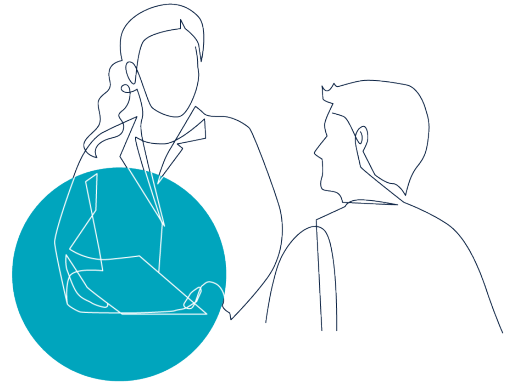


Perinatal Mental Health and Substance Use: Clinical Insights from Pregnancy Through the Newborn Period

March 30, 2026 | 1830–2000 PT



THE UNIVERSITY OF BRITISH COLUMBIA

Continuing Professional Development

Faculty of Medicine

TERRITORIAL ACKNOWLEDGMENT

We acknowledge that UBC CPD is located on the traditional, ancestral and unceded territory of the Skwxwú7mesh (Squamish), x^wməθkwəyəm (Musqueam), and Səlílwətaʔ/Selilwitulh (Tseil-Waututh) Nations.

What is your relationship to the territory or the land that you're on?



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FUNDING ACKNOWLEDGEMENT

Funding for this webinar has been provided by the Perinatal Community of Practice, an initiative of the Shared Care Committee and Joint Collaborative Committees.



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Joint
Collaborative
Committees

DR. HAYLEY BOS

MD, FRCSC, OB-GYN

Maternal Fetal Medicine in Victoria;
Co-chair, Perinatal Community of Practice



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INTERESTED? STAY CONNECTED!

The Perinatal Community of Practice (CoP) works to unite physicians, midwives, and perinatal care providers across BC by equipping them with practical tools, skills, and resources. Through collaboration and knowledge, they work to advance culturally safe, high-quality care for all patients.

Scan the QR code to stay informed about:

- Perinatal care forums and networking opportunities
- Educational webinars hosted with UBC CPD
- Project highlights



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LEARNING OBJECTIVES

1. Identify key perinatal mental health conditions and substance use patterns in pregnancy, including associated risk and protective factors.
2. Describe the clinical implications of in-utero substance exposure for newborns, including assessment and early care considerations.
3. Apply trauma-informed, family-centred, and interdisciplinary approaches to support coordinated care for pregnant individuals and newborns affected by mental health concerns and substance use.



DISCLOSURES

Speakers

- **Dr. Hayley Bos (moderator):** Received payments from Pfizer for presentations for local community advisory board for RSV vaccination. **These topics will not be discussed in this webinar.**
- **Dr. Phillippa Houghton:** Received payments from Shared Care, Physician Quality Improvement. **There is no potential conflict of interest** between this funding and this webinar.
- **Dr. Charissa Patricelli:** Voluntary role with Canadian Society of Addiction Medicine Conference Planning Committee 2025 and 2026; Perinatal Mental Health and Substance Use Conference Planning Committee 2026. Received funding CIHR (Canadian Institute of Health Research) \$100,000 Bridge Funding Grant for POETIC (Perinatal Opioid Exposures, Trajectories, Insights and Concentrations WHRI (Grant Funding) IOAT-App Research study \$25,000 Catalyst Grant. There is **no potential conflict of interest** between this funding and this webinar.
- **Dr. Marie-Noelle Trottier-Boucher:** Nothing to disclose



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DISCLOSURES

Planning Team

- **Dr. Bruce Hobson:** Has received funding from UBC CPD, Doctors of BC, PHSA, PainBC, Cowichan Valley Division of FP, Qathet Division of FP as a Medical Lead, Director, and Committee Member. There is **no potential conflict of interest** between this funding and this webinar.
- **Dr. Tracy Monk:** Received payments from PathwaysBC as Medical Director. There is **no potential conflict of interest** between this funding and this webinar.
- **Dr. Kathleen Ross (moderator):** Received payments from the Perinatal Community of Practice, Shared Care Committee as Co-Chair and PathwaysBC as the Co-Chair of their Board. There is **no potential conflict of interest** between this funding and this webinar.
- **Dr. Chris Morrow:** nothing to disclose
- **Stephanie Din, Shreyasi Dutiya, Caldon Saunders** are employees of UBC CPD.

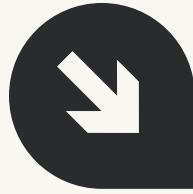


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The Interplay of Perinatal Mental Health and Substance Use

Recognizing distress, reducing stigma, and creating opportunities for care





Dr. Phillippa “Pip” Houghton

MBBS | CCFP | Perinatal Mental Health Certified | CanReach Mental Health in Pediatric Primary Care Certified | Provincial Opioid Addiction Treatment Support Program | BCAPOP Perinatal Substance Use Training | Fair Play Facilitator



Perinatal Mental Health Conditions Are Common →

84%

Of postpartum people report high levels of stress after having a baby

1 in 5

Globally, 1 in 5 will experience a perinatal mood or anxiety disorder

23%

Of birthing people, 23% report clinically significant mood or anxiety symptoms

Likely an underestimate

As many cases remain undiagnosed and untreated



Postpartum Vulnerability



Sleep Deprivation

Chronic sleep deprivation impacts mood, worsens anxiety and thought intrusion and increases the risk of suicidal ideation in people with PPD

