

# SWORBHP LINKS

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## ALS PCS 4.5

The ALS PCS Version 4.5 has been published and went into effect May 1st 2018. The Ontario Base Hospital Group Medical Advisory Committee (OBHG MAC) proposed and endorsed multiple new and revised core directives to the Emergency Health Regulatory and Accountability Branch of the MOHLTC (EHRAB): PCP Analgesia, ACP Analgesia, ACP Combative Patient and PCP/ACP Emergency Tracheostomy Tube Reinsertion. With the exception of the ACP Combative Patient Directive, these directives have been released by the EHRAB and added as auxiliary medical directives within the ALS PCS v4.5. The SWORBHP Medical Council endorses all of these medical directives and believes that these auxiliary directives allow for optimal prehospital care. As such, we have advised Services within our region to adopt these auxiliary directives.

### PCP AUXILIARY ANALGESIA MEDICAL DIRECTIVE

This directive has been introduced as auxiliary with the plan to transition to a core directive in early 2019. If your respective Service chooses to adopt this auxiliary directive, it would take the place of the current PCP core adult analgesia directive. Changes to this directive allow for more liberal indications for analgesia administration, changing the age condition to  $\leq 12$  years of age for all analgesic agents along with the appropriate dosage based on age. In addition, ischemic chest pain will be a contraindication for the administration of these medications.

### ACP AUXILIARY ANALGESIA MEDICAL DIRECTIVE

This directive has been introduced as auxiliary with the plan to transition to a core directive in early 2019. If your respective Service chooses to adopt this auxiliary directive, it would take the place of the current ACP core adult analgesia and pediatric analgesia directive. Changes to this directive allow for more liberal indications for analgesia administration, changing the age condition to  $\leq 12$  years of age for acetaminophen, ibuprofen and ketorolac agents along with the appropriate dosage based on age. There are also changes to the dosage of morphine.

In addition, Services now have the option of carrying fentanyl to treat patients with severe pain. SWORBHP Medical Council fully supports and recommends the addition of fentanyl to the ACP scope of practice to treat patients with severe pain. In this directive fentanyl can be administered in lieu of morphine and via the IV or IN route.

...continued on page 2

**ALS PCS 4.5** - cont'd from page 1

**PCP/ACP EMERGENCY TRACHEOSTOMY TUBE REINSERTION MEDICAL DIRECTIVE**

This directive has been introduced as auxiliary with the plan to transition to a core directive in early 2019. This directive builds on the Endotracheal and Tracheostomy Suctioning Medical Directive and allows for the reinsertion of tracheostomy tubes if they become dislodged.

**ACP COMBATIVE PATIENT DIRECTIVE**

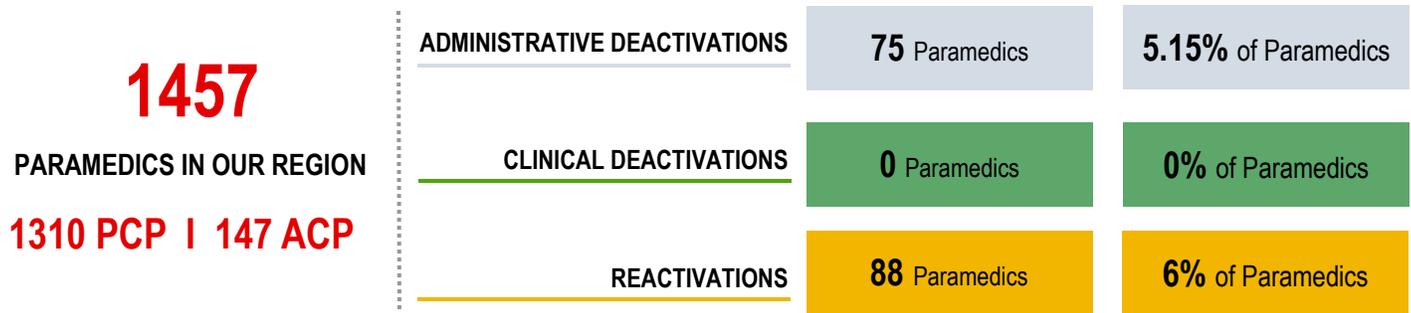
Within the core medical directive, ACP Services now have the option of carrying ketamine to treat patients with suspected excited delirium or severe violent psychosis. SWORBHP Medical Council fully supports and recommends the addition of ketamine to the ACP scope of practice to treat patients with excited delirium or severe violent psychosis. Medical Council believes that the evidence supports the use of ketamine in this patient population and can potential reduce the risk of harm to prehospital care providers due to its quick onset of action and sedation properties. There are also updates to the clinical consideration section which is applicable to both midazolam and ketamine administration.

