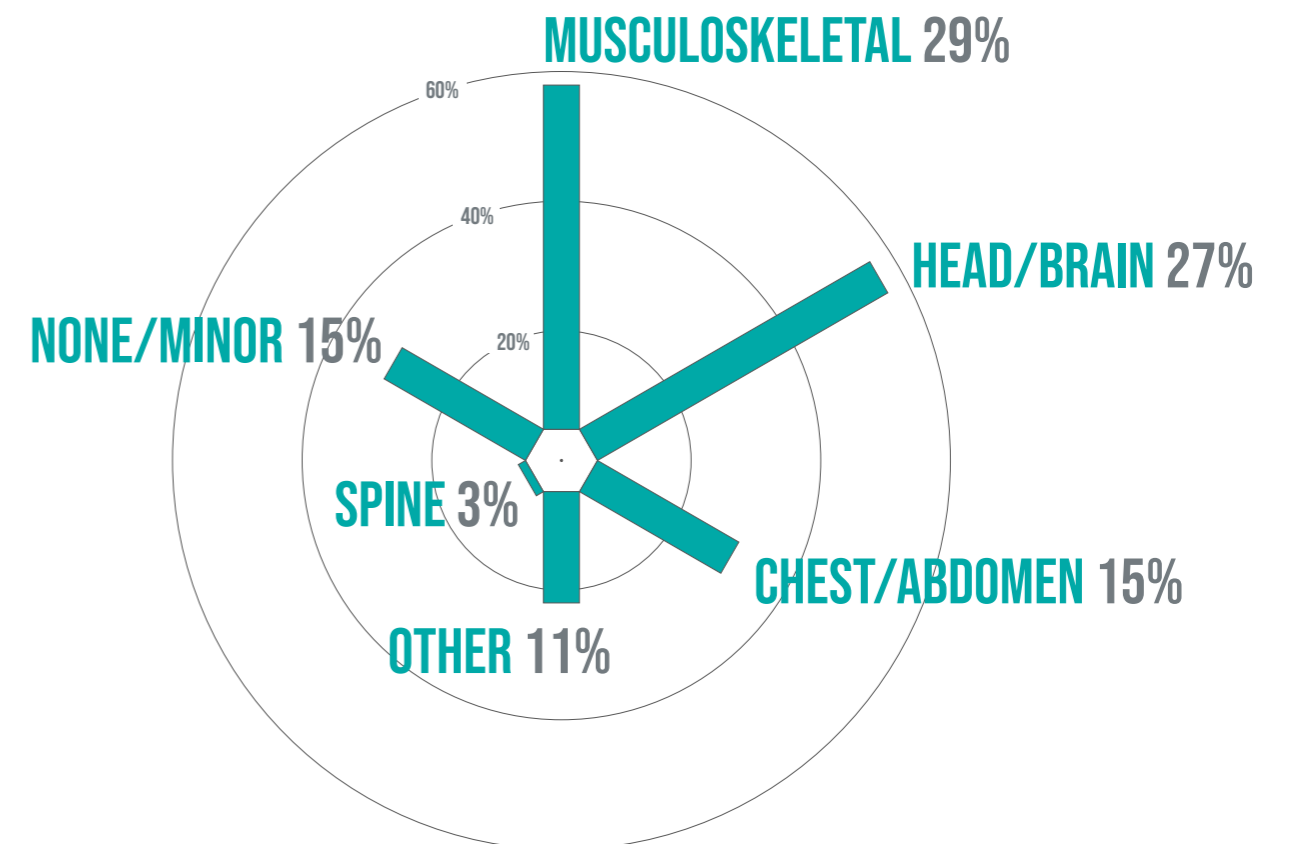
N<5
DIED IN HOSPITAL (EXCLUDING ED DEATHS)

DIRECT TRANSPORT FROM SCENE TO IWK
48% (N=30)

INTERMEDIATE FACILITY PRIOR TO IWK
31% (N=19)

TRANSFERRED TO IWK FROM NB OR PEI
21% (N=13)

BODY REGIONS INJURED



MOST COMMON INJURY PATTERNS AMONG PEDIATRIC MAJOR TRAUMA PATIENTS WERE MUSCULOSKELETAL INJURIES (29%) AND HEAD/BRAIN INJURIES (27%)



IWK TRAUMA PROGRAM

PROGRAM UPDATE

The IWK Trauma Care Program is staffed by a Trauma Coordinator, Melanie Doyle (0.5 FTE), Trauma Medical Director, and Trauma Program Manager.

We would like to extend our sincere thanks to Dr. Dafydd Davies who served as the Trauma Program Medical Director at the IWK since October 2015. We're grateful for his dedication and hard work to improve care for our pediatric trauma patients. We wish him all the best in his new role as Chief of Surgery at the IWK and look forward to his continued work with our pediatric trauma population.

The trauma program welcomed Dr. Jason Emsley into the role of Trauma Program Medical Director in October of this year. Dr. Emsley is a staff Emergency Department Physician at IWK Health and NS Health, and is a Medical Communication Centre Physician for Nova Scotia EHS. He is also the Research Director for the IWK Department of Emergency Medicine.

Our Trauma Program Manager role also had a change in leadership this year. Thank you to Tanya Sheppard, who served as Trauma Program Manager since 2019; we wish her all the best in her new role as Manager, Mental Health and Addictions with IWK Health. We welcome Tanya Murray as the new Manager of the IWK Trauma Program.

QUALITY INITIATIVES AT THE IWK

IWK TRAUMA QUALITY AND PATIENT SAFETY COMMITTEE

The IWK Trauma Quality and Patient Safety (QPS) committee meets regularly to review cases arising from SIMS reports or other concerns pertaining to trauma patients. The committee works to identify problems or issues and provides feedback for ways to improve processes. The IWK trauma program will continue to hold quarterly Trauma QPS committee meetings, and the Trauma Coordinator and Medical Director will work closely with the IWK Quality and Improvement Consultant to improve processes within the trauma program.

