

CONTINUUM OF CARE FOR PREGNANT PERSONS DIAGNOSED WITH OPIOID USE DISORDER

COMPREHENSIVE SUMMARY
& CLINICAL TOOLKIT



PRESENTED BY:



IN COLLABORATION WITH:



ACKNOWLEDGEMENTS

We respectfully acknowledge that the comprehensive summary and toolkit entitled “Continuum of care for pregnant persons diagnosed with Opioid use disorder” was developed with the Reproductive Care Program of Nova Scotia, in collaboration with IWK Health and Nova Scotia Health, on the ancestral and unceded territory of the Mi’kmaq People. We are aware of the historical and ongoing harms that have been perpetuated around reproductive care and opiate use with Indigenous Peoples in particular. The Truth and Reconciliation Commission as well as other landmark documents call for action of improved health care for Indigenous Peoples including efforts to improve maternal and infant health experiences and outcomes, along with education inclusive of skills-based training reflective of intercultural competencies and anti-racism principles. Our resource has been thoughtfully and reflectively curated considering the continued challenges and compounding stigma that Indigenous pregnant persons diagnosed with Opioid Use Disorder face daily. Section one of this resource sets the stage in developing a foundation of care that is grounded in trauma-informed, harm reduction and culturally safe care. We further expand on this foundation, by bringing to light the historical experiences of Indigenous peoples in the perinatal space, and by highlighting the compounding stigmas experienced by pregnant persons diagnosed with opioid use disorder who identify as Indigenous. We are committed to enact the Truth and Reconciliation Commission of Canada’s Calls to Action, through intentional and reflexive education by way of this comprehensive summary and toolkit. We are all treaty people.



ACKNOWLEDGEMENTS

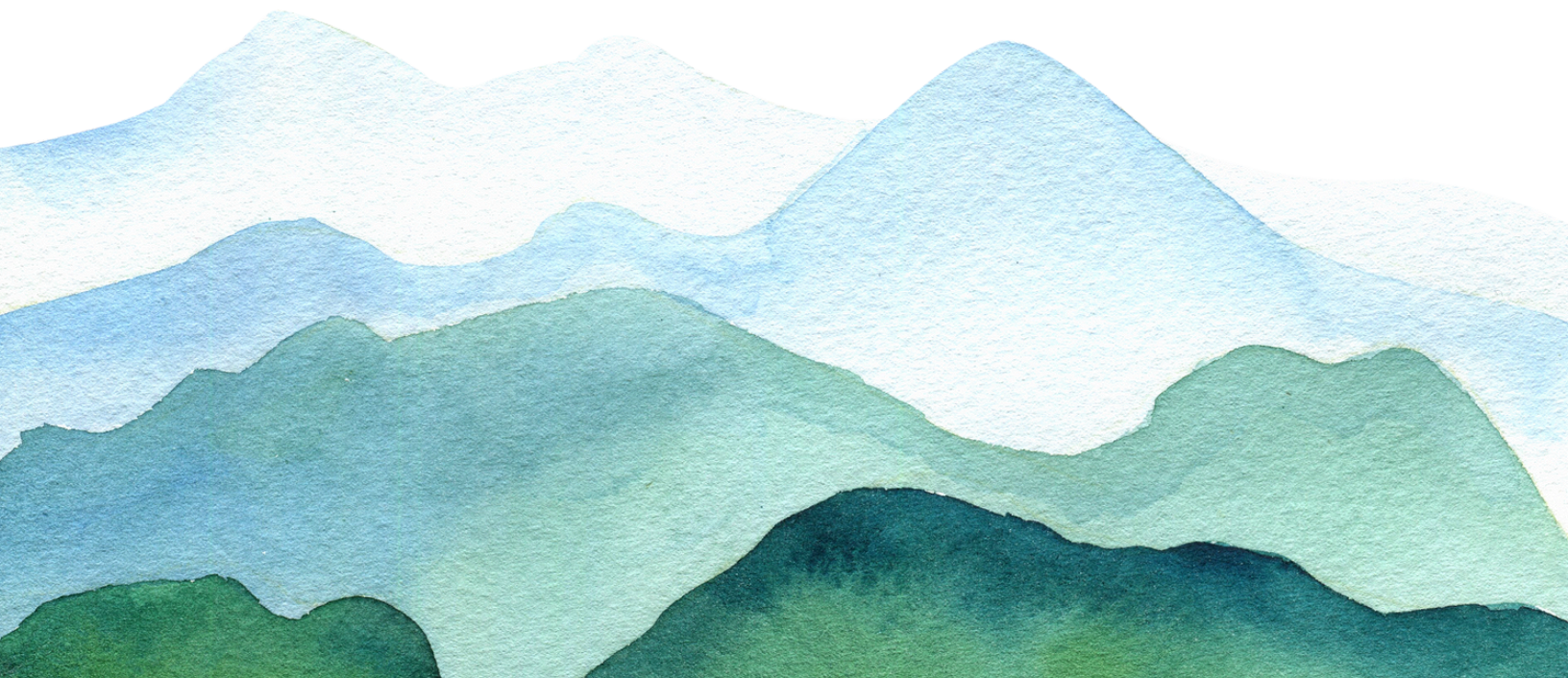
We acknowledge that the comprehensive summary and toolkit, "Continuum of Care for Pregnant Persons Diagnosed with Opioid Use Disorder," was collaboratively developed in a province profoundly enriched by the historic and present contributions of African Nova Scotians with ancestral ties to the 52 historic Black communities in Nova Scotia, and the broader African descent community who are making contributions to Black culture in this province. We acknowledge the legacy and contributions to the province's culture, heritage and history of African Nova Scotian people for over 400 years. The foundation of our comprehensive summary and toolkit is created within and enriched by the great legacies of African Nova Scotian people. We acknowledge the historical and ongoing inequities experienced by this community from anti-black racism. Due to the compounding stigmas and inequities faced by pregnant persons diagnosed with opioid use disorder identifying as Black or of African descent, a reflective and intentional approach was taken to ensure knowledge within this resource would not further perpetuate the negative and harmful experiences of the perinatal African Nova Scotian population. Our comprehensive summary and toolkit are part of our commitment to supporting African Nova Scotian communities and actively working towards rectifying the inequities and injustices experienced, through development of educational resources reflective of anti-racist language and including consulting experts from African Nova Scotian communities.



