



In 2011, the Ministry of Health and Long Term Care (MOHLTC) requested Critical Care Services Ontario (CCSO) to lead a planning process to develop a comprehensive neurosurgical system to meet the needs of adult and paediatric patients across Ontario. As a part of this program, the MOHLTC also committed new nursing positions, including clinical Neurosurgical Outreach Nurse and Neurosurgical Nurse Educator positions, to support the management of specialized

paediatric and adult neurosurgical patients.

The Neurosurgery Education and Outreach Network (NEON) was established in May 2013 to work in collaboration with the Provincial Neurosurgery Advisory Committee to support the educational component of recommendations to better integrate access to neurosurgical services in the province. Originally comprised of Nurse Educators and Program Directors from each of the province's adult neurosurgical centres, their work formed the foundation for an educational outreach program designed to provide a wide breadth of education to non-neurosurgical centres on neurosurgical patient's care across the continuum. The

expanded network has grown to include Clinical Nurse Specialists, Advanced Practice Nurses and Nurse Practitioners working in both adult and pediatric neurosurgery.

The OUTREACHER Newsletter will be published two to three times per year to provide regional hospitals with Neurosurgery updates and education.

**NEON**  
Working toward Provincial  
improvements in neurosurgical  
service delivery

- Improving access
- Improving quality and responsiveness
- Improving neurosurgical nursing care across the province

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## EDUCATIONAL OPPORTUNITIES IN YOUR LHIN!

### LHIN 2

- Neurobehavioral Rehabilitation in Acquired Brain Injury Conference  
Brantford General Hospital, Brantford
- Neuro Workshop March 20 and April 3<sup>rd</sup>, 2018
- Joseph Brant Hospital, Burlington. Feb 28<sup>th</sup>  
Physician Education: “Care of the Acute Neurosurgical Patient and Provincial Guidelines”.
  - St. Catharine’s General Hospital, March 1<sup>st</sup>  
“Care of the Patient with Acute Spinal Cord Injury and Provincial Guidelines”

### LHIN 3&4

- March 7 neuro education day  
St. Mary’s General Hospital
- March 14 neuro education day  
St. Mary’s General Hospital

### Hamilton Convention Center

- May 3<sup>rd</sup> and 4<sup>th</sup> Neurosurgical Outreach Educational Booth

### Second Annual Brain Simulation Day at Mohawk College

- June 26<sup>th</sup> all day event, registration limited

### **OTN Lunch and learn education webinars:**

- April 16 – Seizures – Electrical Storm in the Brain
- June 18- Orthopedic Devices and Collar Care for Patients with Spinal Cord Impairment
- September 17- TBD
- November 19- TBD

**Contact** Neurosurgery Outreach nurse – Kim Belluz regarding neurosurgery education, Monday to Friday 8-4 at belluzk@tbh.net or 807-684-6004

### LHIN 5&6

- Trillium Health Partners: Neuroscience Rounds every Friday, 8am-9am, available OTN.
- Jan 17: Oakville-Trafalgar Memorial Hospital Collar Care and Maintenance
- Jan 30 and March 28: William Osler ED  
New Hire Orientation: Neuro Assessment and Collar Care
- March 29: Oakville-Trafalgar Memorial Hospital: Neuro Assessment and case studies
- April 6 & 12: Oakville-Trafalgar Memorial Hospital: Neuro Assessment and case studies
- April 13: Oakville-Trafalgar Memorial Hospital; Cervical Collar Care and Management
- April 26 & 27: Oakville-Trafalgar Memorial Hospital: Neuro Diagnoses Review

## EDUCATIONAL OPPORTUNITIES IN YOUR LHIN!

### LHIN 10

March 22<sup>nd</sup> Quinte Healthcare Belleville General Hospital Hand-on Neurological Assessment  
April- Brockville General Hospital Case Reviews

### LHIN 11

No planned educational events

### LHIN 14

### **NEON/RCCR Spring Education Tour 2018**

#### **\*Save the Date\***

May 8 Nipigon  
May 9 Geraldton  
May 22 Manitowadge  
May 23 Marathon  
May 24 Terrace Bay  
June 6 Kenora  
June 7 Fort Frances  
June 8 Atikokan  
June 13 Red Lake  
June 14 Dryden  
June 15 Sioux Lookout