The SWORBHP education team is working on education and training surrounding the above directives. We will be covering this during the 2018 annual CME for those Services that wish to adopt these new auxiliary medical directives. It is our belief that the utilization of these new directives and auxiliary medications will help facilitate the delivery of excellent prehospital care within our Region. Should a Service choose to adopt any of these auxiliary directives, paramedics can utilize the new directive once their Service has completed its training and the equipment/medication is available for use

Dr. Matt Davis, M.D., M.Sc., FRCPC  
Regional Medical Director

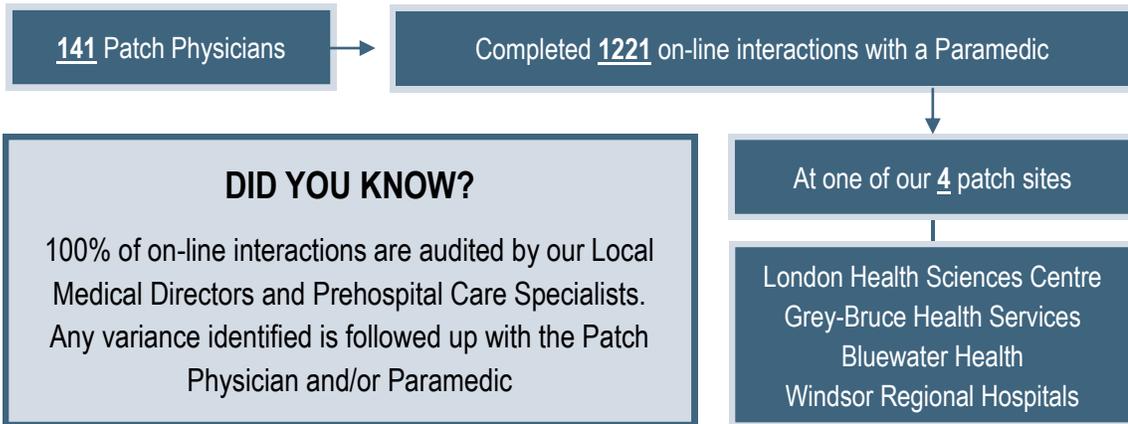
**SOUTHWEST ONTARIO REGIONAL BASE HOSPITAL PROGRAM  
FACTS  FIGURES**

APRIL 2017 - MARCH 2018 AT A GLANCE



**INITIAL CERTIFICATIONS**  
**109 PCP | 5 ACP**

**FACTS & FIGURES** cont'd from page 3



**IQEMS**

SWORBHP implemented a new electronic auditing system, The Integrated Quality Evaluation Management Suite (IQEMS) on November 1, 2017. The application was designed to identify variances through an electronic filtering system, allowing Auditors the ability to audit more systematically. All of our Interdev Services are currently on this platform with our Zoll Service coming online this year. In most years, we will see less than 10 critical (C) variances, however due to the filtering system within IQEMS, the number is quite a bit higher. This is due to the standardized filtering system used by the Base Hospitals utilizing IQEMS and we are in the process of rectifying this. Overall, the total number of calls requiring a second level audit was 1.2%.

**New Hire Audit Process**

Through our Performance Agreement with the MOHLTC, SWORBHP is obligated to audit 80% of all newly hired Paramedic calls for the first six months of certification under our Program. We have chosen to audit 100% and provide a summary of activity at the end of the six month period.

This process has been very well received by our Paramedics and Services. **110 newly hired Paramedics were audited last year** which resulted in approximately **10,000 audits performed by a Pre-hospital Care Specialist.**

97	PCP New Hire Audits
2	ACP New Hire Audits
11	PCP Upgrade to ACP Audits

**COMMUNICATION LINE**

- 248** Self Reports
- 10** Good Job acknowledgements
- 52** Service Inquiries
- 10** Other Inquiries

In addition to our mandatory CME for Emergency Childbirth last year, SWORBHP hosted several CME events including a Just Culture Workshop with Paul LeSage, 12 Lead Acquisition courses and rounds, a Neonatal Resuscitation Provider Course, IV Certification courses and several webinars and courses. We also provided refreshers for many of our Services related to the changes to the ALS PCS version 4.0.

As you can see, we have kept ourselves busy supporting you in your practice and look forward to continuing to support you in the future.

