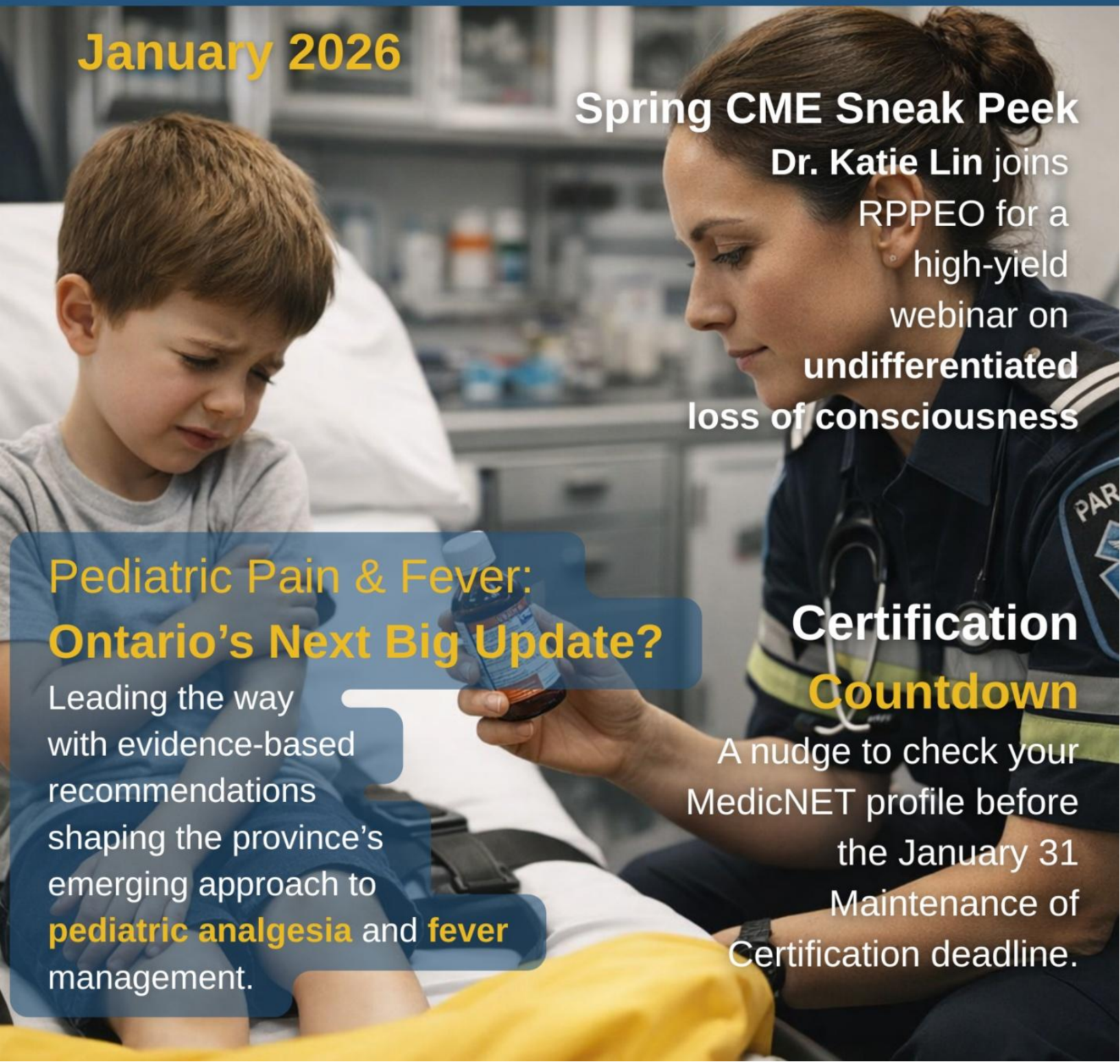
MedicNEWS

Insight for paramedics in Eastern Ontario



January 2026

Spring CME Sneak Peek

Dr. Katie Lin joins RPPEO for a high-yield webinar on **undifferentiated loss of consciousness**

Pediatric Pain & Fever: Ontario's Next Big Update?

Leading the way with evidence-based recommendations shaping the province's emerging approach to **pediatric analgesia** and **fever** management.

Certification Countdown

A nudge to check your MedicNET profile before the January 31 Maintenance of Certification deadline.

In This **Issue**

🩺 Certification: January 31 MoC Deadline Approaches

A reminder of what counts toward Maintenance of Certification and to check your MedicNET profile before Jan 31

🎓 Continuing Education: Spring 2026 CME Preview

Dr. Katie Lin joins RPPEO for a high-yield webinar on undifferentiated loss of consciousness, with automatic CME credit for live attendees and a recorded module for CME viewing.

📚 Elective CME: New Learning Added

Four new hours of elective CME hit MedicLEARN, including Grand Rounds on airway and cardiac arrest, plus a new a new podcast episode featuring the 2025 AHA Guidelines and upcoming courses.

🧭 Medical Direction: Evidence-Based Directive Updates

An in-depth look at CPEP and the provincial CMDR process, including decisions on IV acetaminophen, methoxyflurane, pediatric analgesia, and the developing paediatric analgesia pilot.

💊 Clinical Spotlight: Suboxone® in the Field

A refresher on Suboxone®, why services are beginning to implement the auxiliary directive, and why RPPEO distributed a region-wide information package in December.

📈 OMC Activity Update

A snapshot of patch trends, documentation findings, case complexity, and insights from more than 600 paramedic surveys.

🔬 Research: STEMI Bypass and Sex Differences

A regional research project examining sex-related patterns in STEMI bypass has been accepted for presentation at ICEM 2026, with implications for recognition, documentation, and equitable care.

Certification

MoC Deadline Alert: January 31 is your Maintenance of Certification Deadline

The annual Maintenance of Certification (MoC) deadline is January 31, 2026. By that date, you'll need to have all the annual requirements met and documented in your profile on MedicNET.

It's a great idea to check your MedicNET profile now, before you're hard up against the January deadline. If you notice something that doesn't seem right, you can follow-up with the RPPEO in plenty of time to get your profile ready for the certification deadline. Read the sections below for up-to-date advice and ideas for many of the requirements you'll need to make a smooth certification renewal come the MoC deadline at the end of January.

Maintaining education and certification records for 1600 plus paramedics is a huge undertaking, and accidental errors can creep in. If something doesn't seem right with your records, please reach out to us at certification@RPPEO.ca.

We have been communicating with paramedic services throughout January to identify and help paramedics complete their MoC requirements. Paramedics at risk are sent an email with details on how to finish up their MOC requirements.

Let the RPPEO help you with your questions or concerns about Maintenance of Certification. Contact MedicLINE (1-877-587-7736 Option 1) or email Jeff at certification@RPPEO.ca.