TRAUMA NURSE CHAMPION GROUP

The Trauma Nurse Champion group has continued this year, with the addition of several new nurses to the group with some staff turnover. We have a total of 5 ED nurses forming the Trauma Nurse Champion group, who work to identify any issues or gaps to bring to the Trauma Coordinator. The group works together to find solutions and make improvements to trauma care in the ED. The nurse champions also serve as a resource for trauma care to nursing staff in the ED. Work is in progress by the group for upcoming trauma education days for new ED nursing staff.

MASSIVE TRANSFUSION PROTOCOL

The Massive Transfusion Protocol (MTP) working group has continued their efforts this year. The group developed several algorithms and protocols to improve implementation of the MTP, as well as enhance communications between various team members.

LIFELIGHT PHYSICIANS AND EHS COMMUNICATIONS CENTRE

Over the past year, we have improved the methods whereby our LifeFlight Physician colleagues and our Pediatric TTLs communicate about potential traumas and their clinical status and management enroute to the IWK. In addition, we have worked with the EHS Communications Centre to ensure that TTLs are brought into discussions as early as possible when there is a potential pediatric trauma patient to be transferred to the IWK.

NOVA SCOTIA TRAUMA REGISTRY

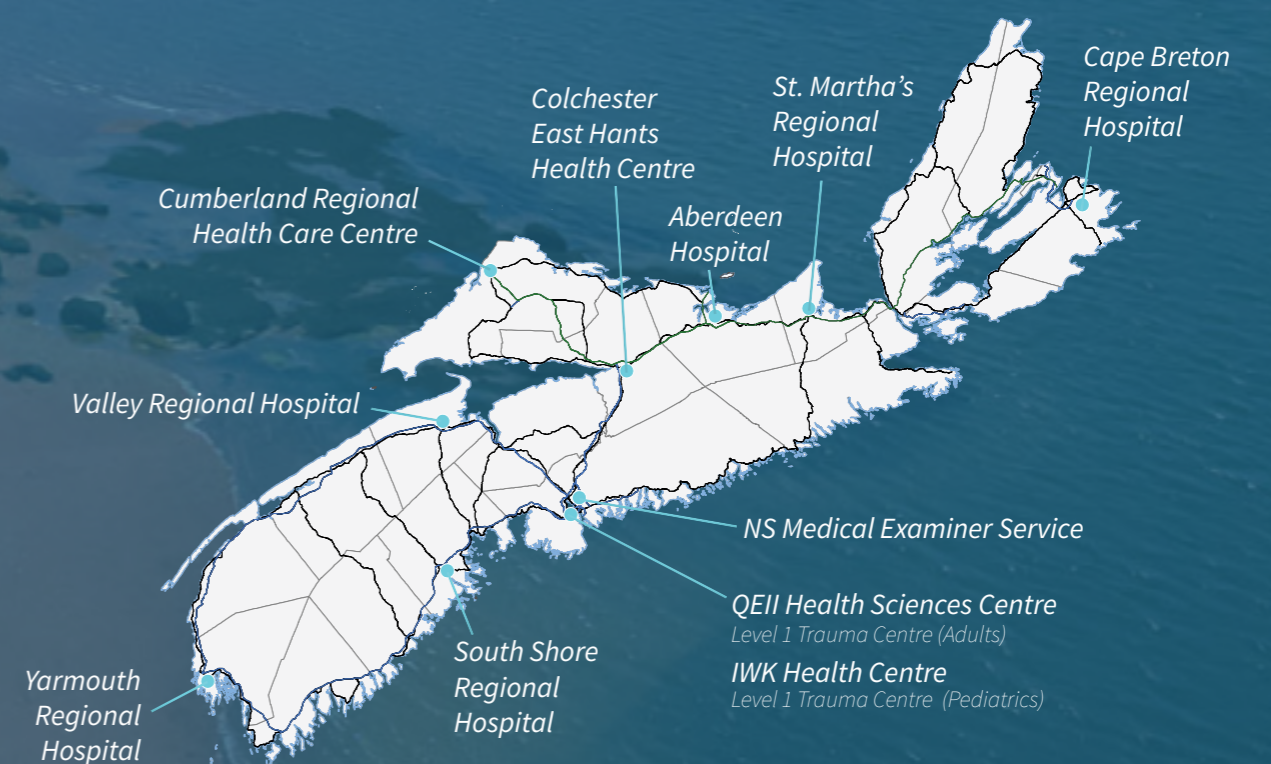
REGISTRY UPDATE

The trauma registry is an essential component of a successful trauma system as it allows for timely evaluation, research, and monitoring of trauma care, and can be used for outreach, planning, and improvement. Since April 2000, the NSH Trauma Program has identified and collected data on all major trauma patients seen at the two Level 1 trauma centers in Halifax (QEII Health Sciences Centre, IWK Health Center), the 8 regional hospitals across Nova Scotia, and from the Nova Scotia Medical Examiner Service. This information is stored in the NSTR, a comprehensive population-based database that houses over 19,000 records of the most severely injured patients with the capacity to collect over 2200 data elements per record.

The NSTR is a valuable resource that enables the NSH Trauma Program to conduct quality assurance, engage in injury surveillance, and research, and develop injury prevention and control strategies. In addition, the NSTR allows administrators and clinicians to engage in evidence-based decision-making, policy development, and program planning. In 2021/22, the NSH Trauma Program received 11 requests for access to data from the NSTR; these requests ranged from ongoing partnership studies to research studies investigating various topics including pediatric trauma, rural trauma, and ATV trauma.