CONSIDERATIONS TO ADVANCE EQUITY IN PERINATAL HEALTH

To ensure intentional considerations of advancing equity in translating evidence into practice, we have engaged in the following activities:

1. **Partnership:** We have developed an interprofessional team, including partnerships with pregnant persons diagnosed with opioid use disorder and experts in Indigenous perinatal health and African Nova Scotian perinatal health.
2. **Use of Empowering Language:** We have engaged in thoughtful dialogue and discussion on the use of language in our summary and have described this process in the “**Disclaimer**” section.
3. **Transparency and Action:** We have been transparent in our purpose for our comprehensive toolkit, along with providing an implementation plan as part of the toolkit to support equitable action and translation of this comprehensive summary into healthcare practice across Nova Scotia.
4. **Reflective Practice:** We have engaged in continuous periods of reflexivity throughout the writing process to ensure consistent reflection of advancing equity. We encourage all practitioners to engage in constant reflexivity and challenge ingrained conscious and unconscious biases.



A FOUNDATION

A foundational resource to provide recommendations and guide the care of pregnant persons diagnosed with opioid use disorder (OUD) and their newborns diagnosed with neonatal opioid withdrawal syndrome (NOWS).

PURPOSE

This comprehensive summary will serve as an accessible, inclusive, and evidence-based resource that informs care provider practice and education across Nova Scotia in caring for persons who are diagnosed with opioid use disorder and/or prescribed opioid agonist therapy, their newborns, and their families during the perinatal period. This resource was created using a diverse, interdisciplinary team, including patient partners, to ensure the practice guidance and recommendations within the comprehensive summary align with and enhance care provider clinical practice and the patient's personal experience.

OBJECTIVES

The following objectives were used to guide the development of this comprehensive summary.

- Guide the care for pregnant persons with OUD perinatally and their newborns in the neonatal period.
- Inform care practices, policy development, and education for healthcare providers caring for pregnant persons diagnosed with OUD and their newborns in Nova Scotia.
- Develop a standardized approach to care across the perinatal continuum for pregnant persons and their newborns in Nova Scotia.



We are thankful for the contributions and insight shared with our committee throughout the writing and development process from a diverse number of healthcare providers, health system leaders, and a patient partner. We give thanks for the time and energy our partners have devoted to contribute in developing a comprehensive and holistic document to guide the care of pregnant persons diagnosed with opioid use disorder and their infants diagnosed with neonatal opioid withdrawal syndrome.