Annual Maintenance of Certification

The Advanced Life Support Patient Care Standards v.5.4 outline the requirements for paramedics to recertify each year at the base hospital in the Maintenance of Certification Standard (page 284). Paramedics need to **assess and manage at least ten 911 patients or RPPEO-approved alternatives**. The Medical Director determines the competency and compliance of each certified paramedic via chart audits, field evaluations, and RBHP patch communication review, making 911 patient care essential to annual maintenance of certification. The standards indicate that **a paramedic may have no more than 90 consecutive days away from providing 911 patient care**. Those who have more than 90 days away from

caring for 911 patients undergo a Return to Clinical Practice to enable them to maintain their annual Certification.

In addition to the requirements set out in the Patient Care Standards, the RPPEO requires the following each year:

Each Advanced Care Paramedic (ACP) must

- Be employed by a Paramedic Service
- Have participated in Cycle 1 Spring and Cycle 2 Fall CME
- Have 8 hours of an elective from our approved elective calendar, or RPPEO-approved paramedic submitted electives (submit for approval via our Elective CME Pre-approval request form).

Each Primary Care Paramedic (PCP) must

- Be employed by a Paramedic Service
- Have participated in one cycle of annual RPPEO CME (usually Cycle 2 CME)

The RPPEO Certification Year runs from February 1 through January 31. Each paramedic must complete annual maintenance of certification requirements by the end of the day of January 31 each year.

For more details, see the RPPEO Certification Policy or visit RPPEO.ca.

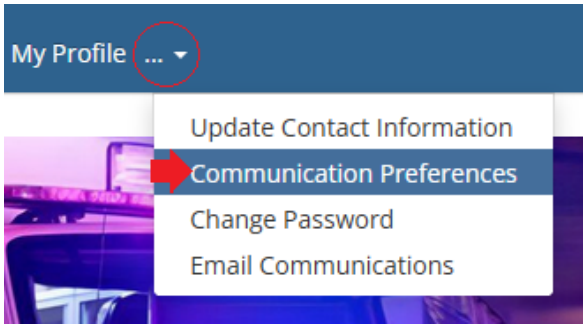
Managing Your Email Preferences

By default, MedicNET notifications regarding your certification will be sent to all email addresses in your MedicNET profile. You may edit these addresses within MedicNET. If you have not provided an email address, RPPEO uses your employer email address.

To adjust your email preferences or choose which addresses receive notifications, go to "My Profile" in the top menu of MedicNET, then select "Communication Preferences".

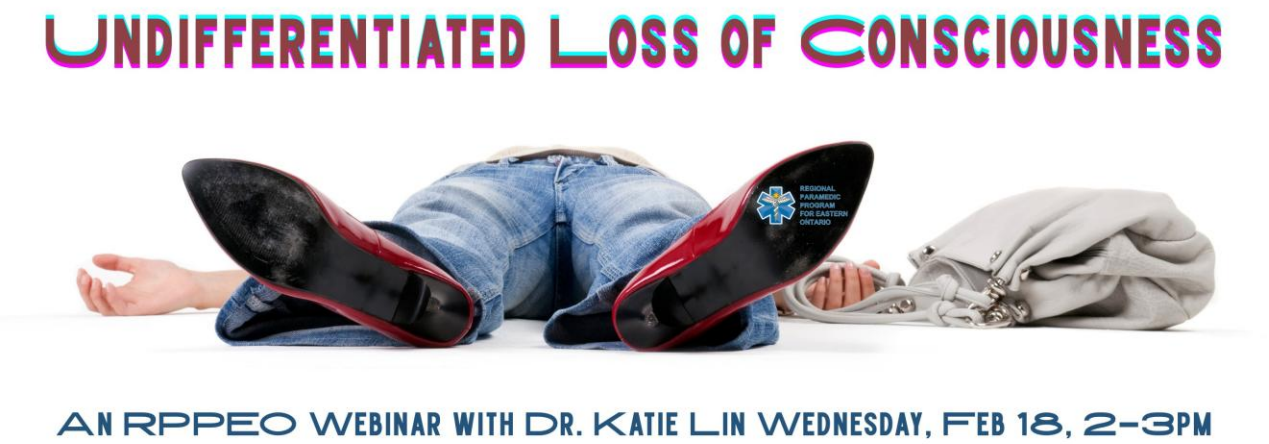
Maintenance of Certification Help

We are happy to hear from you and help you with your Maintenance of Certification. For more about your annual CME requirements or other recertification issues, contact us at **certification@rppeo.ca** or **1-877-587-7736**.



Continuing Education

Spring 2026 CME: **Webinar Preview & Invitation**



1 - Click this link to register for the live webinar!

RPPEO is pleased to present an important online seminar addressing Undifferentiated Loss of Consciousness on Wednesday, February 18, 2026, from 2-3pm ET. The webinar is presented as part of RPPEO Spring 2026 CME programming. All are welcome to attend!

Pre-eminent clinical educator and STARS Air Ambulance critical care physician Dr. Katie Lin presents a lecture packed with pearls for those encountering loss of consciousness in prehospital care. Register now!

Loss of Consciousness

Undifferentiated loss of consciousness is a common yet challenging prehospital presentation, demanding skilled history taking, focused assessment, and confident clinical decision-making.

This session will help paramedics distinguish seizure from syncope, recognize common seizure mimics, and apply a structured approach to assessment and management in the field.

Spring 2026 CME Credit

The live event is hosted on the online meeting platform Teams and will be recorded for inclusion in 2026 Spring CME for RPPEO paramedics. Participating RPPEO-certified paramedics will *automatically* receive credit for attending the live webinar, so long as you provide your EHS# during registration. RPPEO certified paramedics who do not attend the live event will have the opportunity to view it as a Spring 2026 CME module.

All are welcome!

Registration

This webinar is hosted on Teams and open to all! You must register in advance to receive the event link. Use this link to register now!

Meet Dr. Katie Lin

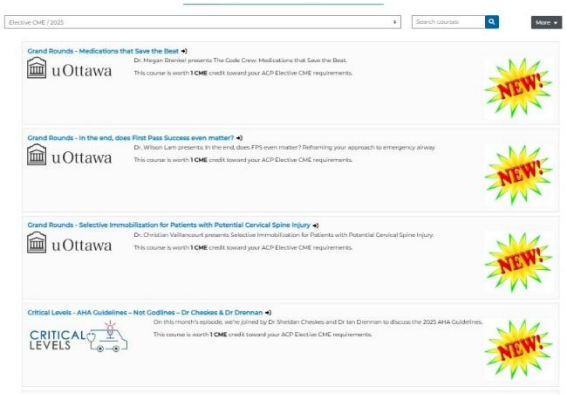
Dr. Katie Lin is one of Canada's finest EM educators with her unique focus on neurologic emergencies. In addition to working as an emergency physician in Calgary, she also covers calls on Calgary's Code Stroke team and serves as a critical care transport physician with STARS Air Ambulance. She completed her residency training and stroke fellowship in Calgary alongside a parallel Master of Public Health through Harvard.

Elective CME

See RPPEO's Education Events listings for pre-approved elective CME courses, workshops, seminars, and more! ACPs require 8 hours of elective CME annually and we encourage PCPs to be curious and participate in learning opportunities that support your clinical efforts.