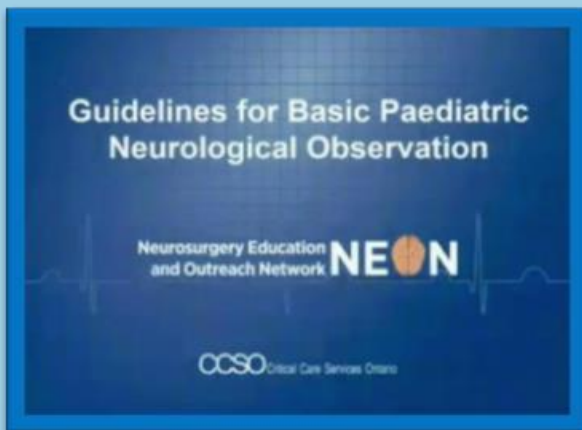
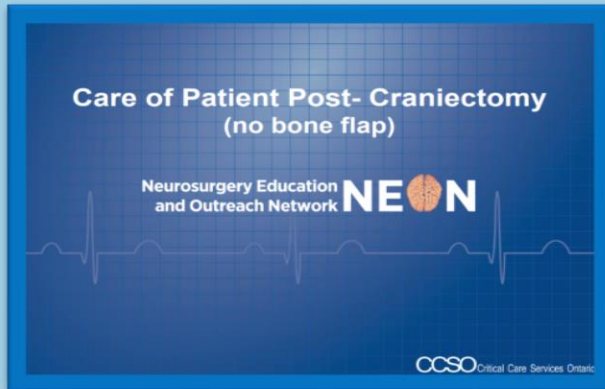
### **TNCC- Trauma Nursing Core Course:**

- Lake of the Woods District Hospital- Kenora, March 23 & 24, 2018
- Atikokan General Hospital-Atikokan, April 21 & 22, 2018
- **Contact** Chad Johnson for more information 807-684-6252 or johnsoc@tbh.net

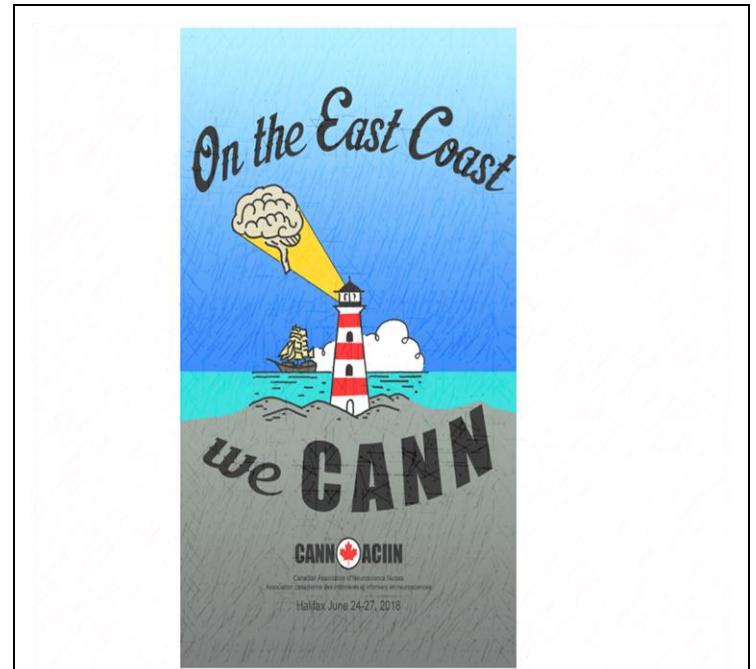
## What's New!

### Associated web links:

Webinar is now archived on the Critical Care Services Ontario (CCSO) website at <https://www.criticalcareontario.ca/EN/Toolbox/Education/Pages/default.aspx>



**Now offered through the Ontario  
Telemedicine Network Hub!**



The 49<sup>th</sup> Annual Canadian Association of Neuroscience  
Nurses Meeting and Scientific Sessions

June 24<sup>th</sup>-27<sup>th</sup>

Halifax, Nova Scotia

### Save the Dates

World Federation of Neuroscience Nursing meeting

- October 19<sup>th</sup> -Scientific presentations
- October 20<sup>th</sup>- Emergency Neurological Life Support education session and exam writing

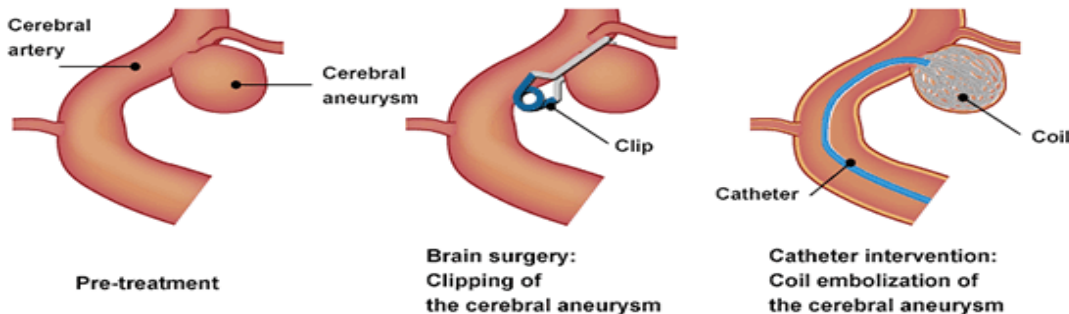
## Aneurysmal Subarachnoid Hemorrhage (SAH)