Hormonal Fluctuation

Rapid changes in hormones from pregnancy to postpartum, some people are more sensitive to this shift than others

Identity Change

Transition to parenthood, overwhelm, distribution of mental load within the family unit

Isolation

Reduced supports, increased demands, separation from peers and usual activities that promote wellbeing and resilience



Substance Use and Mental Health Symptoms



Increase risk

Depressive symptoms increase risk of substance use

Coping Strategy

Often used to manage anxiety, insomnia, stress

Common Substances

Cannabis, alcohol, nicotine

Clinical Signal

Distress is here, more screening is needed



Pre-Existing Substance Use



Higher Risk

Substance use disorder in pregnancy increases risk, both obstetric risk as well as mental health risk

Motivation To Change

Pregnancy can be a profound opportunity for behavioural change and may represent a window a to recovery if the right supports are in place

Stigma is High

Disclosing or discussing substance use in pregnancy can be very scary, stigma is high

Trauma Informed Care

Trauma is high in these patients and they are vulnerable to added, compounded trauma during their pregnancies, use your TIC lense



Recovery is Vulnerable



Early Recovery

Loss of familiar coping strategies

Emerging symptoms

Anxiety, insomnia, thought intrusion, depression, hypervigilance

Postpartum Risk

Postpartum pain, sleep deprivation, stress can all contribute to destabilizing recovery

Relapse Risk

Unrecognized and untreated distress increase risk of relapse



Screen Often



Frequent Care

You have regular, reoccurring touch points, every encounter is an opportunity for brief screening

Prenatal Screening

Early intervention and care planning

Postpartum Screening

Remember to book your well-parent visits alongside every well-baby visit, this will trigger you to dedicate time to check-in with the parent

Baby Care

Anyone involved in baby care continuum (maternity care provider, primary care, public health, pediatrics) is a touch point for brief screening



Ask without Stigma



Start Gently

Ask open, normalizing questions

Normalize Distress

Make it clear that all new parents struggle and you check-in with everyone

Then Tools

If indicated after a gentle inquiry, reach for your tools (EPDS, PHQ-9, GAD-7), but make sure to sign post and explain the purpose

Create Safety

Listening allows space for disclosure



Validate, reassure, respond



Validate

Acknowledge the distress/disclosure without judgement

Reassure

Normalize their experience, make sure they know they are not alone

Respond

Offer more in depth screening, detailed assessment, connection with services



The perinatal period is a time of extraordinary joy and transformation, but also a time of real fragility. Sometimes the most powerful intervention we can offer isn't a medication or a referral, but simply taking the time to ask about distress and how someone is coping.



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TERMINOLOGY

Substance Exposed Newborn

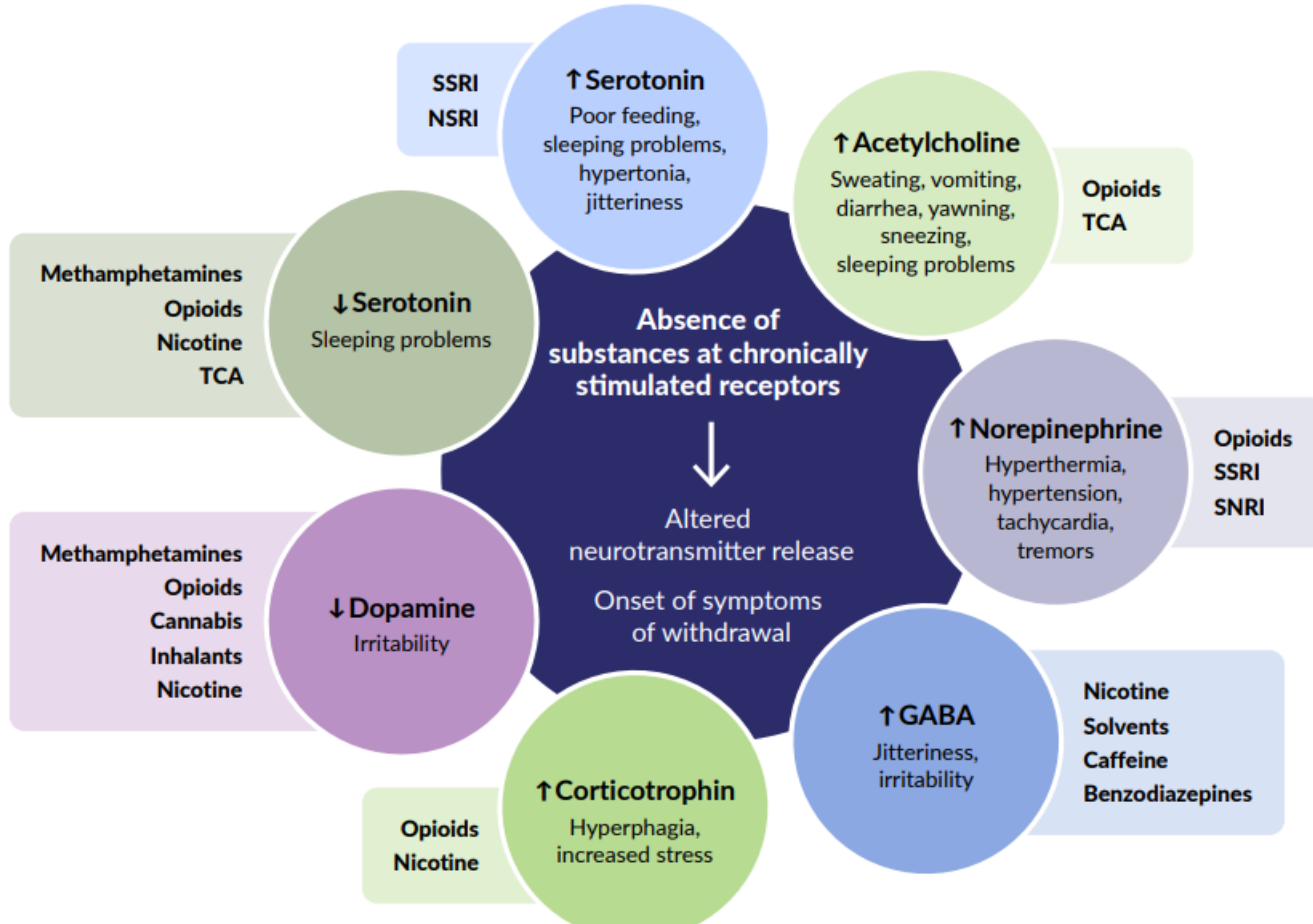
Neonatal Abstinence Syndrome (NAS)