Here are a few upcoming events you'll find are available for credit. Visit RPPEO.ca for registration details and more info!

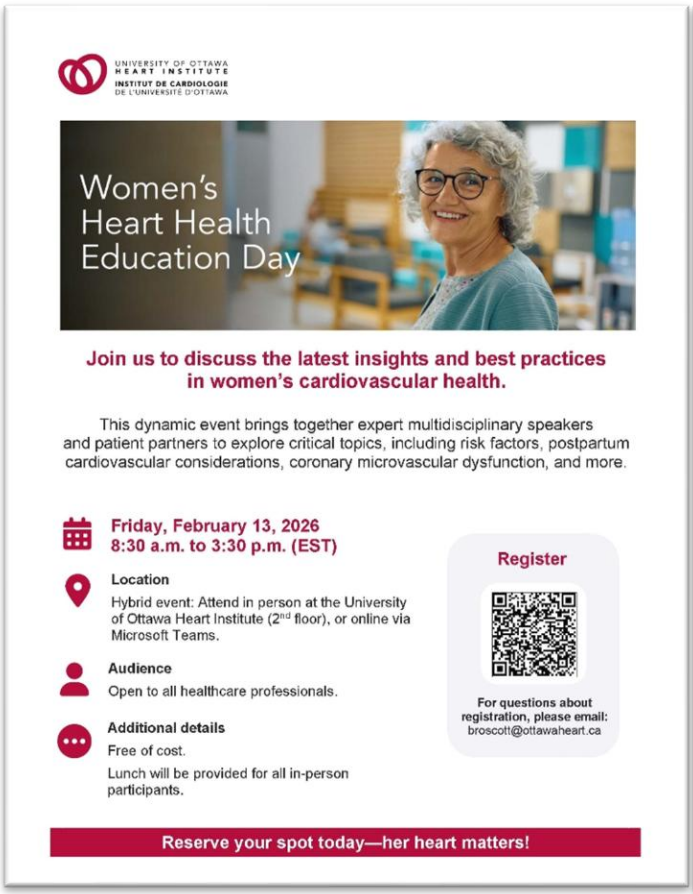
We added 4 additional hours in December to the online elective CME available in MedicLEARN bringing the total to 20 hours of CME offerings on the platform. Three of the new electives are



Grand Rounds examining cardiac arrest pharmacology, airway emergencies, and selective immobilization for patients with potential cervical spine injury, and the 4th is another podcast installment, this time with Dr. Sheldon Cheskes and Ian Drennan discussing the 2025 AHA Guidelines. Visit MedicLEARN to listen in and gather elective CME credits automatically!

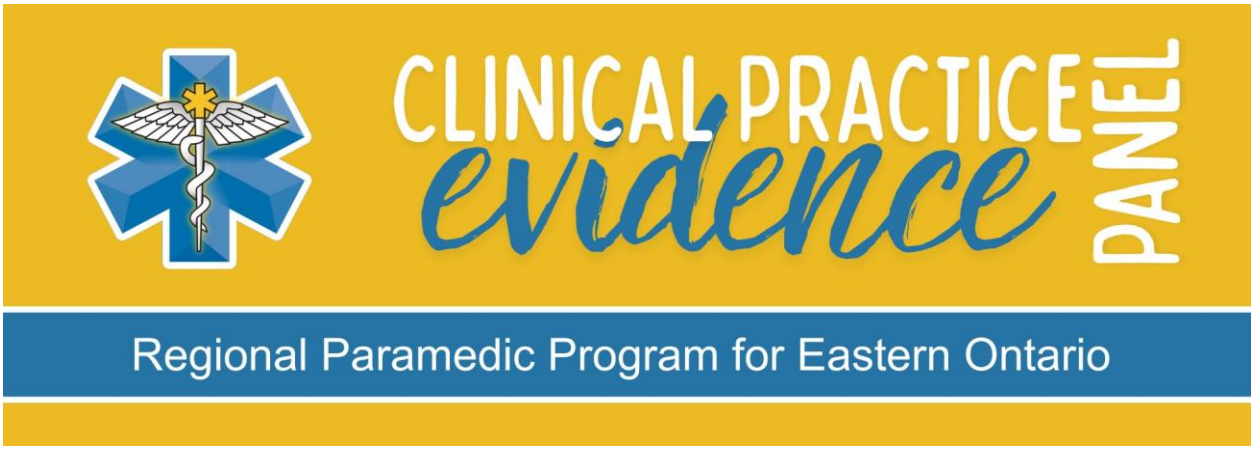
Paramedics are encouraged to submit courses, webinars, or trainings that you plan to attend for elective CME consideration by completing this form at any time during the year. You will need to provide proof of attendance to receive credit on your MedicNEW profile.

Upcoming Educational Opportunities



Medical **Direction**

Evidence-Based Updates to Scope of Practice



RPPEO is contributing to a major effort to update paramedic medical directives across Ontario, while innovating by directly involving paramedics in the process of evidence review. Central to this effort is our new **Clinical Practice Evidence Panel (CPEP)** – an RPPEO-led initiative – and the province's **Comprehensive Medical Directive Review (CMDR)** framework.

RPPEO launched CPEP in 2025 as a groundbreaking way to embed evidence-based decision-making into paramedic practice. By bringing paramedics, medical directors, and RPPEO specialists together to review clinical evidence and guide updates to directives, this collaborative approach ensures front-line experience directly informs provincial standards and drives continuous improvement in patient care. This is part of a broader shift: **paramedicine is evolving into a fully recognized health profession**, and CPEP affirms paramedics as key collaborators and leaders in shaping clinical practices. Meanwhile, through our active participation in the CMDR process (a province-wide review mandated by Ontario's Medical Advisory Committee), we're helping drive directive change via rigorous evidence assessment and a process that transparently shares findings.

Why does this matter?

For frontline paramedics, these initiatives mean clinical directives that are *safer, clearer, and easier to apply* under pressure. Updated directives will reflect the best available evidence and real-world insights, leading to safer care and fewer gaps in what treatments you can provide.

For paramedic service leadership, CPEP and CMDR provide a structure for continuous quality improvement and transparency in decision-making. Every change in a medical directive comes with a documented rationale and evidence backing it, which means leaders (and paramedics)

can see *why* a decision was made. This open, evidence-driven process builds trust that patient care standards are being advanced thoughtfully and collaboratively.

CPEP

The Clinical Practice Evidence Panel (CPEP) is a new RPPEO-led group of paramedics, base hospital physicians, and clinical specialists who are hard at work reviewing paramedic medical directives. This multidisciplinary panel is sifting through evidence to recommend changes. As part of Ontario's comprehensive directive review process, CPEP is examining what to add, what to remove, and how to improve clinical directions. Here we highlight **four decisions** CPEP has reached so far and the rationale behind each:

1. **IV Acetaminophen –** Considered, But *Excluded*
2. **Methoxyflurane –** High Cost, But *Continuing to Review Its Potential Clinical Benefits*
3. **Pediatric Analgesia –** *Closing the Gap* in Treating Kids' Pain
4. **Pediatric Antipyretics –** *Considering Fever Treatment* in the Field

We'll also touch on the **Pediatric Analgesia Feasibility Pilot** that's putting some of these ideas to the test in 2026, and provide a quick who's-who of the CPEP panel.