Using data collected from the NSTR, the NSH Trauma Program presented at the CHIMA Coding Community Meeting in Dec 2022 to highlight how accurate ICD-10-CA external cause of injury code assignment and the need for injury specificity can affect data being entered into the registry. The NSH Trauma Program also collaborated with Injury Free Nova Scotia to provide data which was used in their report “A Path Towards Improved Off-Highway Vehicle Rider Safety: Findings from Injury Prevention Research in Nova Scotia”. More information regarding the contents of that report can be found on the [Injury Free Nova Scotia](#) website.

DATA COLLECTION SITES



ADULT TRAUMA EDUCATION

Trauma Nova Scotia continues to provide clinical trauma rounds and offers courses, webinars and simulation training to clinicians and healthcare providers across the province. Through these educational opportunities, we provide hands-on training, reinforce best practices, and optimize the ability of providers to care for trauma patients throughout NS and the Maritimes.

This year saw the addition of Dr. Adam Harris (Medical Director of Education) and Bree Gillis (Provincial Education Lead). Bree has moved to the position of Manager since joining the program.

TRAUMA SIMULATION

Simulation training offers individuals a “controlled” environment to safely acquire and practice skills and learn how to work together during critical situations. In collaboration with the ED Leadership and Central Zone Education Director Dr. James Gould, we were able to run monthly *in situ* simulations. As a result, the interprofessional staff of the Halifax Infirmary ED gained knowledge and review of equipment specific to trauma care. Extensive planning is required to bring these opportunities to life and we appreciate everyone’s participation and enthusiasm.

RESIDENT TRAUMA TEAM LEADER TRAINING

Simulation “Bootcamps” were provided to residents onboarding into the trauma team. Both Emergency Medicine Residents and General Surgery residents attended boot camps this year. These sessions provided an opportunity for simulated learning scenarios, a review of clinical procedures using clinical grade human cadavers, and a chance to develop the crisis resource management skills necessary to become effective team leaders in challenging case scenarios.



TRAUMA NOVA SCOTIA COURSES

ADVANCED TRAUMA LIFE SUPPORT (ATLS)

The ATLS Course was developed by the American College of Surgeons (ACS) and teaches clinicians a systematic approach to the care of trauma patients. Through the course, physicians learn to assess a patient’s condition, resuscitate, stabilize, and arrange interfacility transfers in our trauma system. While ATLS is typically attended by physicians, we welcome all healthcare professionals involved in the care of trauma patients to participate in the course.

The following courses were provided during 2022/23:

- 5 Hybrid ATLS courses were held with approximately 90 participants receiving their ATLS certificate.
- 3 ATLS Refresher Courses were held with approximately 12 participants.
- Trauma NS, in partnership with EHS LifeFlight, offered a course with 17 participants receiving their ATLS Certificate.
- An ATLS Instructor Course was held in the Spring of 2023 and certified 6 new ATLS instructors. Another ATLS Instructor Course is planned for Fall 2023.

PROVINCIAL TRAUMA COURSE

In the past, we’ve partnered with EHS LifeFlight and the EHS Simulation Program to offer the Rural Trauma Team Development Course (RTTDC, developed by the ACS) throughout the province - this was hugely popular. With the ease of COVID-19 restrictions allowing for in-person courses to move forward, it was decided it was time to bring trauma training back throughout the province.

In early December, a needs assessment of trauma education across the province was conducted and our team started developing a course tailored to meet the needs of trauma care providers in Nova Scotia. Trauma Nova Scotia will start providing the Provincial Trauma Course in May of 2023 and will be offering the course at all regional hospitals across the province by the Fall of 2023. A second tour of the province is planned for Spring 2024 with a greater focus on rural sites and community hospitals.

CRITICAL CARE PARAMEDIC PROGRAM

Trauma Nova Scotia was part of a collaborative effort by the Nova Scotia Health Learning Institute for Health Care Providers, the QEII Health Science’s Centre Simulation program, and EHS LifeFlight to provide the Critical Care Paramedic Program to Advanced Care Paramedics in Nova Scotia. This competency-based course was launched in 2021 and trains ACPs to become proficient in providing high-quality, safe, effective, person-centred care as part of an interprofessional team in a variety of critical care environments.



Shown: Graduates of the Critical Care Paramedic Program.

EVIDENCE-BASED GUIDELINES

Working in collaboration with physicians, nurses, pharmacists, and other trauma care professionals and health system experts, Trauma Nova Scotia develops trauma care guidelines for the province which are informed by the best available evidence and tailored to our trauma system.

Over the past year, we collaborated with a team of experts and local stakeholders in performing a rapid review of the literature and revising the provincial guideline for the Massive Hemorrhage Protocol. The updated guideline was prepared as an infographic (*right*) and was distributed for display in all regional and tertiary care facilities across the province.

We have also worked with specialists from critical care and pharmacy on a guideline for deep vein thrombosis in trauma patients. Looking forward, we are starting work on a new research study that will investigate times to definitive care for traumatic brain injury patients in NS. The finding of this study will be used to update the provincial head injury guidelines.



PEDIATRIC TRAUMA EDUCATION

IWK TRAUMA ROUNDS

Multidisciplinary Trauma Rounds continued this year, with all sessions presented virtually over Zoom. Topics included penetrating thoracic trauma and resuscitative thoracotomy in the pediatric population, pediatric spinal trauma, provider perception of TTAs on ED flow, and pediatric trauma mortality in Nova Scotia.

TRAUMA SIMULATION

There were continued challenges with the trauma simulation program this year, with several sessions being cancelled last minute due to various factors including staffing concerns and redeployment of staff. The sessions that were run successfully received very positive feedback from participants. Planning continues for pediatric trauma simulation in the upcoming year.

PEDIATRIC FELLOW TRAINING

In the past year, we have worked with our TTLs and the Program Director for the Pediatric Fellowship in Emergency Medicine Program to formalize the process of having pediatric fellows be on call for trauma. These are to be longitudinal shifts to allow for increased exposure to pediatric trauma for this group of trainees.

