SPRING 2014

TRAUMA NEWSLETTER

Tulips at Parliament Hill
Photo courtesy of Ottawa Tourism

INSIDE THIS ISSUE:

REGIONAL TRAUMA NETWORK

The first meeting of the Regional Trauma Network (RTN) Committee was held on April 30 at The Ottawa Hospital. Thirty-five health providers from across the Champlain LHIN attended the inaugural meeting. Participants included representation from most of the community hospitals as well as EMS, Criticall, Ornge, and the Champlain LHIN. The meeting was presented by The Ottawa Hospital as Lead Trauma Hospital, in collaboration with the Critical Care Services of Ontario (CCSO).

The goal of the RTN is to support an effective, sustainable, and inclusive Ontario-wide regional trauma system (RTS) of care. This endeavour provides an opportunity for all stakeholders in the region to discuss system enhancements to improve trauma care. All community hospitals were invited to participate for the first meeting and core representation based on 4 different zones in the LHIN was discussed. Four representatives (two clinical and two administrative) from community hospitals will be part of the core membership for the RTN.

Excellent discussions were held regarding the need for additional trauma education, causes of delays in transfers from community hospitals to the lead trauma hospital (LTH) and other regional challenges.
Specific objectives were identified, including:

1. Optimizing care across the trauma continuum of care, including pre-hospital, acute health and rehabilitation services.
2. Providing an opportunity for the LTH and the referring hospitals to interact on a regular basis to identify issues and discuss potential solutions.
3. Enhancing communication, trauma education and sharing of protocols and guidelines
4. Strengthening the coordination of care in a patient's journey, including patient acceptance, transfer, repatriation and addressing bed capacity issues across the region.
5. Ensuring accountability of Lead Trauma Hospitals to regional centres in establishing and sharing benchmark data.

The RTN will meet on a quarterly basis and will facilitate communication about struggles and solutions for trauma care in the Champlain LHIN.

Article written by
Alanna Keenan
Trauma APN
Trauma Services, TOH

CHEO TRAUMA PROGRAM UPDATE

CHEO's Trauma team would like to welcome Dr.Ahmed Nasr MD,MSc,FRCSC , Assistant Professor , Department of Pediatric Surgery University of Ottawa as our new Medical Director of Pediatric Trauma. We would also like to welcome Dr. Rick Gerein, MD,FRCPC Pediatric Emergentologist at CHEO as our new Medical Director of Simulation in the Division of Pediatric Emergency Medicine.

The Trauma team would like to thank our LHIN ED partners who invited us to be part of your educational plans this past year. Please let us know if you would like the Outreach team to help with the educational needs of your hospital by contacting Louise Lafleur at 613-737-7600-2285 to book your team's date.

As part of our ongoing Lean work we have looked at introducing several new initiatives in trauma care this year. Earlier in the fall CHEO's ED Team started having monthly mock codes with a multidisciplinary team. This has helped to increase our team's communication, efficiency and environmental/ situational awareness. Later this year we plan on introducing to our trauma bays mandatory sign in and name tags if involved with direct patient care. As well, to help further hospital wide teaching regarding traumas and trauma codes, the CHEO Trauma Program will be conducting insitu mock trauma codes four times a year for the multidisciplinary CHEO team.

Article written by:
Kerri-Lynn Whyte
Trauma Coordinator
Trauma Program, CHEO

ACUTE SPINAL INJURIES DO NOT HAVE TO TAKE THEIR BREATH AWAY!

An acute spinal injury, depending upon the level and completeness of the injury, may also affect the respiratory function and result in acute respiratory insufficiency. Respiratory insufficiency is due to complete or partial paralysis of the respiratory muscles. The injury may result in alterations in the mechanical properties of the lung and chest wall and reduced compliance. This has a direct effect on the efficiency of breathing and an acute decrease in lung volumes. The decreased ability to sigh, weak cough and (neurogenically mediated) the development of mucus hypersecretion resulting in-effective secretion clearance. As a result, the complicating factor of mucus retention leads to atelectasis, pneumonia and respiratory failure.

In an acute spinal injury, the earlier lung recruitment maneuvers are initiated, the more effective are the efforts to prevent the complicating respiratory factors of the injury. These therapeutic interventions are easily implemented and require minimal equipment:

- Cough assist (a.k.a. Insufflation & exsufflation) uses a mechanical device to provide a positive pressure breath and a negative pressure breath to mechanically simulate a cough. The pressures utilized can vary from +/-25 to 40 cmH2O. The timing of the inspiratory and expiratory breathes can be customised to the patients needs and tolerance. (see www.irrd.ca àon-line education àrespiratory protocols for sci and neuromuscular diseasesàinterventions, cough assist)
- Lung volume Recruitment using a self inflating resuscitator bag equipped with a one-way valve that allows for progressive stacking of breathes. The release of the breath creates a rapid depressurizing effect and creates an effective cough.