Susan Kriening, RN, BScN, MHS, ENC(C)  
Regional Program Manager

SOUTHWEST ONTARIO REGIONAL BASE HOSPITAL PROGRAM

# PARAMEDIC SERVICES WEEK 2018

PARAMEDICS: HEALTH-COMMUNITY-YOU

This year's theme, 'Health-Community-You' was spot on as Paramedics, Services, Families, Patients and Communities united in the Southwest Ontario Region to celebrate Paramedic Services Week 2018!

**Great work and thank you for all that you do!**



# S E R V I C E S T A T I O N

*Featuring:*



## BC Comes to BC

A team of Doctors, Nurses, and Paramedics made the voyage from British Columbia to Bruce County to run The CARE Course (Comprehensive Approaches to Rural Emergencies). This was the first time in Ontario that this program has been run and Bruce County Paramedic Service partnered with Grey Bruce Health Services to participate in this unique two-day rural emergency medicine program that brought together Paramedics, Nurses and Physicians in a collaborative learning environment.

The British Columbia team of rural educators brought a truckload of medical simulation equipment to Wiarton and Lion's Head on March 2nd & 3rd and March 5th & 6th. This allowed the course to focus on skills stations and scenarios whereby interdisciplinary groups worked as teams in a fun learning environment. The 2 day inter-professional learning experience focused on airway management, trauma care, cardiac care emergencies, obstetrics, pediatric emergencies and neonatal care. Between the Lion's Head and Wiarton sites, the training was available to 48 participants - made up equally of nurses, doctors and paramedics.

The CARE Course is being piloted in Ontario as part of a rural medicine initiative of the Ontario College of Family Physicians' Collaborative Mentoring Networks, and is funded by the Ministry of Health and Long-Term Care. Lion's Head and Wiarton in Bruce County were the first sites in the Province to take part in this initiative. Another course is scheduled to take place in Red Lake in June and possibly other courses will occur over the next couple of years with the hopes that this course becomes adapted to the Ontario system and becomes more widely available.

For the Bruce County Paramedics that attended, they gained not only the knowledge of how some advanced skills are performed but also the "great opportunity to interact with nurses and doctors in a non-stressful way to gain insight into their roles and responsibilities after we transfer care to them." Melissa Moulton (Paramedic participant).

"Communication and inter-professional teamwork skills are at the centre of the learning and teaching experience and are an essential part of providing excellent emergency care in low human resource settings," said Dr. Jel Coward, who, along with Dr. Rebecca Lindley, nurses and paramedics, assisted in teaching the courses.

Ray Lux  
Chief, Quality Assurance  
Bruce County Paramedic Service



# HUMAN TRAFFICKING

## What can Paramedics do to Help?

Human trafficking is defined as “the harboring, transporting, providing, or obtaining a person for compelled service or sex acts through the use of force, fraud, or coercion” (Gibbons & Stoklosa, 2016, p.715). People are trafficked for many reasons but the most common include sexual exploitation, forced labour, domestic servitude, and criminal activity (Ecclestone, 2013). Although the clandestine nature of human trafficking makes prevalence statistics difficult to gather, some offer the global estimates of the number of trafficked persons as being from 600,000 to 200 million (Timoshkina, 2014). Women and children, and those living in poverty are disproportionately affected with 80 percent of trafficking victims being female and 50 percent of those females being children (Okech et al., 2011).

Given the scope of the problem, what can Paramedics do to intervene in human trafficking? Paramedics operate throughout the community and are potentially uniquely equipped to identify and intervene with victims of human trafficking. Victims of human trafficking often have limited access to medical care and do not interact with health professionals until there is a medical emergency and Paramedics are often the first on the scene to respond to these medical emergencies (Ecclestone, 2013). This provides an opportunity for Paramedics to intercede by recognizing inconsistencies in victims’ statements in conjunction with evidence of the presenting symptoms (Grubb & Bennett, 2012; Mace et al., 2012). Recognizing the signs of human trafficking can be difficult, there are certain risk factors that can help first responders in identifying possible human trafficking situations. For example, a young girl who has a significantly older boyfriend who holds her identification and is exhibiting some negative health symptoms may warrant further investigation. Some risk factors taken in isolation may not indicate a human trafficking situation, but when taken in connection with others can indicate possible human trafficking.