RURAL TRAUMA TRAINING

The Nova Scotia Health Trauma Program has recently hired an Education Director as well as a Coordinator for the Education Program. We are actively working with the team at Trauma Nova Scotia to include further pediatric trauma training and refreshers for physicians and nurses outside of the Central Zone.

TRAUMA NOVA SCOTIA WEBINARS 2022/23

Inter-professional clinical trauma webinars are supported monthly. The virtual platform allows us to reach staff throughout the Maritimes and provide an interactive experience for those attending. Webinar attendance has grown significantly over the last year and includes a variety of disciplines. It was also made a priority to seek out presenters reflective of interprofessional attendance. Our trauma webinars continue to be approved as Continuing Medical Education (CME) through the Dalhousie University CME office.

Trauma webinars over the past year included the following:

Trauma and Rehabilitation: Mobilizing Ideas for Collaboration to Improve Patient Outcomes

Presenters: Dr. Suzanne Salsman and Dr. Monique MacFarlane Conrad

Under Pressure - Blood Pressure Targets in Trauma Resuscitation

Presenter: Dr. James Gould

STRIVE (Simulated Training for Readiness in Various Environments): Shifting from Surviving to Thriving in Chaos

Presenter: Dr. Stephanie Smith

EHS LifeFlight: Planes, Trucks, and Choppers - Moving Critically Ill and Injured Trauma Patients

Presenter: Steve Crocker, CCP

Cranial Trauma in the Golden Hour

Presenter: Dr. Sean Christie

Initial Management of the Burn Patient

Presenter: Dr. Jack Rasmussen

Information on upcoming webinars and access to previously recorded webinars is available on the [NSH Trauma Program](#) website.



TNS RESEARCH

RESEARCH UPDATE

Over the past year, we investigated burn trauma, pediatric trauma, traumatic cardiac arrest, rural trauma, all-terrain vehicle traumas, and the effect to TTL specialty on mortality in TTA patients. These projects were conducted in collaboration with medical students, residents, fellows, physicians and other researchers locally and nationally. In addition, we performed several rapid reviews to inform clinical trauma practice at the QEII HSC. This year, we welcomed Izabella Opra as a new Research Associate with Trauma Nova Scotia, and we are grateful to Implementation Science at NS Health for supporting the creation of this new position.

TC SERVICE EVALUATION

One of our research priorities this year was to evaluate the TC Service at the QEII and determine the impact of this new service on trauma patient outcomes, key performance indicators (KPIs), and healthcare costs. This evaluation is underway and has received \$29,949.95 in funding from a Transforming Research into Care (TRIC) Level 2 QEII Foundation Award. Furthermore, we are assessing satisfaction with the TC Service and the new Virtual Follow Up Clinic among trauma care providers and major trauma patients. Additionally, we are conducting a longitudinal survey of burnout among TTLs and members of the TC Service to determine whether self-reported burnout levels are decreasing over time following TC Service implementation.

BARHO BURNS RESEARCH PROGRAM

The Barho Burns Research Program was named in honor of a family of Syrian refugees who were struck with tragedy when a fire swept through their Spryfield home, killing seven children. Ebraheim and Kawthar Barho escaped the blaze and were treated for severe burns at the QEII HSC. As part of this research program, we surveyed the use of extracorporeal membrane oxygenation (ECMO) to treat severely burned patients at burn centers across North America. The study was recently published in the *Journal of Burn Care & Research*. Another study was performed to examine the effect of combined burns and trauma on prehospital and in-hospital mortality in Nova Scotia; this study is currently under peer-review.

HEAL NOVA SCOTIA RESEARCH PROGRAM

The Heal-NS Research Program is dedicated to investigating topics related to violence, with support and partnership from Implementation Science at NS Health. As part of this program, we published 3 studies on firearm injury in collaboration with 2 medical students from Dalhousie University through the Research In Medicine (RIM) Program (Nick Bennett, Moe Karkada). Findings from these studies were presented at local and national conferences. In addition, we are collaborating with Dr. Alexa Yakubovich (Department of Community Health and Epidemiology, Dalhousie University) on a health system study of the Interprovincial Violence Against Women (IPV) Project. This project received \$99,969 in funding from the NSH Research Fund.

RESEARCH PUBLICATIONS 2022/23

Taylor J, Gezer R, Ivkov V, Erdogan M, Hejazi S, Green R, Tallon JM, Tuyp B, Thakore J, Engels PT, Ackery A, Beckett A, Vogt K, Parry N, Heyd C, Coates A, Lampron J, MacPhail I. **Do patient outcomes differ when the trauma team leader is a surgeon or non-surgeon? A multicentre cohort study.** CJEM. 2023;25:489-97.

Hurley S, Green RS. **Communicating key information in trauma: it's time to gain the advantage we need.** CJEM. 2023;25:359-60.

Wakai A, Green R, Sinert R. **A personalized medicine approach is warranted for optimal prehospital fluid resuscitation in the severely injured adult trauma patient.** CJEM. 2023;25:183-4.

Karkada M, Bennett N, Erdogan M, Kureshi N, Tansley G, Green RS. **A population-based study on the epidemiology of firearm-related injury in Nova Scotia.** Injury. 2022;53:3673-9.

Green RS, Erdogan M. **Are outcomes worse in patients who develop post-intubation hypotension?** CJEM. 2022 ;24:465-6.

Bennett N, Karkada M, Erdogan M, Green RS; Heal-NS Research Program. **The effect of legislation on firearm-related deaths in Canada: a systematic review.** CMAJ Open. 2022;10:E500-7.

Bennett N, Erdogan M, Karkada M, Kureshi N, Green RS; Heal-NS Research Program. **Mandatory gunshot wound reporting in Nova Scotia: a pre-post-evaluation of firearm-related injury rates.** CJEM. 2022;24:439-43.

Hebert S, Erdogan M, Green RS, Rasmussen J. **The use of extracorporeal membrane oxygenation in severely burned patients: a survey of North American Burn Centers.** J Burn Care Res. 2022;43:462-7.