Neonatal Opioid Withdrawal Syndrome (NOWS)



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SUBSTANCES & WITHDRAWAL



TIMING OF WITHDRAWAL

TABLE 1 Onset, Duration, and Frequency of NAS Caused by Various Substances

| Drug | Onset, h | Frequency, % | Duration, d |
|---------------------------------|----------|------------------------|------------------|
| Opioids | | | |
| Heroin | 24–48 | 40–80 ²⁷ | 8–10 |
| Methadone | 48–72 | 13–94 ³⁷ | Up to 30 or more |
| Buprenorphine | 36–60 | 22–67 ^{46,48} | Up to 28 or more |
| Prescription opioid medications | 36–72 | 5–20 ^{56,60} | 10–30 |
| Nonopioids | | | |
| SSRIs | 24–48 | 20–30 ⁶⁴ | 2–6 |
| TCAs | 24–48 | 20–50 ⁶⁴ | 2–6 |
| Methamphetamines | 24 | 2–49 ¹⁰¹ | 7–10 |
| Inhalants | 24–48 | 48 ⁷⁰ | 2–7 |



Table 1. Adapted Kocherlakota P. (2014). Neonatal Abstinence Syndrome. *Pediatrics*. 134(2); e547-e581. doi:10.1542/peds.2013-3524.

VARIABLES

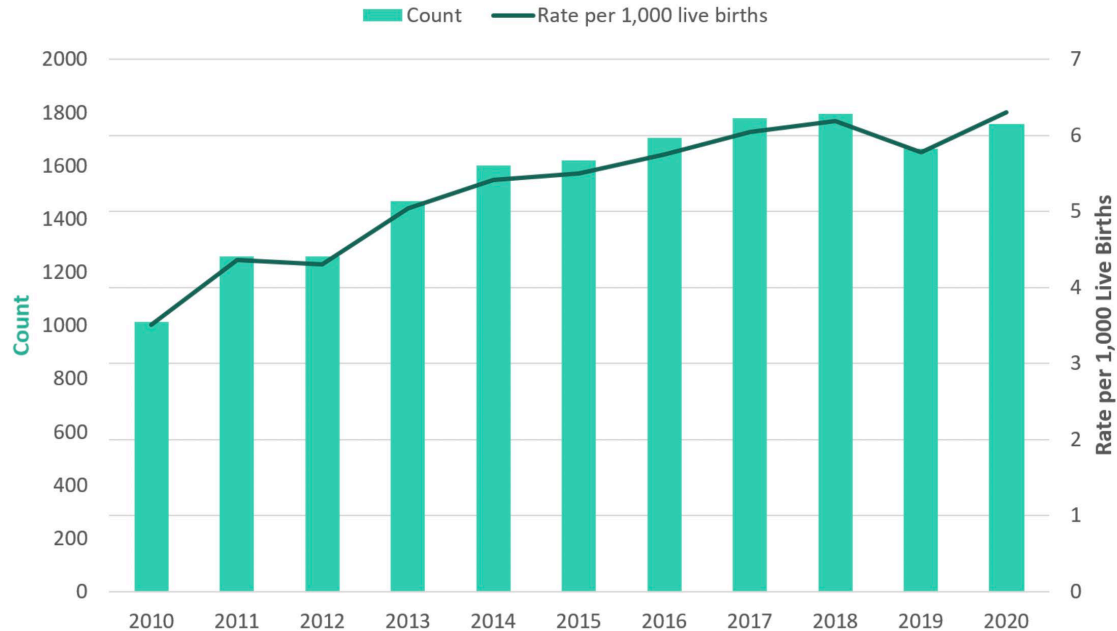
- **Type of opioids exposed to**
- **Time of last dose**
- **Duration of exposure**
- **Total dose accumulation**
- **Mother, baby & placenta pharmacodynamics**
- **Gestational age**
- **Presence of other risk factors**



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EPIDEMIOLOGY

Figure 1: Counts and crude rates of hospitalizations for neonatal abstinence syndrome from 2010 to 2020, by calendar year



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TAKEAWAY # 1

- **We need to acknowledge the complexities and variables in neonatal withdrawal and shift attention to how the infant is functionally impacted.**



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EVALUATION

| Modified Finnegan scoring tool | ESC care tool |
|---|---|
| Designed for infants with opioid exposure only | Can be used for infants with any substance exposure |
| Focuses on physiologic symptoms & signs of withdrawal | Focuses on how withdrawal sx impact a baby's function |
| Requires infant to be disturbed | Does not require infant to be disturbed |
| Nursing/health care provider focused tool | Parent integral to assessment & supportive treatment |
| Lengthy & complicated | Short & simple |



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Eat Sleep Console



Can the baby eat?