IV Acetaminophen: Considered and Excluded

CPEP decision: **Do not recommend adding IV acetaminophen to paramedic scope**.

Why we looked at it: The panel discussed IV acetaminophen as a potential option for patients who can't take oral medication (e.g., severe nausea, decreased LOC). Through our environmental scan, we noted that some EMS systems and hospitals use IV Tylenol for pain, so it warranted a look.

Evidence and reasoning: We found that IV acetaminophen provides little to no advantage in pain relief over oral acetaminophen. Research and experience show that once absorbed, the pain reduction is essentially the same. The only slight benefit is a faster onset by the IV route, but the difference is not clinically significant in most cases. On the downside, the IV form is considerably more expensive in Ontario and requires setting up an IV infusion (which takes time and resources).

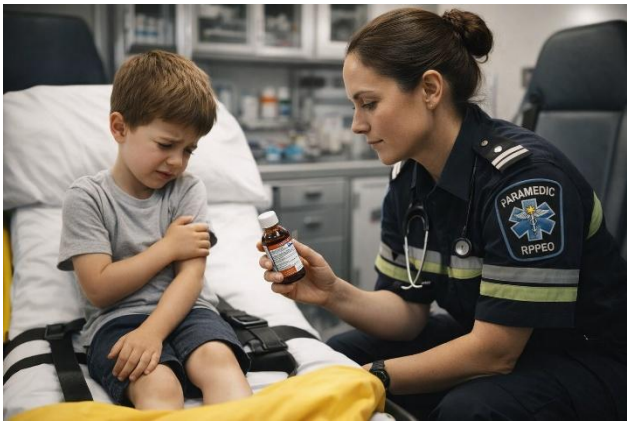
In short, it's a lot of extra cost and effort for minimal gain. The panel agreed that this trade-off isn't worth it. If a patient can't swallow pills, we have other means to manage pain (intranasal fentanyl for severe pain, for example). We're also examining oral liquid formulations (see Pediatric Pilot below) which can cover many "can't swallow a pill" scenarios without needing an IV. Given budget constraints and the push for high-value interventions, CPEP chose to exclude IV

acetaminophen from further consideration. Instead, our focus is on optimizing oral medications (like making liquid/chewable forms available for all ages) and other analgesics that offer bigger benefits.

Bottom line: *Paramedics won't be seeing IV Tylenol since the evidence didn't justify it. We're sticking with oral acetaminophen (cheap, effective) and putting our energy into changes that more meaningfully improve patient care.*

Pediatric Analgesia: Closing the Gap for Kids' Pain

CPEP decision: **Actively considering adding pediatric analgesia** to our scope of practice.



The gap: Paramedics have opioid options for children, but nothing they can give independently for mild to moderate pain such as acetaminophen or ibuprofen. This creates an odd mismatch. A five-year-old with a broken arm may receive fentanyl as the only practical option, while an adult with the same injury could receive oral analgesics as part of a multimodal plan. The same issue comes up with common childhood problems like painful ear infections or minor burns where a hospital would routinely offer simple oral analgesia. Although paramedics can call a Base Hospital Physician for a verbal order, ambulances do not carry the liquid or chewable formulations needed for pediatric dosing. This gap has been recognised for years and leaves children, parents, and medics facing unnecessary distress in situations where gentler tools should be available.

What CPEP is doing: The panel made pediatric analgesia a top priority. We are gathering evidence on pediatric dosing and safety for common analgesics (acetaminophen and ibuprofen), and we looked at other systems. Many emergency paramedic services elsewhere do enable basic analgesics for kids. The evidence is clear that these medications are safe and effective for children when dosed correctly. There is no reason not to use them, aside from creating a safe implementation plan.

Bottom line: *More help is on the horizon for kids in pain. CPEP recognized the status quo was no longer enough and is taking action.*

Methoxyflurane: Considering a New Pain Option and its Cost

CPEP decision: **Actively considering the clinical benefits of adding methoxyflurane** as an analgesic option for moderate-to-severe pain.

What is it and why consider it: Methoxyflurane is an inhaled analgesic agent (brand name Penthrox). It's a self-administered pain relief inhaler that's been used for years by paramedics in Australia and the U.K. It's fast-acting and non-opioid. Currently, Ontario paramedics do not carry any inhaled analgesics. Nitrous oxide was considered and rejected in previous directive reviews. CPEP also reviewed **nitrous oxide**, but we are not recommending it due to its heavy logistical burden which leads to tremendous resource utilization (see below). CPEP saw methoxyflurane as a way to give paramedics, **including PCPs,** a quick and effective inhaled pain option without needing an IV line.

Evidence and pilot findings: RPPEO collaborated with a pilot study on methoxyflurane in our region in 2024 and 2025. The pilot looked at service level implementation feasibility and also monitored paramedic safety (to ensure providers aren't exposed to unsafe levels of the gas). The results were encouraging and the study authors plan to publish them soon, which will aid in the evidence base for this medicine.

Methoxyflurane is not cheap. A single methoxyflurane inhaler costs about **$125** in Canada, though services purchasing in larger volumes may be able to negotiate lower pricing over time as uptake increases. However, CPEP is weighing that cost against the clinical benefits demonstrated in existing scientific studies. Methoxyflurane gives PCPs the ability to start pharmacological pain control quickly, before egress or extrication, which can improve patient outcomes. The panel notes system-level effects as well, in that methoxyflurane can sometimes prevent the need for additional resources (e.g., reducing the necessity for backup ACP intercepts purely for pain management). Considering these factors and the strong evidence of efficacy, the clinical (and system) benefits could justify the cost.

Current status: CPEP continues to consider a recommendation to include methoxyflurane as an optional analgesia directive for both PCPs and ACPs. The idea is to use it for acute moderate-to-severe pain, where quick relief is needed. If our full evidence analysis supports methoxyflurane, we will also create an implementation plan that would address training (paramedics would need to be taught how to use the inhaler and screen for contraindications like significant renal impairment in the patient) and logistics (procurement of the inhalers, protocols for ventilation

in ambulances, etc.). Essentially, we're doing our homework to make sure if we recommend methoxyflurane, it can be implemented safely and cost-consciously.