Jessula S, Yanchar NL, Romao R, Green R, Asbridge M. **Where to start? Injury prevention priority scores for traumatic injuries in Canada.** Can J Surg. 2022;65:E326-34.

STUDIES IN PROGRESS

Nunn J, Rasmussen J, Kureshi N, Green RS, Erdogan M. The effect of combined burns and trauma on prehospital and in-hospital mortality.

Hannah M, Erdogan M, Kureshi N, Goldstein J, Jensen JL, Opra I, Green RS. A population-based analysis of prognostic factors associated with survival in adult traumatic cardiac arrest patients.

Evans A, McIver R, Erdogan M, Kureshi N, Green RS, Johnston T. A comparison of rural vs urban traumatic injury mortality in Nova Scotia.

Abraham RJ, Wilson D, Abdolell M, Green RS, Campbell S, Erdogan M, Zwicker D. Radiological findings of ATV-related injuries in Nova Scotia: a retrospective cross-sectional study.

Green RS, Thanapaalasingham K, Kureshi N, Erdogan M. Clinical evaluation of a novel proning device in COVID-19 patients with severe respiratory failure.

Green RS, Cashen D, Ferguson H, Harris A, Erdogan M. Burnout among physicians and nurses at the QEII HSC before and after implementation of a dedicated inpatient trauma consult service.

Green RS, Cashen D, Golden K, Hurley S, French D, Kurshi N, Opra I, Erdogan M. Effect of a dedicated trauma consult service at the QEII HSC: a pre-post evaluation of trauma outcomes, key performance indicators and healthcare costs.



IWK TRAUMA RESEARCH

IWK TRAUMA RESEARCH

Dr. Jason Emsley is the Director of the Research Program for the IWK Emergency Department. Below is a summary of pediatric trauma research that Dr. Emsley and colleagues (students, residents, fellows, nurses, and Trauma Nova Scotia) have been involved with this year.

PUBLICATIONS

Bartlett EM, Emsley JG, Kiberd MB. [Pediatric vascular access in major bleeding: how much is enough?](#) CJEM 2022;24:793-4.

ABSTRACTS PRESENTED

Sadoway AJ, Kinden R, Johnson M, Kureshi N, Erdogan M, Green R, Emsley JG. Epidemiology and predictors of mortality among major pediatric trauma patients in Nova Scotia: a 17-year retrospective analysis. Trauma Association of Canada Annual Meeting, Edmonton AB, April 20-21 2023.

Kinden R, Sadoway AJ, Johnson M, Kureshi N, Erdogan M, Green R, Emsley JG. Prehospital mortality among pediatric trauma patients in Nova Scotia: a 17-year retrospective analysis. Trauma Association of Canada Annual Meeting, Edmonton AB, April 20-21 2023.

Jones CMA, May R, Doyle M, Taylor B, Young M, Emsley JG. Provider perception of trauma team activations on pediatric emergency department flow. Dalhousie Department of Emergency Medicine East Coast Spring Research Series, Halifax NS, June 2022. (Winner of Best Trainee Abstract Presentation).

Ali J, O’Leary M, Sameoto C, Emsley JG. An epidemiological survey of infant trauma in Canada. Dalhousie Department of Emergency Medicine East Coast Spring Research Series, Halifax NS, May 2022.

MANUSCRIPTS IN PROGRESS OR UNDER REVIEW

Kinden R, Sadoway AJ, Kinden R, Johnson M, Kureshi N, Erdogan M, Green R, Emsley JG. Prehospital mortality among pediatric trauma patients in Nova Scotia: a 17-year retrospective analysis.

O’Leary M, Fitzpatrick E, Sameoto C, Emsley JG. Epidemiology of submersion injuries in Canadian children and adolescents: 1990-2018.

Jones CMA, May R, Doyle M, Taylor B, Young M, Emsley JG. Provider perception of trauma team activations on pediatric emergency department flow.

Sadoway AJ, Kinden R, Johnson M, Kureshi N, Erdogan M, Green R, Emsley JG. Epidemiology and predictors of mortality among major pediatric trauma patients in Nova Scotia: a 17-year retrospective analysis.

May R, Young M, Taylor B, Emsley JG. Effect of trauma team activations on pediatric emergency department flow.

LEADERSHIP & QUALITY ASSURANCE

NS TRAUMA ADVISORY COUNCIL

The Nova Scotia Trauma Advisory Committee (NSTAC) has been established with the approval of the Vice President of Medicine, Nova Scotia Health & Vice President of Operations, Central Zone. The NSTAC is responsible for providing oversight in developing, implementing, and monitoring trauma activities in Nova Scotia in collaboration with other Maritime trauma programs. In addition, the NSTAC offers a forum for programmatic and agency leaders to review, discuss, and improve care at the provincial level for major trauma patients. Our meetings include representation from all zones and services involved in the provision of trauma care. Through NSTAC, we welcomed our first Patient/Family Advisor to our program, Bob Murray. Bob’s son Mitchell acquired a traumatic brain injury in 2020. Bob has considerable experience as the family member of a patient in our trauma system and we look forward to learning from his experiences. Bob will join NSTAC for two years and provide this important perspective to our work

QUALITY ASSURANCE

Trauma Nova Scotia routinely conducts quality assurance checks on the data collected in the NSTR. This year, we started making site visits to each of the 22 community and 8 regional hospitals across Nova Scotia to better understand trauma resource allocation and how we can continue to support these sites to improve their trauma care. We have also been working hard to create the Trauma Nova Scotia Quality Improvement & Safety (QIS) Council. The QIS Council will be co-chaired by Dr. Sean Hurley and Dan Cashen, and includes interdisciplinary membership from NS Health and the public. This council will ensure leadership oversight of quality improvement and safety activities to maintain and improve quality or standards of health service within the Trauma Nova Scotia quality improvement program. Additionally, the QIS Council will identify recommended areas of priority to program operational leadership and program QIS teams, hold the program accountable to achieve performance metrics for identified priorities, and facilitate achievement of people-centred, high-quality, safe and sustainable health and wellness for Nova Scotians. Following launch of the TC Service in 2022, we began administering a quality survey of care providers and trauma patients to determine satisfaction with the care provided by the TC Service. Between October 2022 and April 2023, 261 individuals completed the survey, predominantly nurses, trauma patients, and physicians; the response thus far has been very positive.