To help Paramedics address this important issue, the Institute for Family Violence Studies at the Florida State University, supported by a grant from the Office of the Florida Attorney General and in collaboration with the University of Windsor, has created online training specifically designed for Paramedics. The training features real-life case scenarios of two main types of human trafficking: sex and labor trafficking. It debunks myths about victims and perpetrators and offers a detailed look at the devastating effects of trafficking. The training also describes common “red flags” that may indicate trafficking and provides information for Paramedics to report the crime.

**All Paramedics are encouraged to complete this important training!** After reviewing the curriculum, SWORBHP has agreed to award 1.0 CME credit to Paramedics who complete the training and successfully pass the quiz at the end of the curriculum.

**The training can be accessed here:** <https://dvmedtraining.csw.fsu.edu/training/ems/>

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## Human Trafficking - cont'd from page 6

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## Fanshawe High Fly Simulation



Fanshawe College is extremely pleased to announce the acquisition of a decommissioned Sikorsky 76 (S76) air ambulance helicopter via a gracious donation from Ornge. Multiple programs throughout the college will be taking advantage of this amazing gift to enhance educational experiences. Both our Paramedic and Advanced Paramedic programs will see the S76 helicopter utilized in patient simulations which will increase fidelity and enhance experiential learning initiatives. We are in the process of completing standing operational procedures for utilizing the helicopter at various sites around campus including; field sites, roadway sites and a mock helipad. It is hoped that helicopter simulations will commence during this year's fall semester. Students will get firsthand experience with air ambulance utilization and collaborative clinical practice. They will establish landing zones, learn safe operational practices around the helicopter, experience what it's like to work within the confines of a helicopter, and conduct patient hand overs to name a few key academic activities. Aspects of flight physiology and the stressors of flight in a clinical realm will be incorporated into our curriculum. Fanshawe College will be actively seeking opportunities to share this gift through outreach, collaborative educational relationships with our community partners.

Mark Hunter  
Chair, School of Public Safety, Fanshawe College



## WELCOME BACK: Dr. Lauren Leggett

Hi Everyone!

I'm beyond excited to join the SWORBHP team as the new Medical Director of Education.

I had the opportunity to be involved with SWORBHP during my "fellowship" year 2015-16, and could not be happier to return to the team. I had a phenomenal time being introduced to the world of prehospital medicine and had a truly fantastic and diverse experience in the domains of education, research, policy, special exercises and ride-outs.

Education is my passion. During my fellowship I was lucky to be involved in a number of teaching opportunities. I've had a great time going to as many CME events as I could. It was fun to travel around to Oneida, Windsor, Chatham, Lambton, London and Owen Sound. The questions and input that came from these experiences were phenomenal and really helped me appreciate a deeper understanding of the prehospital world; specifically, the intricacies of working with directives, "unique" environments and the truly wild-and-crazy things that you just can't make up. I also got a chance to help with ongoing CME including Ask MAC, Webinars and other teaching seminars during the year.

During my fellowship, I had the opportunity to experience external base hospital educational experiences including CME at Sunnybrook, EMS Fellowship courses through the National Registry of Emergency Medical Technicians (NREMT) in Atlanta as well as the Medical Director's course through the National Association of EMS Physicians (NAEMSP) in San Diego. Following my fellowship year, I spent a month in San Diego learning about their diverse EMS system and working with the medical directors there. It was a once-in-a-lifetime experience where I spent time with HEMS, border patrol, community Paramedicine and public outreach, land and fire ride-outs (they have a fire-med system), as well as sitting-in on their annual CME, working at the medical tent for a Tough Mudder event, San Diego Chargers game and being involved with their EMS fellow education, research and education. It was also a lovely place to spend time in chilly October.

I hope to bring all of these experiences to my new role as Medical Director of Education. I look forward to building on an already great education portfolio and together with our team, creating an outstanding education experience. In order to achieve this, we will draw upon our entire SWORBHP team, as well as yourselves to help us achieve our educational goals and targets.

Outside of SWORBHP, I am an academic emergency physician. I am currently working in London and will be moving this summer to work in Windsor. Outside of work, I love to travel, spend time with family, friends and my puppy, Hank (who is half Pyrenees Mountain Dog, ¼ lab, ¼ shepherd; currently 70lbs and 6 months old!).

I'm really looking forward to my new role and working with all of you. If our paths cross, please stop and say hello. Warning: I may regale you with photos of Hank ☺.

Dr. Lauren Leggett, MD, FRCPC  
Medical Director of Education



## WELCOME TO THE TEAM: Lyndsey Longeway

Hi Everyone!