Bottom line: *Despite its higher cost, methoxyflurane offers a* new capability *– rapid, potent pain relief that doesn't rely on needles or opioids. CPEP sees it as a potentially worthwhile addition pending our evidence review. It's looking like an example of choosing to "spend where it counts" – investing in something that demonstrably improves patient care. Stay tuned, as this could be one of the headline changes to our pain management interventions in the next update.*

Methoxyflurane at PCRF Journal Club

Paramedics are invited to check out this month's PCRF Journal Club, a US-based education initiative from the Prehospital Care Research Forum on California that brings current research to frontline providers in an accessible, practical format. In this episode, Dr. Michael Austin, RPPEO Medical Director, and Zach Cantor, EMS Specialist, step inside the ambulance to explore a question rarely discussed: how safe is the air paramedics breathe when administering methoxyflurane, marketed as Penthrox. The discussion walks through a controlled laboratory study in the RPPEO region measuring occupational exposure inside ambulance environments, shows how ventilation can shift the safety equation, and reflects on what these findings mean for clinician safety, system design, and the balance between patient comfort and provider health. It's a thoughtful, evidence-informed conversation that connects science with real-world practice.

Clear Air in a Rolling World: What Ambulance Methoxyflurane Exposure Means for Paramedic Safety

Nitrous Oxide: Considered and Excluded

CPEP decision: Do not recommend adding nitrous oxide to paramedic scope of practice.

Why we looked at it: Nitrous oxide is used in some international EMS systems and hospital settings as a rapid-onset inhaled analgesic, often for short procedures or brief episodes of acute pain. Since our environmental scan showed that other jurisdictions use it effectively in controlled environments, we evaluated whether it could fill a gap in Ontario's prehospital pain-management toolbox.

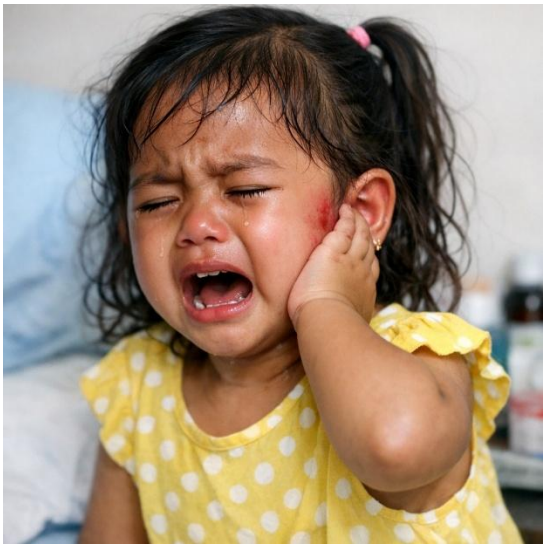
Evidence and reasoning: Although nitrous oxide can provide quick, non-invasive analgesia and the gas itself is inexpensive, the operational barriers in Ontario outweigh the clinical upsides. Introducing it would require services to purchase, store, and maintain specialized delivery devices capable of safely administering a 50:50 nitrous/oxygen mix. These systems need regular inspections, leak testing, and strict adherence to occupational safety requirements to prevent environmental contamination. Cylinder management alone (transport, swapping, tracking, compliance with gas-handling rules) is a significant logistical lift and would add recurring work for logistics and biomedical engineering teams.

More importantly, Ontario EMS has never carried nitrous oxide, so implementing it would require a new training program, updated policies, and expanded quality-assurance processes. All of this comes with added cost, yet the analgesic benefit is not meaningfully superior to what paramedics already have. Other medications in our directives provide reliable, scalable pain relief without requiring new infrastructure. For a province with diverse geography and large service footprints, the resource burden simply doesn't match the modest clinical gain.

In short, the logistical demands are heavy, and the improvement in patient care may be achieved by other means. The panel agreed that nitrous oxide doesn't offer enough value to justify such system-wide changes. Instead, we are focusing on strengthening the analgesic options paramedics already have, considering methoxyflurane as an inhaled option, and exploring initiatives that improve access to oral formulations, pediatric-friendly options, and other high-value approaches to managing pain.

Bottom line: *Paramedics won't be seeing nitrous oxide on the trucks. The benefit wasn't strong enough to offset the equipment, safety, and cost burdens that would come with it, especially when effective alternatives are available.*

Pediatric Analgesia Feasibility Pilot: Testing New Treatments for Kids



To support the medical directive decisions, RPPEO is running a dedicated **Pediatric Analgesia Feasibility Pilot** from **April to October 2026**. As noted, it involves **four services: Hastings–Quinte, Lanark County, Cornwall (SD&G), and Prescott–Russell**. Here's a brief overview of what's happening in the pilot and why it's important:

- **What's being tested: Liquid and chewable formulations of acetaminophen and ibuprofen** for use (primarily) in patients under 18. This includes dosing infants through teens with weight-appropriate doses. Both pain and fever indications are covered, with online medical consultation being the way orders will be provided in the pilot. The pilot requires a Base Hospital patch for each administration since this is outside the standard directive (no standing orders yet). Paramedics administer the medication, then continue with usual care, and document the effects (repeat the pain score or note if fever improved, etc.).

- **Training and safety:** Paramedics in the pilot will receive training on pediatric dosing calculations, recognizing when to treat fever, refresher on multimodal pain management, pediatric care and oral administration strategies, documentation, and the patch procedure. The pilot team will put protocols in place for participants. The pilot also emphasizes reporting any issues promptly through RPPEO's Patient Safety Incident Reporting (PSIR) system).

- **Data and feedback:** Each participating paramedic fills out a quick log after using the meds, noting things like: how easy or hard was it to administer? Did the child take it willingly? How much time did it add, if any? Their input will directly shape the final directive recommendations, e.g., if chewable tablets turn out to be much easier than liquid for certain age groups, we'll note that. The pilot planning already led to one tweak: we realized we needed a **simple dosing chart at-hand** for medics rather than expecting mental math or an app each time.

This pilot is a critical step in moving the theory that we should treat kids' pain/fever into practice. It's also a great example of how CPEP, though an "evidence panel," is not just doing literature reviews; it's aiding in real-world work to answer operational questions that constrain clinical care. By year end, we expect to have a robust set of data to present alongside our recommendations, making a strong case for permanent change.

Pediatric Antipyretics: Addressing Fevers in the Field

CPEP decision: **Consider adding fever treatment for pediatric patients** (and possibly for adults in select cases) as an extension of paramedic care.

The gap: Paramedics regularly encounter patients with high fevers: for example, a toddler with a fever in a febrile seizure, or an elderly nursing home patient with suspected sepsis. Currently, we have *no directive* that allows us to administer antipyretics like acetaminophen or ibuprofen in these situations. We can treat seizures and sepsis in other ways, but simply reducing the fever (which is standard practice in ER and at home) isn't explicitly in our toolbox. As the CPEP analgesia group noted early on, **"there is currently no directive for fever management in Ontario, highlighting a gap in care"**. In many cases, treating the fever would improve patient comfort and potentially help their clinical condition, and it's low risk.

CPEP's approach: We bundled fever management into our analgesia discussions because the same medications are used. The panel's view is that if we enable paramedics to give Tylenol for pain, we should also enable them to give it for a significant fever when needed. It's essentially the same decision process: identify a problem (pain or fever) and treat with the appropriate dose of medication. The key is to define under what circumstances we should treat a fever: we're not advocating giving Tylenol for every 37.8° temperature, but for fevers that are causing distress or risk (for example, a child who is very uncomfortable or an adult with chills and a high fever where reducing it might help prevent complication).