| Respondents, n (%) | n = 261 | Quality of Care | Timeliness | Communication | Helpfulness | Positive Interactions |
|----------------------|------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| Nursing | 126 (48.1) | ★★★★★ 4.73 out of 5 | ★★★★★ 4.65 out of 5 | ★★★★★ 4.70 out of 5 | ★★★★★ 4.73 out of 5 | ★★★★★ 4.81 out of 5 |
| Trauma Patient | 52 (19.8) | 5 star ██████████ 85% | 5 star ██████████ 81% | 5 star ██████████ 83% | 5 star ██████████ 85% | 5 star ██████████ 89% |
| Physician | 25 (9.5) | 4 star ██████████ 10% | 4 star ██████████ 9% | 4 star ██████████ 9% | 4 star ██████████ 10% | 4 star ██████████ 7% |
| Allied Health | 17 (6.5) | 3 star ██████████ 3% | 3 star ██████████ 6% | 3 star ██████████ 4% | 3 star ██████████ 2% | 3 star ██████████ 1% |
| Patient Family/Proxy | 14 (5.4) | 2 star ██████████ 0% | 2 star ██████████ 1% | 2 star ██████████ 1% | 2 star ██████████ 0% | 2 star ██████████ 1% |
| Paramedic | 8 (3.1) | 1 star ██████████ 2% | 1 star ██████████ 2% | 1 star ██████████ 3% | 1 star ██████████ 3% | 1 star ██████████ 2% |
| Administration | 7 (2.7) | | | | | |
| Support Services | 7 (2.7) | | | | | |
| Other | 5 (1.9) | | | | | |

Shown: Results of the TC Service Quality Survey from Oct 2022 to April 2023.

AWARDS & RECOGNITIONS

CHARLES BURNS TAC BOARD RECOGNITION AWARD

On April 21, on the occasion of its 40th annual scientific meeting and conference held in Edmonton, the Trauma Association of Canada (TAC) honoured one of our own, Dr. Robert Green, with the 2023 Charles Burns TAC Board Recognition Award. The award is presented to a physician or other health professional who demonstrates “outstanding leadership, endless passion, a spirit of volunteerism and who is considered a visionary and innovator in the field of trauma care by their colleagues”. Next year’s annual TAC scientific meeting and conference will be held in Halifax and Dr. Green, as both the 2023 recipient of the Charles Burns TAC Board Recognition Award and the chair of TAC’s newly formed national TTL committee, will present the award to another deserving healthcare professional.



MAKING WAVES AWARD OF DISTINCTION

Bree Gillis is the 2022 recipient of the Making Waves Award of Distinction for her work as Clinical Leader and Registered Nurse in the Halifax Infirmary ED. The Making Waves Award of Distinction recognizes an exceptional NS Health team member in their consistent and focused delivery of outstanding service to patients, families and their colleagues.



QEII PLATINUM JUBILEE MEDAL

Dr. Robert Green was awarded the Queen Elizabeth II Platinum Jubilee Medal in 2023. The medal honors residents of Nova Scotia who have devoted themselves to the service of others and made significant contributions or achievements. Congratulations to Dr. Green on receiving this well-deserved honor!



2023 EAST COAST RESEARCH DAY

Two Trauma NS research projects were winners at East Coast Research Day this year. Dr. James Nunn (left) was the recipient of the Doug Sinclair Resident Research Award for his presentation "Epidemiology and predictors of mortality in burn-related major trauma: an 18-year retrospective cohort study". Dr. Allyson Evans won the Eleanor Fitzpatrick Award for her presentation of "A comparison of rural versus urban traumatic injury mortality in Nova Scotia, 2011-2020".



TRAUMA CARE DISTINCTION AWARDS

This year, Trauma Nova Scotia introduced the TNS Trauma Care Distinction Awards. These awards are given to healthcare professionals and members of the Nova Scotian community who demonstrate exceptional dedication in helping to provide vital care to severely injured trauma patients. To date, we have recognized the efforts of 6 Resuscitation Champions, 4 Mobilization Champions, 1 Teamwork Champion, and 5 Community Trauma Heroes with Trauma Care Distinction Awards.

RESUSCITATION CHAMPIONS

Presented to healthcare providers who help with difficult resuscitations or handling multiple trauma resuscitations simultaneously in a calm, professional manner

RECIPIENTS

Beth Bourque, Shashwat Desai, Ryan Fitzpatrick, Patricia Marks, James Nunn, Adam Southcott



MOBILIZATION CHAMPIONS

Presented to healthcare providers who go above and beyond to help with difficult-to-mobilize trauma patients

RECIPIENTS

Glen Dani, Morgan Hawkes, Erin Piercy, Brigid Werle

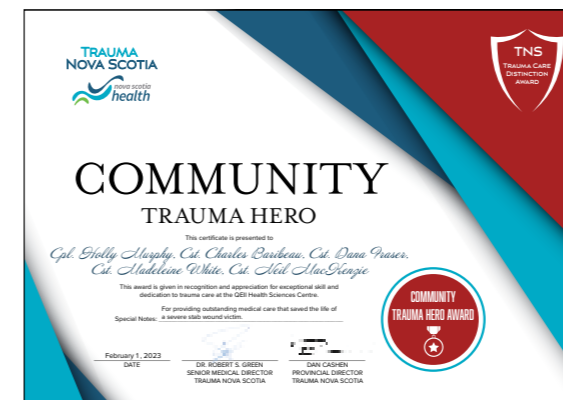


COMMUNITY TRAUMA HEROES

Presented to individuals from the community who provide exceptional, life-saving, medical care while waiting for paramedics to arrive on scene