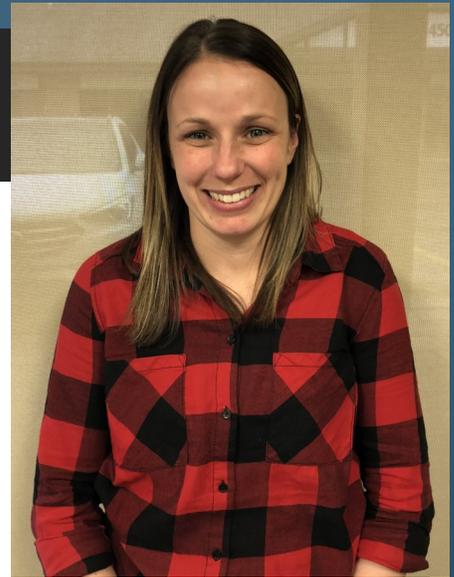
I am very excited to join the SWORBHP team as the Coordinator of Education. I started with the team on April 9th and have been busy learning the role and starting to meet everyone across the region.

My background has always been in quality improvement and education. I come from Ornge, where I held various training, education and leadership roles. I look forward to blending my experiences with yours here at SWORBHP. As I continue to settle into my role, I look forward to meeting those I have not yet had the chance to. This will hopefully be soon as I am attending some CME dates in the fall and visiting Services.

I am very excited to be working with our new Medical Director of Education, Lauren Leggatt. We are both new to the roles and we are taking this opportunity to look at various processes within the education department. We will be looking to draw on the knowledge of our SWORBHP team as well as yourselves to help make our processes clear and concise.

Outside of SWORBHP, I am in the process of completing my undergraduate degree in Health Management. I am a mom to 2 very busy little girls and one fur baby. I am really looking forward to this new role!

Lyndsey Longeway  
Coordinator, Education



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## 2018 EDUCATION UPDATE

### *A MESSAGE FROM THE CERTIFICATION & TRAINING TEAM*

With the 2018 CME season right around the corner, the SWORBHP team is in full planning mode. We are currently working hard on our CME content. Here is a sneak peak of what you will see during the day.

As previously discussed in the last newsletter, we will be incorporating the 3 new medical directives into our pre-course material as well as hands on activities.

Some other exciting topics you can prepare to see are:

- Acute cardiac ischemia
- Some high risk, low frequency skills
- Simulation
- Rhythm interpretation

We look forward to seeing you all in the fall!

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# SWORBHP: DID YOU KNOW?

## CASE 1



48 yo female patient presents pale & cool with what she describes as indigestion with pressure and a bit of a sore neck. No history of trauma. PMHx includes NIDDM and high cholesterol. Medications are Metformin and Lipitor. She has no allergies and denies nausea or vomiting. Dispatch has instructed her to chew & swallow 2 baby aspirin prior to your arrival. Upon further investigation she states the pressure in her chest is 4/10 and constant. Chest is clear on auscultation. The first 12 Lead ECG reveals ST Elevation in V3 & V4. HR: 127, RR: 24, BP: 152/96, SpO2: 92% with accessory muscle use.



What is your next course of treatment?

### OPTION A

Apply defibrillation pads, IV, nitro 0.4mg X 3 doses as per the suspected cardiac ischemia medical directive.

OR

### OPTION B

ASA 160 – 162 mg PO, apply defibrillation pads, IV, nitro 0.4mg SL x 3 doses as per the suspected cardiac ischemia medical directive.