Pilot and evidence: We will be enabling fever treatment within the pediatric pilot on a consult basis. CPEP is also reviewing literature on prehospital fever management: there isn't much controversy in the medical community about using Tylenol/Advil for fever: it's standard care. The main consideration is operational: getting the medications on board the ambulance. Paramedics will need to document the presence of fever and other symptoms while considering serious causes of fever.

Likely recommendation: The panel is currently leaning towards recommending that a new directive (antipyretics?) **include fever as a treatable indication**. In pediatrics, this is a clear winner as an addition. For adults, it could be included as well, though adult patients with fever often can decide for themselves (and might already be taking something). One thing we must stress: this isn't just about comfort, but also about aligning with comprehensive patient care. For instance, extreme fevers can exacerbate dehydration or precipitate seizures; treating them is part of good care. Treating a fever can assist with downstream care as well. By reducing the fever, paramedics can help distinguish whether tachycardia and an unwell appearance are driven by fever alone or by something more serious, such as sepsis. Effective fever management can help patients look and feel better, normalize vital signs, reduce unnecessary interventions

later on, and may even shorten hospital stays. We'll let the evidence guide the recommendations!

Bottom line: *Treating fever via standing orders in the field is on the table as a new standard capability. It rides on the coattails of RPPEO's pediatric analgesia work (since it's the same meds). It's another step toward more holistic care: not focusing only on "big" interventions, but also on basic measures that make patients safer and more comfortable, and lead to better outcomes.*

Who's on the CPEP Panel?

As a final note, it's worth knowing **who is behind these recommendations.** After all, these decisions aren't made in a vacuum. CPEP is comprised of a diverse group, bringing multiple key perspectives to shape the outcome. The current panel members (as of early 2026) include:

- **Dr. Michael Austin** – RPPEO Medical Director (Panel Chair)
- **Benjamin De Mendonca** – RPPEO Program Director (Panel Sponsor)
- **Charlene Vacon** – RPPEO EMS Specialist (Panel Coordinator)
- **Erin Lindsay** – RPPEO Program Admin (Support)
- **Dena O'Hara-Brunet** – RPPEO Education Specialist (Combative Patient subject matter expert)
- **Zachary Cantor** – RPPEO Education Specialist (Analgesia subject matter expert)
- **James Bowen** – RPPEO Quality & Patient Safety Specialist
- **Megan Wall** – RPPEO Quality & Patient Safety Specialist (Panel researcher/analyst)
- **Dr. Sara-Pier Piscopo** – Associate Medical Director (Pediatrics), RPPEO and CHEO
- **Amanda Taylor** – Commander, Lanark County Paramedic Service (Service rep)
- **Nick LeRiche** – Deputy Chief, Renfrew County Paramedic Service (Service rep)
- **Rob Mallett** – Superintendent, Quality Assurance and Professional Standards, Ottawa Paramedic Service (Service rep)
- **David Marrows** – Advanced Care Paramedic, Frontenac Paramedic Services (Paramedic rep)

- **Florence Grenapin** – Primary Care Paramedic, Ottawa Paramedic Service (Paramedic rep)
- **Zacharie Labonté** – Primary Care Paramedic, Prescott–Russell Paramedic Service (Paramedic rep)
- **Melissa Cammuso** – Pharmacist, The Ottawa Hospital (Pharmacy subject matter expert)

(Note: "Paramedic rep" here means a paramedic chosen to represent the practitioner perspective at their scope on the panel. Service reps are chosen to represent service-side issues like logistics and operationalizing recommendations.)

This mix of expertise, from those who treat patients on the road to those who oversee logistics, training, and quality, is what gives CPEP its strength. Every decision comes after debate and input from all these angles. This collaborative approach makes for recommendations that are **evidence-informed but also practical** for real-world care.

In summary, the CPEP process (part of the larger provincial CMDR initiative) is yielding concrete guidance: drop what doesn't work (like IV acetaminophen), invest in what does (like methoxyflurane), and fill the gaps in patient care (pediatric pain and fever treatment). These changes are not final until approved at the provincial level, but by the time they reach that stage, they are well-substantiated by evidence, expert opinion, and field trials. The goal is that, as directives are updated in the coming year, front-line paramedics and service leaders will clearly see the *why* behind each change and most importantly, patients will benefit from clinical directives that enable better care.

CPEP and RPPEO will continue to communicate updates as this work progresses. If you have questions or feedback on these initiatives, please reach out to us at quality@RPPEO.ca. This collaborative effort is driven by the needs of our patients and providers, and we're excited to be moving paramedic practice forward, together.

OMC
Enhancing Collaborative Care

Activity Update
April 1, 2024 to March 31, 2025

8,826 Patches to OMC

53.5% of ACRs documented care for patients 65 years of age and older. This is up from 50.0% of calls in the Program's first 8 months.

37.6% of Patients Were Not Transported

This represents an increase in non transport from the first 8 months and an estimated system savings of over $1.6m.

69.8% of Patches Were Medical Consultations

30.2% of patches were for mandatory patch points.

27.4% of ACRs Documented VSA

VSA was the most frequently documented problem code followed by Neurological (11.7%) and General and Minor (10.8%).

7.3% of All Patches were Related to Patient Care Models

Summer months (July-September) demonstrated higher PCM use rates.

36.0% of Patches Involved Informal Education for Paramedics

This represents a relative increase of 17.3% from the first 8 month of the Program.

Over 600 Paramedic Surveys Completed!

Thank You!
To date, 614 surveys were completed by paramedics following their call to OMC. Feedback has been overwhelmingly positive with 97.1% of paramedics commenting that they valued the new patch system, focused attention from the physician, support for front line experience and knowledge of paramedic scope of practice.

Quality & **Patient Safety**

Suboxone® in the Field: A Refresher

Suboxone® (buprenorphine/naloxone) became part of the ALS PCS as an auxiliary treatment in 2023. Because auxiliary directives are optional, each service chooses when and how to bring them online. Over the past several months, a number of services in our region have moved from planning to implementation, and others are preparing to follow. That shift means Suboxone® is now a real part of the out of hospital landscape, even for medics whose own service has not activated the directive yet.

With that in mind, it's worth returning to the basics: Suboxone® is used to treat opioid withdrawal. Buprenorphine helps settle the uncomfortable and often distressing symptoms that make it difficult for people to focus, engage in care, or decide on next steps. The naloxone component is simply a safeguard. When taken as intended, the naloxone has no clinical effect. Together, the medication provides relief that helps people feel more stable and able to participate in decisions about their health. In out-of-hospital care, this can make the difference between a chaotic encounter and a productive conversation that supports safer follow-up.

As services in our region begin to implement the auxiliary directive, paramedics may find themselves patching to OMC for Suboxone® or answering questions from patients and colleagues. Even if you are not yet administering Suboxone® yourself, you are part of a system where this care is now taking place around you. A shared understanding across the region supports smoother handovers, clearer communication, and stronger continuity of care.