RECIPIENTS

Cst. Charles Baribeau, Cst. Dana Fraser, Cst. Neil MacKenzie, Cpl. Holly Murphy, Cst. Madeleine White



TEAMWORK CHAMPIONS

Presented to healthcare providers that effectively liaise with the Trauma Consult Service to provide excellent care to trauma patients

RECIPIENT

Jess Ells



OUR PEOPLE

We are grateful to all those involved in the care of major trauma patients in Nova Scotia, from the paramedics and first responders at the scene, to the professionals at EHS and NS Health who manage and coordinate the appropriate level of trauma response, to the numerous professionals who contribute to trauma care in the ED and following hospital admission.

This year, we welcomed several new Trauma Nova Scotia staff members including Dr. Jason Emsley, Dr. Adam Harris, Dr. Sean Hurley, Bree Gillis, Erica Spinney, Chantel King, Izabella Opra, Emily Tucker, and Bob Murray.

TRAUMA NOVA SCOTIA STAFF

| | | | |
|--|---|---|--|
| Dr. Robert S. Green <i>Senior Medical Director</i> | Dr. Sean Hurley <i>Quality Medical Lead</i> | Melanie Doyle <i>IWK Trauma Coordinator</i> | Abbey Sarty <i>Trauma Registry Informatics Specialist</i> |
| Dan Cashen <i>Director</i> | Krista Golden <i>Manager (Outgoing)</i> | Erica Spinney <i>Administrative Assistant</i> | Chantel King <i>Trauma Registry Informatics Specialist</i> |
| Dr. Jason Emsley <i>IWK Medical Director</i> | Breanne Gillis <i>Manager (Incoming) Education Coordinator (Outgoing)</i> | Karen Ssebazza <i>Trauma Registry Coordinator (Outgoing)</i> | Izabella Opra <i>Research Associate</i> |
| Dr. Adam Harris <i>Medical Director - Provincial Education</i> | Mete Erdogan <i>Research & Statistics Officer</i> | Joshua LeBlanc <i>Trauma Registry Informatics Specialist (Outgoing)</i> | Bob Murray <i>Patient/Family Advisor</i> |

QEII TRAUMA CONSULT SERVICE

| | | | | |
|---|--|---|--|--|
| Dr. Daniel French <i>TC Service Physician</i> | Dr. Adam Harris <i>TC Service Physician</i> | Dr. Nick Sowers <i>TC Service Physician</i> | Kathleen Porta <i>TC Service Nurse</i> | Emily Tucker <i>TC Service Clerk</i> |
| Dr. James Gould <i>TC Service Physician</i> | Dr. Sean Hurley <i>TC Service Physician</i> | Bradly Dreimanis <i>TC Service Nurse</i> | Justin Sellers <i>TC Service Nurse</i> | |
| Dr. Robert Green <i>TC Service Physician</i> | Dr. Graeme McBride <i>TC Service Physician</i> | Ryan Mitchell <i>TC Service Nurse</i> | Sarah Sturge <i>TC Service Nurse</i> | |

IWK TRAUMA TEAM LEADERS

| | | | |
|---|--|--|---|
| Dr. John Armstrong <i>Pediatric Emergency Medicine, Trauma</i> | Dr. Ron El-Hawary <i>Pediatric Orthopaedics, Trauma</i> | Dr. Katrina Hurley <i>Pediatric Emergency Medicine, Trauma</i> | Dr. Jessica Mills <i>Pediatric General & Thoracic Surgery, Trauma</i> |
| Dr. Chris Blackmore <i>Pediatric General Surgery, Trauma</i> | Dr. Jason Emsley <i>Pediatric Emergency Medicine, Trauma</i> | Dr. Ursula Laskowski <i>Pediatric Emergency Medicine, Trauma</i> | Dr. Rodrigo Romao <i>Pediatric General & Thoracic Surgery, Trauma</i> |
| Dr. Dafydd Davies <i>Pediatric General & Thoracic Surgery, Trauma</i> | Dr. Luke Gauthier <i>Pediatric Orthopaedics, Trauma</i> | Dr. Chris McCrossin <i>Pediatric Emergency Medicine, Trauma</i> | Dr. Kristen Weerdenburg <i>Pediatric Emergency Medicine, Trauma</i> |

QEII TRAUMA TEAM LEADERS

| | | | |
|---|---|---|--|
| Dr. Mike Biddulph <i>Orthopaedic Surgery, Trauma</i> | Dr. James Gould <i>Emergency Medicine, Trauma</i> | Dr. Sean Hurley <i>Emergency Medicine, Trauma</i> | Dr. Matt Smith <i>Vascular Surgery, Trauma</i> |
| Dr. Dafydd Davies <i>Pediatric General & Thoracic Surgery, Trauma</i> | Dr. Robert Green <i>Critical Care, Trauma</i> | Dr. George Kovacs <i>Emergency Medicine, Trauma</i> | Dr. Nick Sowers <i>Emergency Medicine, Trauma</i> |
| Dr. Danny French <i>Thoracic Surgery, Trauma</i> | Dr. Adam Harris <i>Emergency Medicine, Trauma</i> | Dr. Graeme McBride <i>Anesthesia, Trauma</i> | Dr. Laura Wade <i>Emergency Medicine, Trauma</i> |
| | Dr. Ryan Henneberry <i>Emergency Medicine, Trauma</i> | Dr. Sam Minor <i>General Surgery, Trauma</i> | Dr. Mary-Lynn Watson <i>Emergency Medicine, Trauma</i> |