- Unable to coordinate feeding within 10 minutes of cues AND/OR
- Unable to sustain feeding for age-appropriate duration at breast OR take in appropriate volume



Can the baby sleep?

- Unable to sleep for 1 hour after a feed



Can the baby be consoled?

- Unable to be consoled (and stay) within 10 minutes



Weight lost more than 10%?



**Nurse + Parent/
Caregiver Huddle:**
Maximized Non-
Pharmacological?

Due to withdrawal?



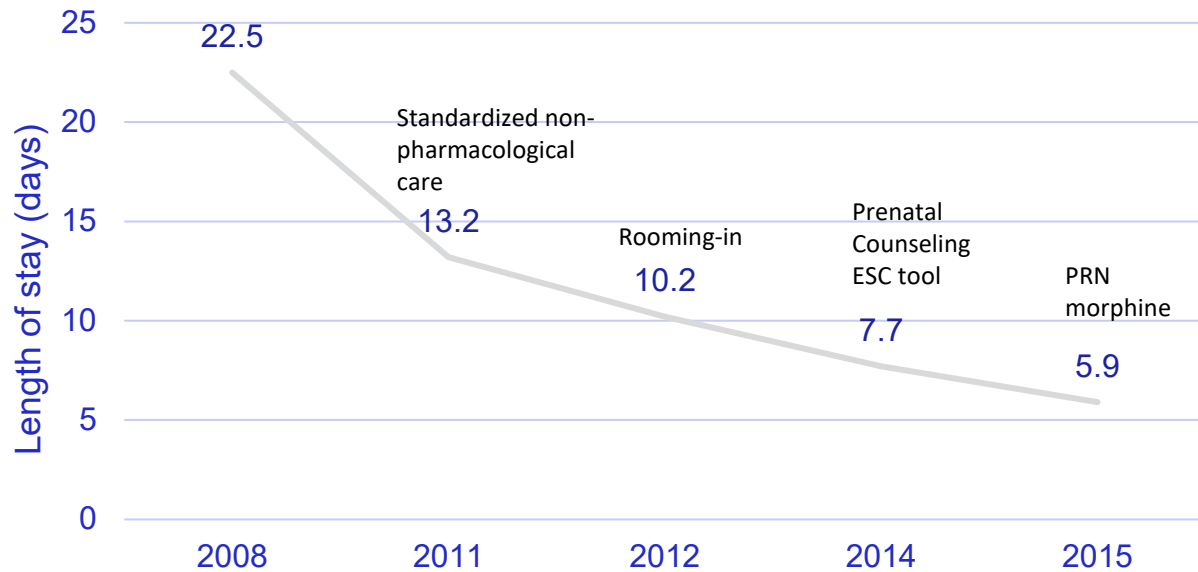
Yes

**Full Team
Huddle:**
Pharmacological
management
needed?

| NON-PHARMACOLOGICAL CARE INTERVENTIONS |
|--|
| Rooming – in |
| Parent/caregiver presence |
| Optimal feeding at early hunger cues |
| Cue based care |
| Skin-to-skin contact |
| Baby held by parent/care giver |
| Safe swaddling |
| Quiet, low light environment |
| Non-nutritive sucking/pacifier |
| Rhythmic movement |
| Additional help/support in room |
| Parent/caregiver self-care and rest |
| Other (Describe in Narrative Notes) |



EVALUATION & SUPPORT: EAT, SLEEP & CONSOLE



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- Morphine treatment decreased from 98% to 14%

TAKEAWAY # 2

- **Eat Sleep Console is an evidence informed, functional assessment tool that shows a positive change in the way we care for opioid exposed infants.**



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PHARMACOLOGICAL TREATMENT

Table 3. Pharmacokinetics of Opioids Used for Neonatal Abstinence Syndrome.^{4,7}

| | Buprenorphine | Morphine | Methadone |
|-----------------|---|---|---|
| Clearance | 3.5 L/h/kg | 75.3 L/h/70 kg | 8.94 L/h/70 kg |
| Half-life | 11 hours | 9.0 ± 3.4 hours (preterm neonates) 6.5 ± 2.8 hours (term neonates) 2.0 ± 1.8 hours (infants and children) | Highly variable; 3.5 to 60 hours |
| Bioavailability | 7% (sublingual) | 48.5% | Variable; 41% to 99% |
| Metabolism | N-dealkylation via CYP3A4 to norbuprenorphine | Glucuronidation to morphine-3-glucuronide and morphine-6-glucuronide | N-demethylation via CYP3A4, CYP2B6, and CYP2C19 to inactive metabolites |