That is why RPPEO distributed a Suboxone® information package in December to paramedics in services implementing the medication. Those paramedics received an email with the resources below. We've also made these resources available at RPPEO.ca with a simple goal: make sure every medic has access to consistent, accurate, and practical guidance as this new treatment becomes more common in the field. The package offers a refresher on withdrawal, clarifies expectations around patching and documentation, and provides context for how Suboxone® fits into emerging substance-use-health pathways. It also supports quality and safety during these early stages of implementation by reducing uncertainty and helping everyone speak the same clinical language.

DECEMBER 2025

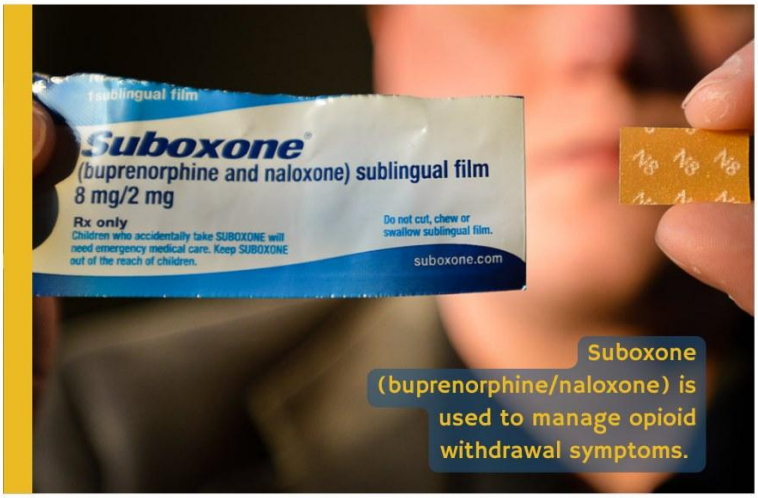
REGIONAL PARAMEDIC PROGRAM FOR EASTERN ONTARIO

VOLUME 2
ISSUE 2

Clinical Bulletin

Updated RPPEO Guidance on Opioid Use Disorder, Buprenorphine/Naloxone and Naloxone

Dr. Michael Austin, Regional Medical Director



Key Points: Paramedics in the RPPEO region are trained to provide Substance Use Health interventions including naloxone and buprenorphine/naloxone (Suboxone®). When Paramedic Services implement the auxiliary directive for Suboxone® administration, it is important for paramedics at the Service to integrate this medication into practice.

Death from accidental opioid toxicity remains common. Many opioid-dependent patients resort to street supply to alleviate withdrawal symptoms, leading to unintended overdoses. The street supply, often contaminated with potent synthetic opioids like fentanyl, is a major contributor to accidental overdose deaths. Prescription opioids such as methadone and buprenorphine effectively treat withdrawal symptoms, reducing reliance on dangerous street drugs and offering a proven mortality benefit for those with opioid use disorder. Naloxone is widely used to treat opioid toxicity and overdose.

Highlights

Buprenorphine/naloxone is a combination medication distinctly different from naloxone. Buprenorphine relieves the symptoms of opioid withdrawal. When taken sublingually as prescribed, only buprenorphine is active.

Naloxone addresses opioid toxicity and may induce opioid withdrawal when administered parenterally. Naloxone is not absorbed when taken sublingually or swallowed. Naloxone-precipitated opioid withdrawal can be uncomfortable for patients and should not be the goal of naloxone therapy; it is considered an adverse event.

Buprenorphine/naloxone, is an auxiliary directive in ALS PCS 5.4. Paramedic services may implement this auxiliary, and paramedics have received both training and authorization to provide Suboxone once implemented by their Service.

Visit RPPEO.ca or use the QR code below for more information.

DECEMBER, 2025

REGIONAL PARAMEDIC PROGRAM FOR EASTERN ONTARIO VOLUME 2.2

What is Suboxone®?

Buprenorphine/naloxone, known by the tradename Suboxone®, is a combination medication to treat opioid dependence. Administered sublingually, only the buprenorphine component is absorbed into the bloodstream. Buprenorphine is an opioid agonist that relieves withdrawal symptoms by occupying opioid receptors.

The small amount of naloxone in Suboxone® has been added to reduce the risk of people injecting the medication instead of taking it orally as prescribed. When Suboxone® is taken orally, the naloxone is not absorbed and has no effect, and therapeutic effects of buprenorphine predominate. However, if someone tries to inject Suboxone®, the naloxone will block any euphoric effects or "high" of injected buprenorphine. Naloxone is only added to the formulation as a deterrent for people who might want to inject the medication. Suboxone® cannot be used to reverse an overdose.

SUBOXONE® CAN ALSO BE VERY EFFECTIVE FOR PATIENTS WHO ARE EXPERIENCING OPIOID WITHDRAWAL FROM ABSTINENCE.

Suboxone® in Your Practice

- Assess and Document the COWS score before AND AFTER each administration of suboxone.
- Reassess for subjective changes in symptoms (does the patient feel better or worse?) and document this.
- Think of opioid withdrawal when a patient who uses opioids is experiencing unexplained pain, restlessness, agitation, vomiting - even if they have not received naloxone. People do not always volunteer that they are experiencing withdrawal: ask!
- Transport to hospital is *not* a required condition for Suboxone administration.
- Consider patching to OMC to discuss offering it for patients experiencing withdrawal due to abstinence (i.e. no naloxone was given).

Why Patching Is Required

Suboxone® is a controlled substance and its novel administration in the prehospital setting requires careful clinical oversight. Paramedics are expected to patch to a Base Hospital Physician (BHP) prior to administering Suboxone® to ensure patient eligibility, confirm clinical appropriateness, and receive real-time support. This temporary requirement is outlined in the Medical Advisory MA-2024-02, issued in March 2024, which provides guidance on BHP consultation for Suboxone® administration. While we are all learning about the field use of Suboxone®, the OMC consultation provides an opportunity to fine tune identification of eligible patients and share safety insights.

BY CONSULTING WITH OMC, YOU MAY BE ABLE TO IDENTIFY PATIENTS IN OPIOID WITHDRAWAL AND RECEIVE ORDERS FOR SUBOXONE IN CASES NOT COVERED BY THE DIRECTIVE.

Naloxone

Naloxone is an opioid antagonist that blocks the effects of opioids when taken parenterally. It is used to temporarily reverse an opioid overdose. However, complete reversal in opioid-dependent patients can be uncomfortable and may trigger acute behavioral emergencies, and reduce the likelihood a patient will engage in a plan that will meaningfully alter their disease trajectory. Naloxone-precipitated opioid withdrawal is an adverse event, prompting the need for careful titration by trained paramedics to maintain breathing without causing undue discomfort. Managing acute opioid toxicity with this approach should be the primary goal.