Subarachnoid hemorrhages are commonly caused by ruptured intracranial berry aneurysms and predominantly occur on the circle of Willis. The prevalence is estimated at a rate of 6-16 per 100,000/population. Risk factors include: genetic predisposition, hypertension, cigarette smoking, alcohol consumption, and estrogen deficiency- there is a female predominance for aneurysms ranging from 54-61%.

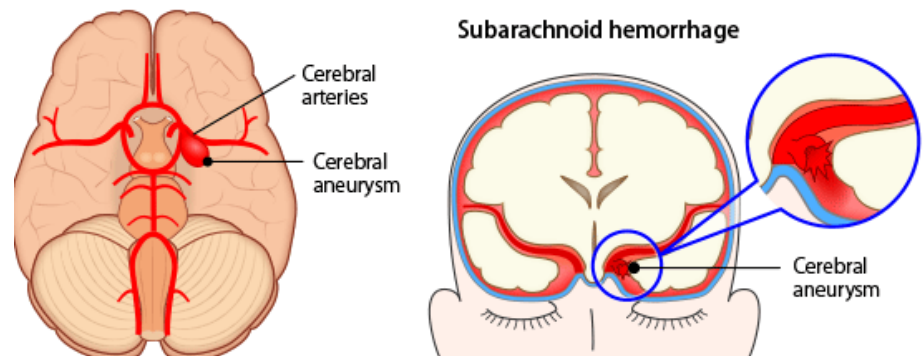
Most intracranial aneurysms present as SAH or are found either incidentally or on screening. Patients with a ruptured aneurysm present primarily as a sudden severe headache classically described as the “worst headache of my life”. The onset of headache may be associated with loss of consciousness, nausea or vomiting, pre-retinal hemorrhages, and meningismus (photophobia, neck rigidity, and often lower back pain).

The cornerstone of SAH diagnosis is the non-contrast CT scan and the sensitivity of the test is highest in the first 6-12 hours after SAH. Once a diagnosis is confirmed, the etiology of the hemorrhage must be determined with angiographic studies.

SAH is associated with a high mortality rate. Approximately 10% of people with aneurysmal SAH die prior to reaching the hospital, 25% die within 24 hours of SAH onset, and about 45% die within 30 days. Acute medical care includes constant hemodynamic and neurological monitoring and emergent referral to a neurosurgical centre.



<http://neurosurgery.med.u-tokai.ac.jp/en/patients/sah/treatment.html>



### Nursing care for a patient with aneurysmal SAH

- Vital signs with neurological checks every hour
- Ongoing oxygen saturation monitoring
- Bed rest with head of bed elevated to 30 degrees
- Controlled environment (low level of external stimulation, restricted visitation)
- Strict intake and output record
- Anti-embolism stockings and pneumatic compression boots
- Indwelling urinary catheter if patient is lethargic, incontinent, or unable to void
- Prepare to transfer to a neurosurgical centre

<http://www.thebrainandspine.com/subarachnoid-hemorrhage/>



LHIN	Organization	Neuro-Nurse Educator	Clinical Outreach Specialist
LHIN 1	Windsor Regional Hospital	Jessie MacKenzie	vacant
LHIN 2	London Health Sciences Centre	Sheila Hunt	Kimberly Salway
LHIN 3/4	Hamilton Health Sciences	Brenda Bousfield	Susan Di Sabitino Sera Nicosia Tina Petrelli (Paeds)
LHIN 5/6	Trillium Health Partners	Beverly Espedido	Beverly Espedido
LHIN 7/8/9W/12	University Health Network	Charmaine Arulvarathan	vacant
LHIN 7/8/9W/12	St. Michael's Hospital	vacant	Jennifer Vachrajani
LHIN 7/8/9W/12	Sunnybrook Health Sciences Centre	Lars Kure	Catherine Morash
LHIN 7	The Hospital for Sick Children	Elisabeth White	Elisabeth White
LHIN 9E/10	Kingston General Hospital	Marnie Cranston	Nicole Chenier-Hogan
LHIN 11	The Ottawa Hospital	Raizha Gramcko	Dianna Hughes
LHIN 13	Health Sciences North Sudbury	Lisa Weiler	Jennifer Arseneault
LHIN 14	Thunder Bay Regional Health Sciences Centre	Chad Johnson	Kim Belluz