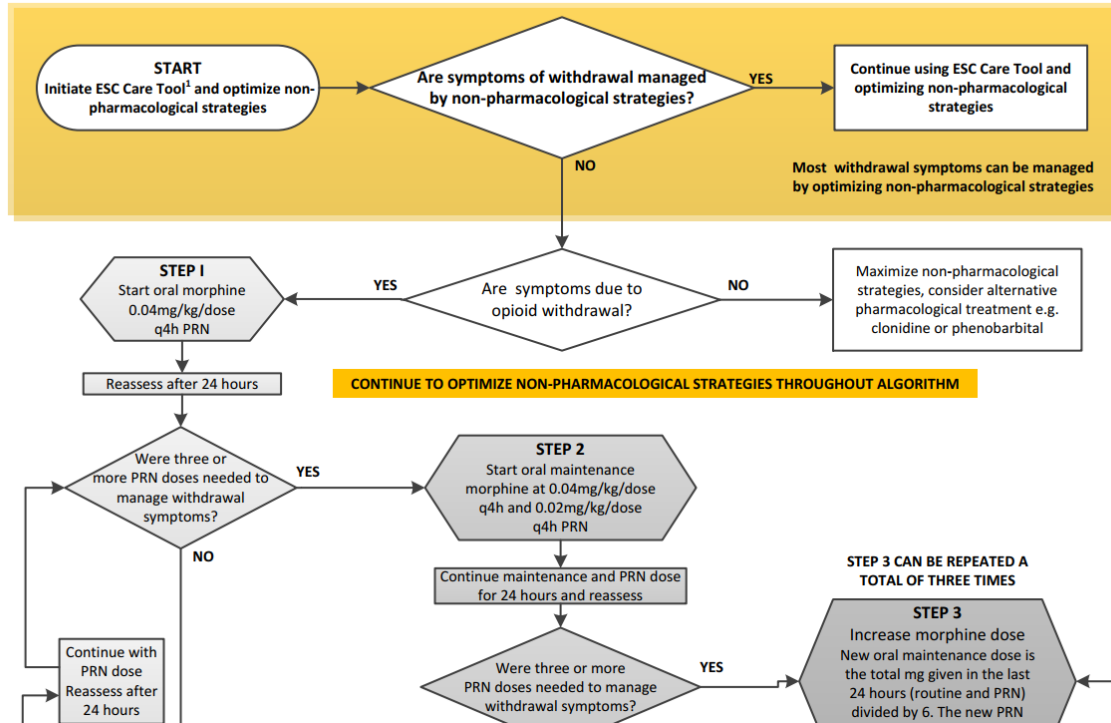
Abbreviation: CYP = cytochrome P450 enzyme.

Adjuvant:

- Clonidine
- Phenobarbital

PHARMACOLOGICAL TREATMENT: PRN MORPHINE

TREATMENT ALGORITHM OF THE SUBSTANCE EXPOSED NEWBORN



TAKEAWAY # 3

- Pharmacological treatment is available when non-pharmacological options have been optimized.



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RESOURCES



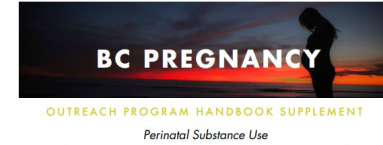
<https://elearning.ubccpd.ca/>



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RESOURCES

PRN morphine education video



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And so much more @
<http://www.perinataleservicesbc.ca/health-professionals/education-development/online-education!>

Perinatal Mental Health and Substance Use: Clinical Insights from Pregnancy Through Newborn Period

Charissa Patricelli, MD, CCFP(AM), FCFP, DABAM, FASAM
Research Director Perinatal Substance Use, BCWH
Clinical Associate Professor, UBC Dept of Family Practice
Educational Co-Lead UBC Health Clinic

Our work takes place on the traditional, ancestral and unceded territory of the Coast Salish peoples – x^wməθk^wəy̓əm (Musqueam), Sk̓w̓x̓w̓ú7mesh (Squamish), Stó:lō and Səlílwətaʔ/Selilwitulh (Tseil-Waututh) Nations.