RPPEO CLINICAL BULLETIN 2.2: UPDATED GUIDANCE ON OPIOID USE DISORDER, BUPRENORPHINE/NALOXONE AND NALOXONE

Page 2 of 2

Even if your service has not yet adopted the Suboxone® directive, this knowledge helps you stay prepared. It allows you to recognise withdrawal when you see it and understand how neighbouring services are managing it. Most of all, as the region grows its capacity to treat opioid withdrawal in the field, this clinical information reminds paramedics of what's needed to support safe, coordinated practice.

Central Resources

RPPEO has created a repository of Suboxone® guidance and tools:

- Clinical Bulletin (Revised): an updated RPPEO Clinical Bulletin outlining eligibility, dosing, documentation, and harm reduction principles >>>Read Clinical Bulletin on OUD, Buprenorphine/Naloxone, and Naloxone
- MedicNEWS Articles: In-depth coverage of Opioid Use Disorder, Suboxone® implementation, and clinical considerations

1. "Suboxone Authorization for Paramedics: What You Need to Know"
2. "Paramedics on the Front Line of the Opioid Crisis"

- Frequently Asked Questions (FAQ): Answers to common questions about training, certification, and operational requirements >>> View and download FAQ
- Suboxone Administration - Paramedic Poster Quick reference for paramedics on patching, documentation, and patient safety >>>View and download poster
- OMC Video"*Suboxone: Clinical Overview and Patch Guidance"*
- RPPEO Training Module RPPEO Substance Use Health - Suboxone Training Module (first delivered during Fall 2024 CME): See MedicLEARN

Consultation and Support

- Patching to OMC remains mandatory before administration. This provides real-time clinical oversight and assists patient safety. >>>Read Medical Advisory on BHP Consultation for Consideration of Suboxone
- For questions or clarification, use MedicASK to connect with RPPEO educators and medical direction.

Your Feedback Matters

We encourage paramedics and services to share feedback on these resources and the implementation process. Your input helps us refine guidance and support tools.

Paramedicine Research

RPPEO study on sex differences in STEMI bypass accepted for ICEM 2026

A regional research project exploring potential **sex-related differences in the application of the STEMI bypass protocol** has been accepted for presentation at the **International Conference on Emergency Medicine (ICEM) 2026**, running **June 9–13, 2026** in Hamburg, Germany. ICEM is widely regarded as the world's largest and most influential emergency medicine conference, bringing together clinicians, educators, researchers, and system leaders from around the world.

This study focuses on a practical question for crews: **Do patients of different sexes experience the STEMI bypass pathway in the same way during real-world prehospital care?** In Eastern Ontario, the STEMI bypass directive allows eligible patients to be transported directly to the cardiac centre, reducing time to reperfusion. The pathway works best when paramedics rapidly recognize STEMI and apply bypass criteria consistently.

Cardiac literature (see below) shows that women (assigned female at birth) frequently present with less classic chest pain, more varied or subtle symptoms, and experience delays in diagnosis and treatment. Those differences can influence recognition, documentation, and whether a patient appears to meet bypass criteria. Because many prehospital systems in Canada have not routinely collected sex-specific data, this study aims to determine whether the bypass pathway

functions equitably for all patients, and whether directive/guidance prompts or education could improve recognition for non-classic presentations.

Although women may be more likely than men to experience additional or non-classic symptoms during myocardial infarction, **chest pain remains the most common symptom for women as well**. The key difference is that women are statistically more likely to present with *both* chest discomfort *and* a broader constellation of symptoms including shortness of breath, fatigue, nausea, back or jaw pain, or a general sense of being unwell. Misinterpretation of these differences has historically led to diagnostic delays and under-recognition. It is therefore important to emphasize that **women do have chest pain**, but **not all women describe it in the same way**, and some women report primarily non-chest-pain symptoms.

Using ambulance call reports and STEMI records from The Ottawa Hospital, the University of Ottawa Heart Institute, Montfort Hospital, and Queensway Carleton Hospital, the team examined three areas: (1) **bypass activation rates** by sex; (2) **reasons for non-bypass** and whether these differ by sex; and (3) **symptoms reported to paramedics**, exploring whether patterns vary across sexes. Findings will help identify opportunities for refining education and protocols, strengthening documentation, and supporting equitable access to bypass for all STEMI patients.

Research team

• Principal Investigator: **Dr. Ayesha Zia**, MD, FRCPC

• Study Coordinator: **Julie Sinclair**, MScN, RN, AEMCA

• Investigators and contributors: **Dr. Kerri-Anne Mullen,** PhD, **Dr. Michael Austin**, MD, FRCPC, DRCPSC (PTM); **Dr. Christian Vaillancourt,** MD, MSc, FRCPC, CSPQ; **Dr. Charlene Vacon**, BA(H), MA, PhD, AEMCA; **Dr. Morgane Laverdure**, MD, **Mitchell Nutbrown,** ACP, **Jane Marchand**; and **Benjamin de Mendonca**, P.Eng., MHA, Director of RPPEO.

The ICEM conference is the first one for the study team on this project. The team plans to publish results from the research project and share the learning with paramedics in Ontario following publication in a peer reviewed journal.

For paramedics, the results may translate into clearer prompts for atypical presentations, targeted refreshers on symptom clusters more common in women, and improved capture of reasons for non-bypass. As one of prehospital care's most time-sensitive pathways, sharpening STEMI recognition and transport decisions benefits every patient who depends on paramedic care.

Evidence and References

1. European Society of Cardiology: "Acute Coronary Syndrome in Women" Women often have atypical presentations, but chest pain remains common. Misinterpretation and selection bias contribute to delayed or missed diagnosis. https://www.escardio.org/Councils/Council-for-Cardiology-Practice-(CCP)/Cardiopractice/acute-coronary-syndrome-in-women

2. University of Western Ontario Medical Journal: "Atypical Presentation of MI in Women" Women more frequently present **without classic chest pain**, contributing to treatment delays, but this does *not* mean women never have chest pain. https://ojs.lib.uwo.ca/index.php/uwomj/article/view/13956

3. Open Heart (BMJ): "Exploring Sex Differences in MI Mortality" Mortality disparities between women and men are partially explained by **atypical symptoms** and **delayed treatment**, not by absence of chest pain. https://openheart.bmj.com/content/12/2/e003517

4. American Heart Association / ACC: "AMI in Women" Women are more likely to have non-chest-pain symptoms *in addition to* chest pain, leading to under-recognition. https://www.acc.org/latest-in-cardiology/ten-points-to-remember/2016/01/26/15/08/acute-myocardial-infarction-in-women

5. Journal of the American Heart Association: "Sex Differences in Prehospital Delays in STEMI"Women experience longer delays despite having comparable documented symptoms; chest pain remains a key clinical variable used in analysis. https://www.ahajournals.org/doi/pdf/10.1161/JAHA.120.019938

Have a Say

Paramedic representatives at the Ontario Base Hospital Group would like to hear your thoughts on the current paramedicine landscape. Submit your concerns and ideas to your OBHG reps today!

Visit this link to submit your comments.

MedicNEWS Back Issues

You can browse the MedicNEWS catalogue or find articles on topics you're interested in by visiting the MedicNEWS page on RPPEO.ca.