On the order of a physician, both of these therapeutic interventions assist with recreating an effective cough, recruiting lung volumes and facilitate secretion clearance. Regular utilization of these interventions can greatly reduce the need for invasive suctioning and may prevent the need for intubation, tracheostomy and mechanical ventilation.

Regular measurement of peak cough flow rates, lung volumes, maximal inspiratory and expiratory pressures allows monitoring of the effectiveness of these interventions.

Article written by:
Dave Swift, RRT
Charge Therapist
The Ottawa Hospital

INJURY PREVENTION: SWIMMING SAFETY

Spring has sprung!

Almost half of all drowning and near drowning in children under the age of 14 happen in swimming pools. Young children are very attracted to water. Most child drowning happen when a child is walking or playing near the water.

We at CHEO recommend "4 sided pool fencing".

This can:

- Stop children in your house from getting to the pool.
- Protect children outside your home
- Prevent 7 out of 10 drowning of children under 5.

Visit the following link for more information http://www.cheo.on.ca/en/fence-pool

Lifejacket information can be received from the Canadian Red Cross. http://www.redcross.ca/article.asp?id=015198&tid=024

Things you must do:

- Stay within sight and arms reach of children when in and around water.
- Learn how to swim.
- Learn C.P.R.
- Ensure that children and less experienced swimmers wear lifejackets around water.

Article written by:
Kerri-Lynn Whyte
Trauma Coordinator
Trauma Program, CHEO

INJURY PREVENTION: DISTRACTION

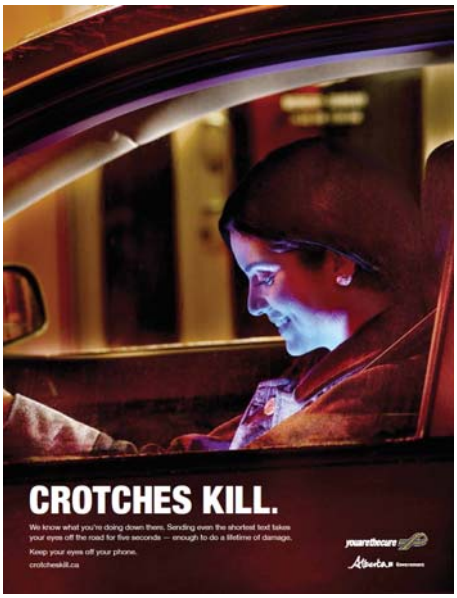
"Drinking and driving fatalities represent close to one quarter of all fatalities annually. According to current collision trends, fatalities from distracted driving are forecasted to exceed those from drinking and driving by 2016." Ministry of transportation, March 17, 2014.

We need to be a part of the campaign to change this behaviour. Teens are telling us that drinking and driving and texting and driving are still the two top behaviours that are not changing among their peers. One student was quoted as saying" if they are not texting and driving either they don't have their drivers licence or they don't have a phone".

When it comes to being distracted while driving we know it's not just kids who are, adults are as well. As adults we need to be the example by changing our behaviour first and finding teachable moments to tell our young people about the importance of not driving distracted before they become one of our patients.

This is a poster produced by Alberta Health care. I think it sends the message don't you?

Article written by: Barbara Mews
Injury Prevention and P.A.R.T.Y. Coordinator
Trauma Services, TOH



A Comparative Study of Cycling Injuries
April 1999-March 2004 vs April 2008-March 2013

Heather Knight HRA, Alanna Keenan APN

Background

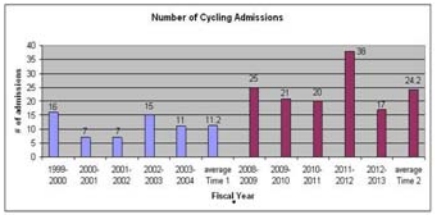
Cycling has increasingly become a popular mode of transportation in the City of Ottawa. The Coalition for Safe Cycling Ottawa reports a 40% increase in the number of cyclists since 2005 in their 2012 annual report. Since 2011, close to 900,000 cyclists have used the Laurier Avenue dedicated bike lane, situated near the UOttawa.

Methodology

A retrospective review and comparison of trauma registry data for The Ottawa Hospital was performed over 2 time periods. Data from April 1999 to March 2004 (Time 1) was compared with data from April 2008 to March 2013 (Time 2). Data elements included age, helmet use, alcohol level, Injury Severity Score (ISS), length of stay and mortality. Patients with an ISS > 12 or greater, Trauma Codes and/or died in Emergency were included.

Number of Cycling Admissions

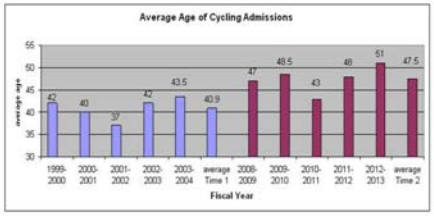
The number of patients presenting to TOH with major cycling injuries has more than doubled over the two time periods (T1=11.2 vs T2=24.2). Patients transferred from outside the city remained stable at 25%. The average length of stay remained constant at 10.2 days which is considerably less than the average LOS for all trauma patients at 17.6 days (T1) and 15.2 days (T2).