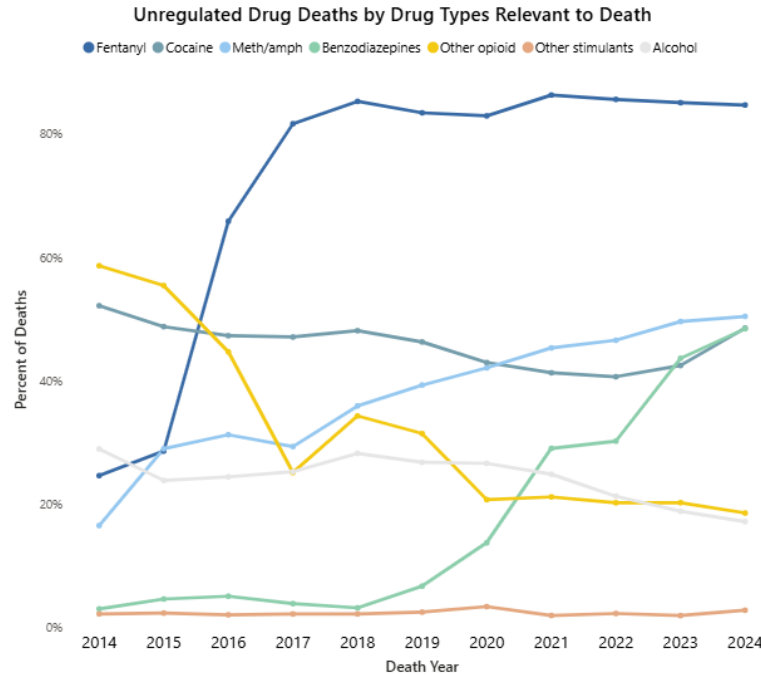


Dr. Elder Roberta Price

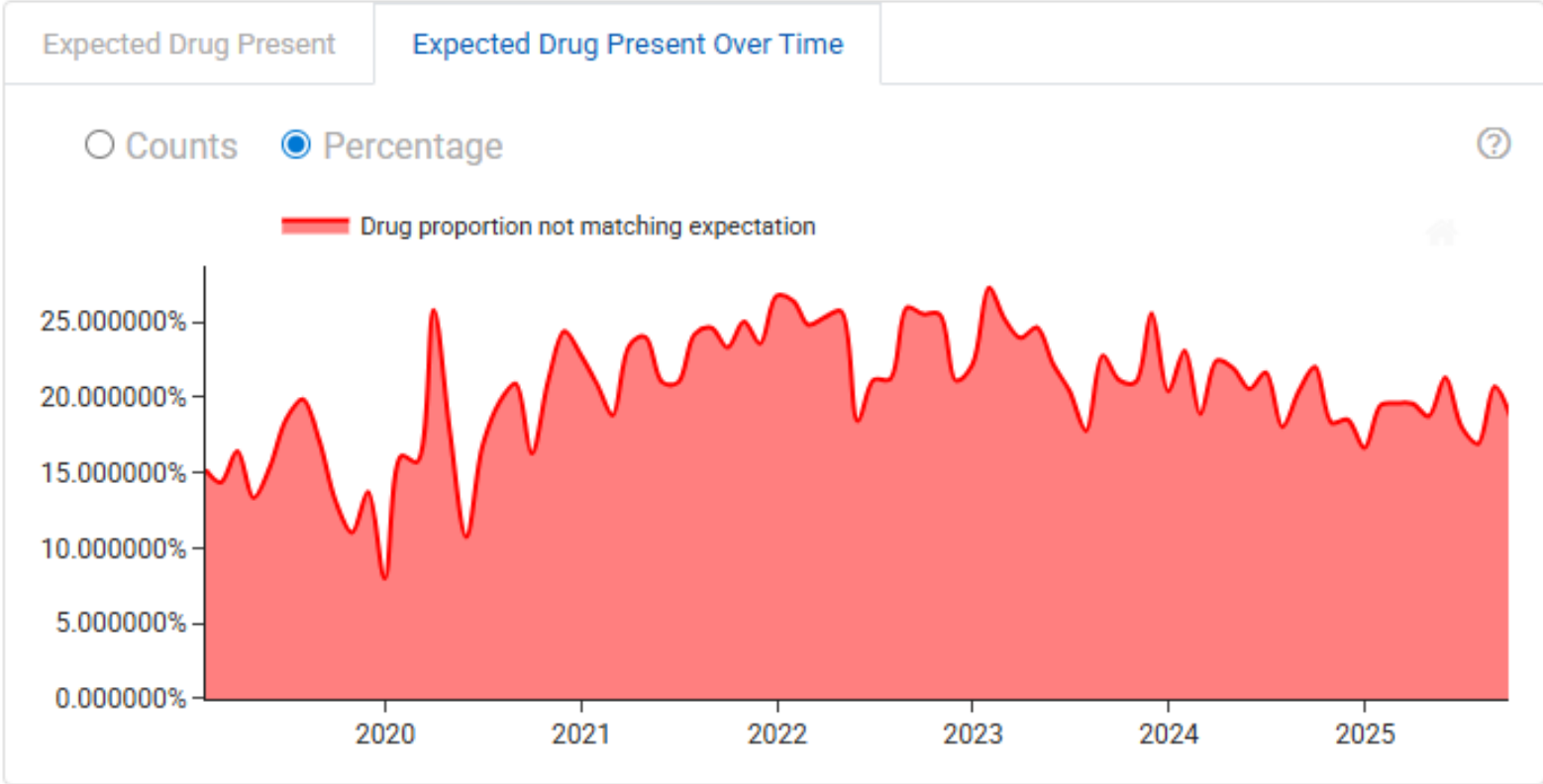
POETIC Network Matriarch Elder

British Columbia Coroners Service. 2025

Unregulated drug deaths



Contaminated Supply



Primary Goal of Prenatal Care in SUD is Trust

- Build Engagement and Trust thru Compassion, Listening and Suspending Stigma
- Build a 'wrap a round' with people they already trust
- Determinants of Health: Food, Shelter, Safety
- Keep the door open despite ongoing use, relapses, trauma responses
- Demonstrate hope
- Tx SUD as a health issue; a symptom of trauma and mental health disorders
- Be an advocate; the system needs it

Rooming-In is Associated With:



- Reduced morphine treatment length
- Decreased NICU admissions
- Lower hospital costs for infants born with Nows
- Decreased apprehension rates
- Increased engagement with substance use treatment

- 2007: Rooming-in compared with standard care for newborns of mothers using methadone or heroin Ronald R. Abrahams MD CCFP
FCFPC S. Ann Kelly MPH Sarah Payne RN MA Paul N. Thiessen MD FRCPC
Jessica Mackintosh Patricia A. Janssen PhD

Neonatal Opioid Withdrawal Syndrome (NOWS) Monitoring Not Requiring NICU Admissions: Examining Rooming-In as Standard Care

ORIGINAL STUDIES

Neonatal Opioid Withdrawal Syndrome (NOWS) Monitoring Not Requiring NICU Admissions: Examining Rooming-in as Standard Care