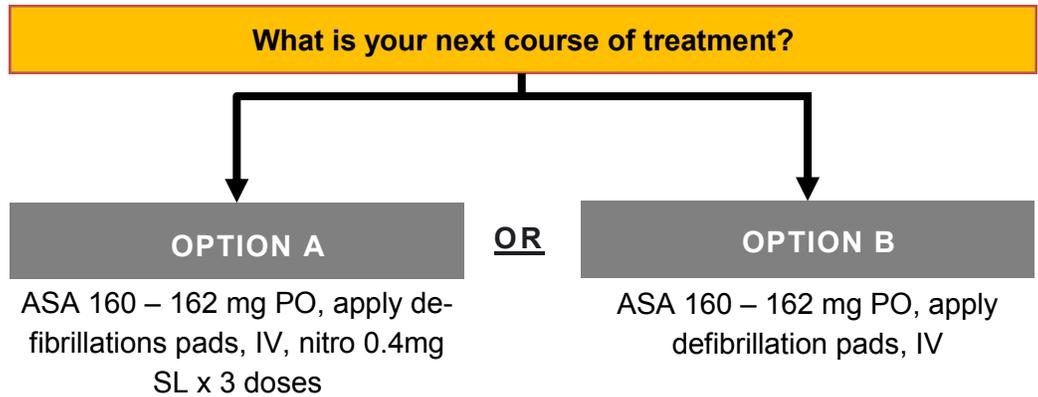
## CASE 2



78 yo male patient presents in mild distress; he states he hasn't had the energy to do his normal daily routines. He has been feeling run down lately and today he is having a hard time getting out of bed. PMHx reveals COPD, HTN and osteoarthritis. Medications are Ventolin, Spiriva, Ramipril and Tylenol. Chest reveals crackles which quickly clear when he coughs. He denies chest pain/discomfort and vomiting but state he has some nausea. You decide to obtain blood glucose level and 12 lead ECG. HR: 87, RR: 12, BP: 157/98, SpO2: 90%, Temp: 37.1, BG: 4.8, 12 Lead ECG: ST elevation in V3 and V4.

CONTINUED ON NEXT PAGE





**CONSIDER THIS...**

Consider what your treatment priority is in each of the cases above. What are the risks and benefits of treating each with ASA? The answer of course will depend on your initial working diagnosis, treatment plan and information gathering.

Most heart attacks develop when a cholesterol-laden plaque in a coronary artery ruptures. Small plaques, which produce only partial blockages, are the ones most likely to rupture. When they do, they attract platelets to their surface and a thrombus builds up on the ruptured plaque. As the thrombus grows, it eventually occludes the entire artery. Patients do not present the same; specifically the elderly and diabetic patients typically have very vague complaints that can be mistaken for a cold or failure to cope. Often times these patients may not have ST elevation on their ECG, but rather biochemical markers of ischemia that are present on bloodwork drawn in the ED.

In addition to being an analgesic and antipyretic, ASA inhibits platelet aggregation thus preventing arterial and venous thrombosis. By having the patient chew & swallow instead of swallowing the ASA whole with water the time of onset reduces from 12 mins to 5 mins.

**CASE 1**

In the 1st case, a patient with somewhat of an atypical presentation with STEMI requiring maintenance of oxygenation and coronary perfusion. Coronary perfusion and subendocardial blood flow may be improved with ASA (for its anti-platelet aggregation action) and nitro (for its vasodilation and decreased myocardial demand properties). In accordance with the suspected cardiac ischemia medical directive, 160 – 162 mg of ASA PO and 3 doses of 0.4 mg of Nitro may be given to the STEMI positive. The benefits outweigh the risk when administering doses of ASA < 1500mg. In the case of nitro with STEMI, there is no known benefit, and some potential harm, from continued administration of NTG beyond 3 doses.

**CASE 2**

In the 2nd case there is ST elevation in V3 and V4. However, you must keep in mind that there are multiple causes of ST elevation other than STEMI and this may be acute or chronic in nature. In addition, the symptoms that are described (weakness, nausea) are vague. While these symptoms may be consistent with cardiac ischemia, they also may be associated with a myriad of other conditions other than cardiac causes. If your clinical judgment in this case is for suspected cardiac ischemia, then the medical directive can be utilized. However, given the patient is not having any pain symptoms, nitro should be withheld.





**IN BOTH CASES**

**In both cases, these patients may be experiencing a cardiac event and would benefit from ASA and it should be administered if indicated and no contraindications exist.**



**CLOSING REMARKS...**

- In cases of STEMI, utilize the ASA and nitro doses associated with the suspected cardiac ischemia medical directive.
- A normal 12 Lead ECG does not rule out cardiac ischemia or a cardiac event.
- In cases where the patient has taken ASA prior to Paramedic arrival.

⇒ *“ASA is a safe medication with wide therapeutic index (effective dose without side effects can be from 80 – 1500 mg). The additional dose provided by Paramedics will not exceed the therapeutic dose while ensuring the correct administration of the correct dose of the medication. Therefore, apply the suspected cardiac ischemia medical directive as if no care had been rendered prior to your arrival.”*

*~ Companion Document v 4.4 for ALS PCS V 4.5, pg. 10, 2nd heading*

- When ST elevation is present on an ECG, withhold nitro in the absence of “pain”.
  - ⇒ *“When administering nitro, it is important to evaluate the response of the patient to each dose not only in changes to vital signs, but also in terms of symptoms. This is why discomfort of some form is important: it allows the paramedic to track improvements in that discomfort with subsequent doses. In order to meet the indications for nitro administration it should encompass some form of discomfort which is consistent with cardiac etiology which in turn would allow a paramedic to gauge the response and indicate the need for further nitro administration.”*