Average Age

The average age of cycling admissions has increased consistently since 1999. The average age was 40.9 yrs for Time 1 and 47.5 yrs for Time 2.

Average Age



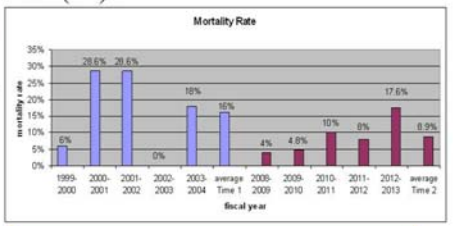
Alcohol and Helmet Use

Helmet use is difficult to determine as it is not routinely documented. The statistics available show a small increase in helmet use from 30% to 34.8%. This is consistent with Statistics Canada's 2009 report on helmet use which reported a rate of 34.3% for Ontario.

Documented alcohol use shows a significant decrease to 7.4% (T1) from 16% (T2). This decrease suggests that more citizens are cycling for health, environmental, lifestyle and economic reasons.

Mortality and ISS

The ISS has remained constant at 22 over the two time periods, however mortality rates have decreased to 8.9% (T2) from 16% (T1).



Conclusion

The number of major cycling injuries has more than doubled in the last 5 years compared to the 5 year period from 1999-2004. ISS and LOS have remained stable despite an age increase of 6.5 years. The average age of the cycling admissions is significantly younger than the average age of all trauma patients at 40.9 yrs vs 50 yrs (T1) and 47.5 yrs vs 55.8 yrs (T2). The decrease in mortality may be due to increase in helmet use and better overall health of cyclists.

Printed by: TOH Printing Services

EDUCATIONAL OPPORTUNITIES - IN ALPHABETICAL ORDER

2014 Schedule

ATLS Provider (TOH)	TBD	Contact course coordinator for availability, see below
ATLS re-cert (TOH)	TBD	Contact course coordinator for availability, see below
TNCC (Civic)	September 19-20, 2014	Registration is open
Trauma Conference	Oct 7, 2014	See www.ottawatraumaconference.com

REGISTRATION INFORMATION - TOH AND CHEO COURSES

ATCN

Advanced Trauma Care for Nurses

The registration form will be available to download closer to the course date from the Ottawa Hospital website under the Trauma Services education tab or you can send an e-mail to cpoulin@toh.on.ca to request the form. Complete the form and send it to Cari Poulin's attention at The Ottawa Hospital - Civic Campus, ER Department, DM-139. *Spaces are limited* to 16 participants and registration is based on first come, first served basis.

ATLS

Advanced Trauma Life Support

The next course is presently *full*. Due to the popularity of this course we need to maintain a waiting list. If you wish to become part of the waiting list, please e-mail Joy Moors at jmoors@toh.on.ca and request a registration form.

If you wish to take the course earlier you can search on the following website for other Canadian sites that offer this course, http://web2.facs.org/atls/existing.htm .

CHEO COURSES

Please contact Kerri-Lynn Whyte, at 613-737-7600 ext. 2475 to register for any course organized by CHEO (unless otherwise specified on the list above).

RTTDC– RURAL TRAUMA

For any inquiries please contact the TOH Trauma Coordinator at 613-798-5555 ext. 19601.

TNCC

Trauma Nursing Core Course

The registration form can be downloaded from the Ottawa Hospital website under the Trauma Services education tab or you can send an e-mail to trauma@toh.on.ca to request the form. Complete the form and send it to The Ottawa Hospital - Civic Campus, Trauma Services, CPC-159. *Spaces are limited* to 20 participants and registration is based on first come with payment first served basis.

TRAUMA CONFERENCE

Annual Eastern Ontario Regional Trauma Conference

The on-line brochure detailing the day's activities can be found at this address: www.ottawatraumaconference.com

In our efforts to be more environmentally friendly, registrants will receive a participant package by e-mail prior to the conference day which will include the day's agenda. The participation certificates will be sent out by e-mail after the conference.

Inquiries may be sent to trauma@toh.on.ca.

Mer Bleue Bog Boardwalk
Photo courtesy of Ontario Trails Council

CALL FOR ABSTRACTS

Displayed at the Trauma Conference: October 7, 2014 in Ottawa, ON

Submission deadline: June 30th, 2014

Acceptance/rejection: July 31st, 2014

Questions and submissions: traumaontario@gmail.com

For more details: visit www.ottawatraumaconference.com

Kayaking on the Ottawa River
Photo courtesy of Ottawa Tourism

Newsletter suggestions

Please forward any topic suggestions for lectures, research questions or quality improvement initiatives.
We would be happy to hear from you!
Send your suggestions to: trauma@toh.on.ca

CONTACT US

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