Patricelli, Charissa J. MD^{1,2,3,4}; Ricci, Taylor A. BScH^{2,5}; Doerksen, Justina MN, NP(F)⁶; Ziabakhsh, Shabnam PhD^{2,3}; Everett, Rob MD⁵; Cattoni, Eric MD^{1,2,3,4}; Hamilton, Danica RN, MN, MBA³; Carter, Nicole RN^{2,3}; Wittmann, Lani RN³; Berkman, Jola RN, BSN, BSc(med)Hons, Med (ALGC)⁷; Gordon, Shanlea MA^{1,2}; Abrahams, Ron MD, MSc⁴

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OPEN

Methods

- All infants born/admitted to BCWH, = or >35 weeks GA diagnosed with NOWS and given MOS (Morphine Oral Sulfate) to manage withdrawal over a 5 year period were reviewed (82 infants)
- Data gathered included morphine doses, duration of pharmacologic treatment, vital signs, clinical assessments if RR <40 or >60, reasons for Neonatal Intensive Care Unit (NICU) admission/transfer and subsequent length of stay
- Vitals reviewed included all data from NICU (continuous monitoring and FIR (q4 vitals while on MOS)

Summary of Findings

- Infants >35 wk and >2400g on MOS for NOWS management without comorbidities did not demonstrate Respiratory Rates < 30 bpm or SaO₂<95%
- These infants can be safely managed without continuous cardiorespiratory monitoring outside the NICU setting, promoting the Rooming-In model of care and mitigating financial burden on the healthcare system.
- RR 30-40 and 60-70 was very common in the chart review and did not correlate with change in SaO₂ in the FIR patients or NICU and had no associated adverse outcomes



Breast/Chestfeeding is an infant and parent human right

- Unequaled method of infant feeding
 - Health benefits for adults and children alike
 - "Women have the right to accurate, unbiased information needed to make an informed choice about breastfeeding
 - "Children have the right to... the highest attainable standard of health, of which breastfeeding must be considered an integral component."
-
- United Nations, 2016



The Problem

Inconsistent messaging and practices for safe breast/chestfeeding in the context of:

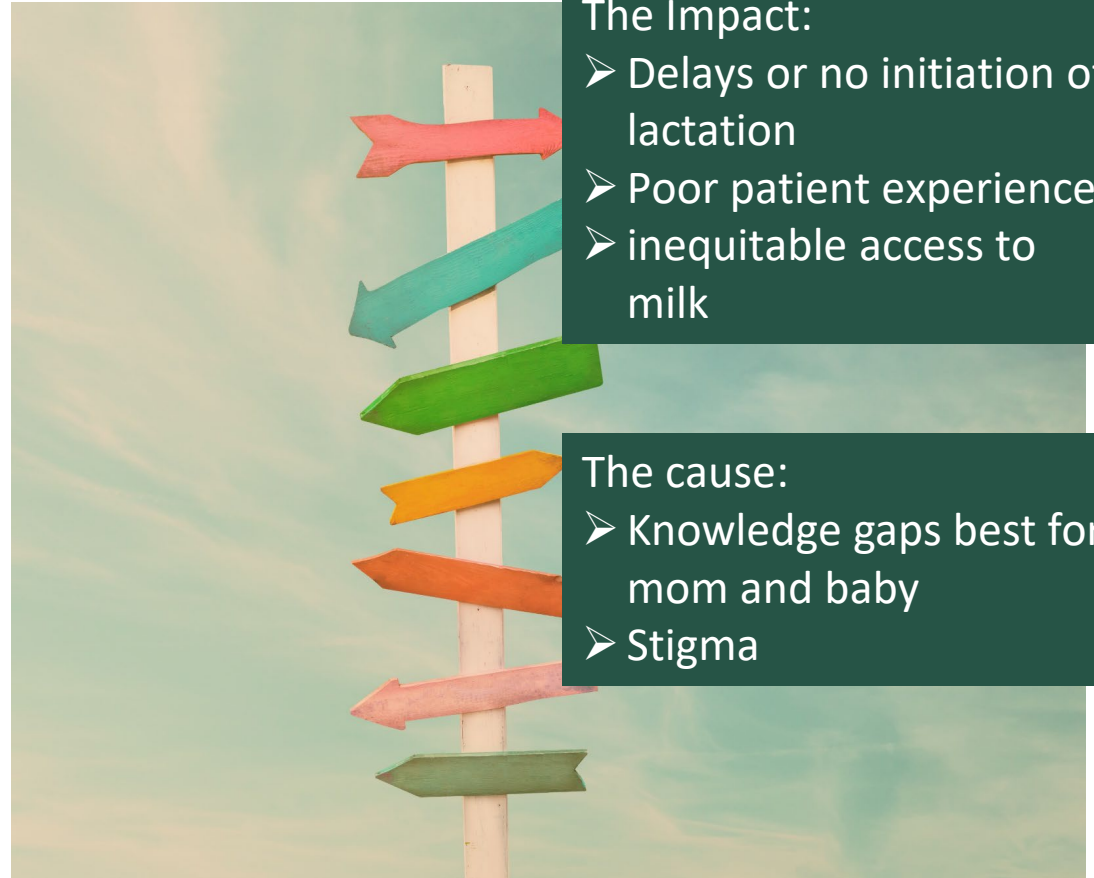
- Opioid agonist therapy
- Recent access to the unregulated supply before delivery
- Relapse or intermittent use in the postpartum period