PRODUCED BY:



IN COLLABORATION WITH:



REPRODUCTIVE CARE PROGRAM OF NOVA SCOTIA

- Lead Author and Co-Chair:** **Gallant, M. RN PhD(c)**
Perinatal Nurse Consultant, Reproductive Care Program, IWK Health
School of Nursing, Dalhousie University
- Co-Author and Co-Chair:** **MacKeen, L. RN MN**
Perinatal Nurse Consultant, Reproductive Care Program, IWK Health
- Co-Authors:** **Brooks, M. MD FRCPC**
Assistant Professor, Department of Obstetrics & Gynaecology
Dalhousie University, IWK Health, and Nova Scotia Health
Obstetrician Gynecologist and Obstetrical Medical Advisor
Reproductive Care Program, IWK Health.
- Maguire, S. RN IBCLC PNC(C)**
Perinatal Nurse Consultant, Reproductive Care Program
IWK Health
- Singh, B. MD FRCPC MSc**
Associate Professor, Department of Pediatrics, Dalhousie University
Neonatal Medical Advisor, Reproductive Care Program
IWK Health

CONTINUUM OF CARE FOR PREGNANT PERSONS DIAGNOSED WITH OUD PRACTICE RESOURCE COMMITTEE

CO-AUTHORS

Allen, V. MD MSc FRCSC.

Professor, Department of Obstetrics &
Gynaecology, Dalhousie University
IWK Health, and Nova Scotia Health

Bentley, A. RN

Public Health Early Years Program
Nova Scotia Health Authority

Bland, L. BScN, RN

Research Coordinator, Multidisciplinary
Black Advocacy & Research Centre, School
of Nursing Dalhousie University

Broersma, Z. RM BHSc

IWK Health

Canning, P. PDt, CDE

Dietitian - Women & Newborn Health
IWK Health

Chowdhury, M. MD, FCFP

Associate Professor Department of
Obstetrics & Gynaecology,
Dalhousie University IWK Health and
Nova Scotia Health
Physician Direction 180, Opioid
Agonist Treatment Centre
Consultant Physician for Phoenix
Youth Service
Consultant Physician for Gender
Affirming Care in Youth/Adolescents.

Curley, K. MSW, RSW

Family Newborn Care Unit
IWK Health

Drewniak, T. RPh

Valley Regional Hospital
Community Pharmacist
Nova Scotia Health Authority

Gillis, T. BA BSW

Social Worker
Department of Child and Family Well-Being
Nova Scotia

Gouthro, H. RN

Clinical Nurse Leader
Neonatal Intensive Care Unit, Cape Breton Regional Hospital
Nova Scotia Health

Hillman, D. RN BScN IBCLC

Faculty: Perinatal & Newborn Nursing Program
Nova Scotia Learning Institute for Health Professionals
Nova Scotia Health

Iaboni, V. RN MScN

Consultant, Science & System Performance
Public Health Early Years Program
Nova Scotia Health Authority

Jebailey, C. RN

Public Health Early Years Program
Nova Scotia Health Authority

Johnson, M. PCP, EMD

Patient Flow Supervisor
Emergency Health Services
Medical Communications Centre, Nova Scotia

Kempton, K. RN, Nurse Practitioner Student

Clinical Nurse Specialist, Family Newborn Care Unit
IWK Health
School of Nursing, Dalhousie University

CO-AUTHORS

Lanthier, D. RN IBCLC

Lactation Consultant, Family Newborn Care Unit
IWK Health

Lawrence, T. RN, PNC (C)

Clinical Leader of Operations,
Family Newborn Care Unit
IWK Health

Lezama, B. PT, BScPT

Physiotherapist
IWK Health

Lewis, V. RN BScN

Clinical Nurse Educator - Women & Children's
Health Program
Interprofessional Practice and Learning
Eastern Zone, Nova Scotia Health Authority

Lowe, D. BA

Regional Director & Baby Steps Coordinator
Nova Scotia Early Childhood Development
Intervention Services

MacCormick, H., MD FRCPC

Obstetric Anesthesiologist, Department of
Anesthesia, Pain Management, & Perioperative
Medicine (NSH) and Department of Women's
& Obstetric Anesthesia (IWK Health); Assistant
Professor, Faculty of Medicine, Dalhousie
University

MacLellan, K. RN BScN MPH

Consultant | Science & System Performance
Public Health Early Years Program
Nova Scotia Health Authority

McDonald, J. BScPharm, MSc, PharmD

Pharmacist
Valley Regional Hospital – Nova Scotia
Health
IWK Health

McLeod, R. RN

Clinical Leader of Development
Family Newborn Care Unit
IWK Health

Medynski, J. RD CDE

Clinical Dietitian
Women's & Newborn Health Program
IWK Health

Pennell, C. RN BScN

Indigenous Health Consultant
IWK Health

Pitman, S. RN BScN PNC(C)