*~ Ask Mac, 2012, [https://askmac.sworbhp.ca/?sfid=1819&\\_sft\\_askmac-categories=cardiac-ischemia&sf\\_paged=3](https://askmac.sworbhp.ca/?sfid=1819&_sft_askmac-categories=cardiac-ischemia&sf_paged=3)*

# Why do we not have TXA (Tranexamic Acid) in the Ambulance Yet?

Tranexamic Acid (TXA) is increasingly administered as a component of resuscitation in patients who have significant hemorrhage. In the last few years, most patients with complicated multisystem trauma involving hemorrhage that arrived in the Windsor Regional Trauma Centre received a dose of Tranexamic Acid (TXA) during the first few minutes of their arrival. The Crash-2 study reported a 10% reduction in mortality in trauma patients, measured four weeks after injury. TXA was given in the Emergency Department within the first 3 hours of injury in the study (1). Crash-2 is the largest study done to date that supports the use of TXA in civilian settings. This raises the question: would it be beneficial to give TXA in the prehospital setting? Unfortunately it is not clear from the currently available evidence that giving TXA sooner would result in better outcomes.

Most of our trauma occurs in urban areas. Our prehospital scene time in these cases is usually less than ten minutes, and the transport time is similarly very short. From a research perspective, it would be very difficult to determine if giving TXA within 20 minutes of Paramedic contact would increase its overall benefit. The Crash 2 study required twenty thousand cases to show a statistically significant 10% decrease in mortality. It is unlikely that a study to investigate this in the prehospital setting would ever be possible. The prehospital studies that have been done with regards to TXA administration have far fewer cases and were not designed to show outcome benefit. They were to determine the feasibility of administering TXA in the prehospital setting (2).

There may be parts of Ontario where geographic isolation or long transport times could justify the use of TXA. These are the situations in which most modern militaries use TXA. The Military uses TXA for combat injuries. These injuries are different than most of the wounds seen in Canadian civilian practice. Studies from the military environment have relatively small numbers of cases and were not standardized for the details of administration or types of injuries where TXA was used.

We know from previous prehospital trauma research from Essex County that patients being transported by ACPs received pain meds by paramedics at about the 20 minute mark (3). This occurred after primary survey, packaging, load and go, and secondary assessment had all been completed. Medication was given during transport. Certainly there is an argument for considering the administration of TXA in places like Pelee Island, and perhaps

in other situations with more than a 30 minute prehospital transport time. However, there are few places in Southwestern Ontario that have a greater than 30 minute transport time to an Emergency Department.

The cost for a treatment dose of TXA is approximately \$25, when ordered in bulk purchase. Therefore cost is not prohibitive.

TXA administration continues to be studied and the current research and its applicability is being discussed at the OBHG MAC. Crash-3, a study in progress, is looking at whether or not TXA administration is a benefit in traumatic brain injury. Perhaps future studies will provide evidence for its use in prehospital care. At the moment, the evidence for the benefit of TXA administration in the Canadian civilian prehospital setting is limited. However, the introduction of TXA into prehospital practice continues to be considered as more evidence is generated.

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Local Medical Director  
Essex, Kent, Lambton



## SWORBHP RESEARCH CORNER

As part of SWORBHP's commitment contributing to the prehospital literature and seek out evidenced based answers to pre-hospital questions, the purpose of this section is to highlight a current research project that is occurring in the SWORBHP region as well as one that has been completed.

### WHAT'S NEW

Dr. Mark Lipkus, a fourth year emergency medicine resident at Western University, is leading a project examining patient's awareness of the MOHLTC DNR confirmation form at University Hospital in London Ontario. The objective of this project is to determine patients who have advanced directives and wish to be DNR and whether or not they are aware of and possess the MOHLTC DNR form. His goal is to capture how many patients wish to be DNR but are unaware that this form exists and is required to prevent prehospital resuscitation by Paramedics and first responders. For those who wish to be DNR and are aware of its existence, Dr. Lipkus wishes to learn what barriers are present for those who have not yet obtained this form. Dr. Lipkus presented some of his preliminary findings at the SWORBHP Prehospital and Transport Medicine Research Day held June 19th.

### WHAT'S DONE

Have you ever questioned if the Ambulance Call Report serves any important purpose other than acting as a legal record of care administered? Do Emergency Physicians actually review it, or seek it out to help with their care of the patient?