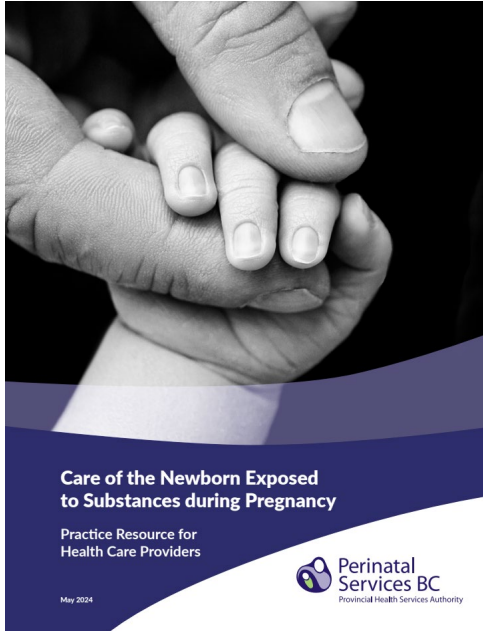
The Impact:

- Delays or no initiation of lactation
- Poor patient experience
- inequitable access to milk

The cause:

- Knowledge gaps best for mom and baby
- Stigma





Mothers/parents are encouraged to breastfeed or chestfeed unless there is concern related to continued substance use or other medical contraindication present such as HIV.

Informed Decision Making about Infant Feeding and Unregulated Substance Use

B



Benefits

All known benefits to parent and infant of human milk feeding, PLUS

Parent:

Continued motivation to stay substance-free.

Infant: Can delay and reduce withdrawal symptoms. less pharmacotherapy, and shorter hospitalization)

R



Risks

Reduced parental ability to respond to feeding cues

Infant exposure to substance / contaminated supply, including possible impact on brain development)

Infectious risk (HIV, Hepatitis C)

Opioids

Sedation, respiratory depression, withdrawal, associated feeding difficulties

Benzos

Sedation, respiratory depression, withdrawal, inadequate weight gain

Stimulants

GI and cardiorespiratory symptoms, hypothermia, irritability, tremors, sleep disturbance, seizures

A



Alternatives *skin to skin

Skin to skin care

Maintain lactation by “pump and dump” milk

Feeding alternatives: previously stored expressed milk or formula; bottle, cup feeding

I



Intuition / Information

“What do you feel and think about these options?”

Harm reduction approaches

N



Nothing / Next Steps

What do you need next? Time, talk, information?

Relapse plan

- Safe childcare
- Lactation support (electric pump, bottles, storage info)

HUMAN MILK FEEDING IN THE CONTEXT OF UNREGULATED SUBSTANCE USE

GUIDELINE

Due to the current toxic and contaminated drug supply, and until there is further evidence of infant safety, **current recommendations are to encourage breastfeeding parents to pump and discard breast milk for a minimum of 96 hours after substance use with unregulated stimulants or opioids.**

This recommendation is based on the available data on methamphetamine clearance from human milk (Chomchai et al., 2016) and is endorsed based on expertise from a multidisciplinary panel of subject matter experts, including Perinatal Addictions Service, Pediatrics, and Pharmacy.

Note: There is no information on unregulated opioids, benzodiazepines, and other contaminants in breastfeeding, therefore the risk of exposure of the infant to unregulated substances is not zero after 96 hours. This decision requires full disclosure and a shared decision-making conversation with the patient, including providing infant monitoring parameters.

HUMAN MILK FEEDING IN THE CONTEXT OF UNREGULATED SUBSTANCE USE

GUIDELINE

Recommendations

For safe breastfeeding in patients with a SUD involving unregulated opioids or stimulants, the recommendations are:

- A. **All patients should have a thorough assessment of drug history, HIV status, and ongoing HIV risk factors** and if relevant, referral for discussion / prescription of PrEP.
- B. **All patients should be offered antenatal breastfeeding/infant feeding education.**
- C. **Breastfeeding/EBM is not recommended for infants of parents who are HIV positive. However, there are ways to support people living with HIV who have a suppressed viral load and who can be very adherent to their own medications to breastfeed in an evidence-informed manner.**
- D. **Human milk feeding is not recommended in patients who regularly access the unregulated drug supply.**
- E. **Human milk feeding is encouraged for patients stabilized on Opioid Agonist Therapies, including Methadone, buprenorphine-naloxone (Suboxone), slow-release oral morphine (Kadian), and [injectable OAT \(iOAT\)](#), if other risk factors are absent. Please see [informed consent document](#) regarding limited safety data on breastfeeding and iOAT, and infant monitoring requirements.**
- F. **Monitor infants for signs of intoxication or neonatal abstinence syndrome (NAS), including sedation and respiratory depression, or neurologic, gastrointestinal, and musculoskeletal disturbances as described in the Eat, Sleep, Console Care Tool (PSBC, 2024).**
- G. **Promote rooming-in and skin-to-skin contact, supported by [Caregiver Behavioral Assessment Form](#) on SHOP.**

Education, Celebrate and Normalize Birth

Parent/family antepartum
education

Dyad/family togetherness

Decrease stigma





Search Substance Exposed Newborn in Pathways

Search

-  **Consultants and Wait Times for** Substance exposed newborn
-  Substance Exposed Newborn Care Patient Information (Perinatal Services BC)
-  Substance Exposed Newborn Care - Practice Resource Guide - 40 pages (PSCBC)
-  Substance Exposed Newborn Treatment Algorithm (Perinatal Services BC)
-  Substance Exposed Newborn Care - Eat, Sleep, Console Care Tool (Perinatal Services BC)
-  Families in Recovery (FIR) Program - Fir Square - Pregnant with Substance Use [BC Women's Hospital & Health Centre (BCWH)]



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