RESIDENT TRAUMA TEAM LEADERS

| | | | |
|--|---|---|--|
| Dr. Abdulrahman Alabduljabbar <i>General Surgery, Trauma</i> | Dr. Kyle Eastwood <i>Emergency Medicine, Trauma</i> | Dr. Matthew Mackin <i>Anesthesia, Trauma</i> | Dr. Robert Raskin <i>General Surgery, Trauma</i> |
| Dr. Sultan Almuallem <i>General Surgery, Trauma</i> | Dr. Eric Hempel <i>General Surgery, Trauma</i> | Dr. Patricia Marks <i>Emergency Medicine, Trauma</i> | Dr. Alysha Roberts <i>Emergency Medicine, Trauma</i> |
| Dr. Lujain Attar <i>General Surgery, Trauma</i> | Dr. Simon Huang <i>Emergency Medicine, Trauma</i> | Dr. Ashley Martin <i>Pediatric Emergency Medicine, Trauma</i> | Dr. Ashley Robinson <i>General Surgery, Trauma</i> |
| Dr. Olga Bednarek <i>General Surgery, Trauma</i> | Dr. Dave Hung <i>Emergency Medicine, Trauma</i> | Dr. Heather McFadgen <i>General Surgery, Trauma</i> | Dr. Elisabeth Savonitto <i>General Surgery, Trauma</i> |
| Dr. Victoria Bentley <i>General Surgery, Trauma</i> | Dr. Allison Keeping <i>General Surgery, Trauma</i> | Dr. Kit Moran <i>Orthopaedic Surgery, Trauma</i> | Dr. Manal Sheikh <i>Emergency Medicine, Trauma</i> |
| Dr. Jill Carter <i>Emergency Medicine, Trauma</i> | Dr. Renee Kinden <i>Emergency Medicine, Trauma</i> | Dr. James Nunn <i>Emergency Medicine, Trauma</i> | Dr. Victoria Smith <i>General Surgery, Trauma</i> |
| Dr. Shashwat Desai <i>Emergency Medicine, Trauma</i> | Dr. Victoria Long <i>General Surgery, Trauma</i> | Dr. Pooja Patel <i>General Surgery, Trauma</i> | Dr. Adam Southcott <i>General Surgery, Trauma</i> |
| | Dr. Kendra MacCuspich <i>Emergency Medicine, Trauma</i> | | Dr. Jillian Tweedy <i>General Surgery, Trauma</i> |

SPECIAL THANKS TO OUTGOING TRAUMA TEAM LEADERS

| | | | |
|--|---|--|--|
| Dr. Sam Campbell <i>Emergency Medicine, Trauma</i> | Dr. Chad Coles <i>Orthopaedic Surgery, Trauma</i> | Dr. Kirk Magee <i>Emergency Medicine, Trauma</i> | Dr. David Petrie <i>Emergency Medicine, Trauma</i> |
| Dr. Sean Christie <i>Neurosurgery, Trauma</i> | Dr. Janet MacIntyre <i>Emergency Medicine, Trauma</i> | | |

SPECIAL THANKS TO OUTGOING TRAUMA NOVA SCOTIA

This past year, we said goodbye to several valued members of our Trauma Nova Scotia team. Our Education Coordinator, Andrea Bond, accepted a new role as the Health Services Manager, Respiratory Therapy. Andrea positively impacted trauma education delivery to QEII ED staff, residents and physicians through simulation-based education and by organizing several successful ATLS courses. Our Administrative Assistant, Louise Gorman, was with us for nearly 2 years and was a tremendous asset to our team with her warm presence and hard work. We said goodbye to 2 members of our registry team who will be greatly missed. Karen Ssebazza (NSTR Coordinator) has been with the trauma program since 2019, and truly excelled in her role as the NSTR Coordinator. Joshua LeBlanc (Trauma Registry Informatics Specialist) also joined the trauma program in 2019 and was instrumental in collecting and entering data on major trauma patients into the NSTR. Finally, we said goodbye to our Manager Krista Golden who accepted a new role as Manager of the QEII ED. We are grateful for Krista's dedication and hard work over the past 2 years.

FUTURE DIRECTIONS

MESSAGE FROM THE DIRECTOR - MOVING FORWARD

Our program could not be more proud of what we have accomplished this year. Looking ahead, Trauma Nova Scotia is poised to make significant advancements and broaden its impact in the coming year. Our primary focus will be on further enhancing trauma patient care in all hospitals in the province, embracing collaboration and partnerships provincially and nationally, and leveraging technology to drive innovation.

In terms of patient care, we will prioritize improving outcomes and the overall experience for trauma patients. By investing time and resources into wide-reaching trauma education initiatives, we will ensure accurate diagnoses, optimized treatment plans, and seamless coordination among healthcare providers. Additionally, we are actively exploring ways to integrate mental health support into our program, aiming for a holistic approach to trauma care.


Collaboration and partnerships will play a pivotal role in our future direction. We will forge alliances with healthcare institutions, academic centers, and community organizations to foster knowledge exchange, advance research, and advocate for trauma prevention and intervention. By pooling resources and expertise, we can tackle the complex challenges associated with trauma more effectively, ultimately enhancing the quality of care we deliver.

We are committed to leveraging technology to transform trauma services. Our focus will be upgrading our Trauma Registry platform to increase efficiency and improve the reports we are able to provide to researchers and senior leaders. Additionally, we will improve our data analytics and build dashboards for senior leaders to gain valuable insights into trauma patient outcomes and develop evidence-based strategies for continuous improvement.

With a clear vision and unwavering dedication, our trauma program is excited to embrace the future and contribute to the advancement of trauma care. By prioritizing patient well-being, fostering collaborations, developing evidence-based guidelines, and harnessing the power of technology, we are confident that our program will continue to make a lasting impact in the lives of those affected by trauma.

Sincerely,

Dan Cashen
Director, Trauma Nova Scotia



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05 Apr 23 15:25

TRAUMA TEAM ACTIVATION

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