Dr. Natalie Cram, a previous SWORBHP fellow and Western emergency medicine resident conducted a study examining the availability and the utility of the Ambulance Call Record in the Emergency Department Management of patients. The objective of this study was to determine how often the Ambulance Call Record (ACR) was available to Emergency Department (ED) physicians and whether it contained information that changed the ED management of patients. This study began shortly after the implementation of a new electronic ACR (eACR) handover process (Round 1). To control for any confounding factors related to this new eACR handover process, the study was repeated 6 months after its implementation (Round 2). The ACR was available at first physician assessment for 82 (15.7%) patients in Round 1, and 76 (24.4%) patients in Round 2 ( $\Delta 8.7\%$ , 95% CI: 3.1%, 14.5%). The ACR was available at some point during patients' ED stay for 154 (28.9%) patients in Round 1, compared to 111 (34.5%) patients in Round 2 ( $\Delta 5.6\%$ , 95% CI: 0.0%, 12.1%). When the ACR was available for a patient ( $n = 265$ ), physicians believed that information in the ACR changed their treatment plan in 76 (28.8%) cases.

The study concludes that physicians who review the ACR believe that the ACR contains relevant information that may influence patient management; however, physicians commonly manage patients without reviewing the ACR often due to its lack of availability.

This study reveals that the ACR is a valuable tool for ED patient management. The study highlighted that physicians utilize the ACR for incident history when it is not clear as to what has occurred prior to arriving at hospital, to review vital signs as well as prehospital 12-lead ECGs. In some cases, what is contained on the ACR can influence disposition decisions. As a result, there should be a continued push to seek out system solutions to have the ACR readily available.

This research was presented at the Canadian Association of Emergency Physicians and the National Association of EMS Physician Conferences. It has been published in the Canadian Journal of Emergency Medicine (CJEM. 2017 Mar; 19(2):81-87. doi: 10.1017/cem.2016.362. Epub 2016 Sep 13)

Dr. Matt Davis, M.D., M.Sc., FRCPC  
Regional Medical Director



## 2018 SWORBHP PREHOSPITAL AND TRANSPORT MEDICINE RESEARCH DAY

On Tuesday June 19th SWORBHP hosted it's Innagural Prehospital and Transport Medicine Research Day. We partnered with innovative leaders in the field to discuss a variety of topics.

- A Descriptive Analysis of Prehospital Midazolam as a Chemical Restraint in Combative Patients
- Prehospital Adverse Events Associated with Nitroglycerin Use in STEMI Patients with Right Ventricle Infarction
- Feasibility of Implementing the Modified Valsalva Technique in the Prehospital Setting
- Defibrillation Pad Placement Change for Refractory Ventricular Fibrillation in out of Hospital Cardiac Arrest
- Routine Application of Defibrillation Pads and Time to First Shock in Prehospital STEMI Complicated by Cardiac Arrest
- Awareness and Barriers to Access of a Ministry of Health Mandated 'Do Not Resuscitate' Confirmation Form
- Stress and Posttraumatic Stress in Paramedics
- Evaluating Factors Relating to Quality and Success of Mandatory Paramedic Patches
- Paramedics' Ability to Determine Diagnosis and Appropriate Disposition in the Patients they Transport to Hospital .
- How do Paramedics Perceive their Role in the Emergency Department
- Hypoglycemia is a Rare Peri-seizure Finding in Prehospital Patients



**Research questions or to get involved:** Dr. Matthew Davis: [matthew.davis@lhsc.on.ca](mailto:matthew.davis@lhsc.on.ca)



**View publications:** [http://www.lhsc.on.ca/About\\_Us/Base\\_Hospital\\_Program/Research/index.htm](http://www.lhsc.on.ca/About_Us/Base_Hospital_Program/Research/index.htm)

# UPCOMING CME EVENTS

MARK YOUR CALENDARS

For a complete list of upcoming CME events, visit our online events calendar:

[http://www.lhsc.on.ca/About\\_Us/Base\\_Hospital\\_Program/Upcoming%20Events/index.htm](http://www.lhsc.on.ca/About_Us/Base_Hospital_Program/Upcoming%20Events/index.htm)

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## COMMENTS OR SUGGESTIONS

SWORBHP LINKS is developed by the Southwest Ontario Regional Base Hospital Program.

If you have comments or feedback on the newsletter, or have an article you would like to have considered for publication in a future edition of **LINKS**, please send to:

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