Clinical Practice Leader
Women's and Children's Health
Nova Scotia Health

Prosser, H. MSW, RSW

Clinical Social Worker, South Shore Regional Hospital
Nova Scotia Health

Richards, L. BScN RN

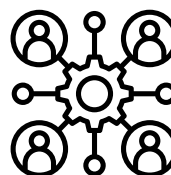
Manager, Clinical and Quality
Lifeflight
Emergency Health Services Nova Scotia

Swain, J. ACP, BSc(Hons), BEd

Manager, Clinical Services
Emergency Health Services, Nova Scotia
Clinical Services, Risk Management and Compliance

Young, M. DEHSM, PCP, EMDQ

Patient Safety and Experience Lead
Emergency Health Services, Nova Scotia
Risk Management and Compliance



ADVISORS

Strong, T. BScN RN, PNC(C)®, IBCLC, S.A.N.E.

Consultant | Science & System Performance
Public Health Early Years Program
Nova Scotia Health Authority
Middleton, Nova Scotia

Hughes, A. RN

Clinical Nurse Educator Interim
Family Newborn Care Unit
IWK Health

Jarvis, K BSW, MSW, RSW

African Nova Scotian Health Consultant
IWK Equity and Belonging

Kajetanowicz, A. MD FAAP

Neonatologist
Cape Breton Regional Hospital
Nova Scotia Health

Maloney, C BA, BHSc (Midwifery)

Registered Midwife

Newman, T. RN IBCLC

Perinatal Clinic
Cape Breton Regional Hospital
Nova Scotia Health

Sauve, C.

Perinatal Social Worker
Family Newborn Care Unit
IWK Health

Sheppard, K. RN IBCLC

Perinatal Clinic
Glace Bay Hospital / Cape Breton Regional Hospital
Nova Scotia Health Authority

MacRae Sly, G. MN RN

Clinical Nurse Specialist
Neonatal Intensive Care Unit
IWK Health

Smith, A. CCA

Patient Partner
Lived Experience
Central Zone

Waye, J. RN, BScN, MN, IBCLC

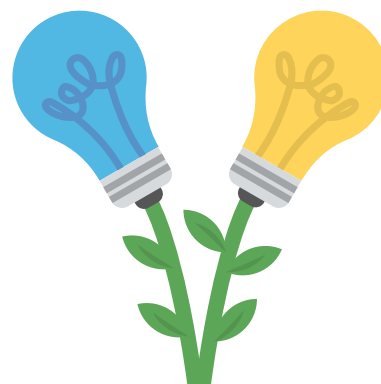
Faculty, Nurse Educator,
Women & Children's Health Programs
Nova Scotia Health Authority

Wilson, A. BScN, RN, PNC(C)

Clinical Nurse Educator
Interprofessional Practice & Learning NSH WZ – South
Shore Sites
Nova Scotia Health

Yazbeck, S. BSc Pharm

Clinical Pharmacist
Women's and Newborn Health Program
IWK Health



INTERNAL AND EXTERNAL REVIEWERS

INTERNAL REVIEWER

Lappin, S. MD IBCLC FABM

Director of Newborn Services, IWK Health

Family Medicine, Dalhousie University

Mann, C. RN MN

Manager Women's and Newborn Health

Birth Unit

IWK Health

EXTERNAL REVIEWERS

Knox, L. RN, PhD(c)

Program Coordinator: The Mothering Co/Lab

School of Nursing, University of British

Columbia, Okanagan

Newman, A. MD, FRCPC

Division Head of Neonatology, Saint John

Regional Hospital

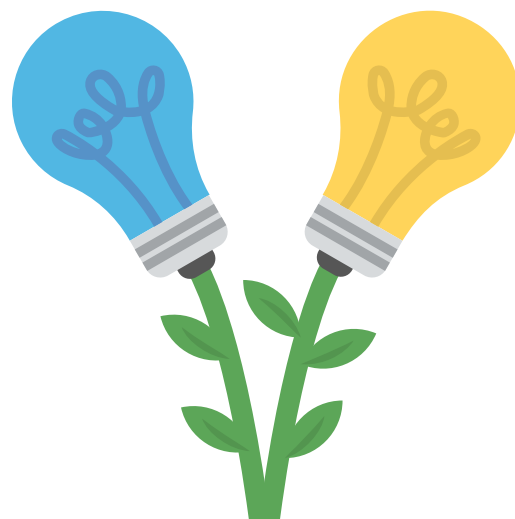
Horizon Health Network

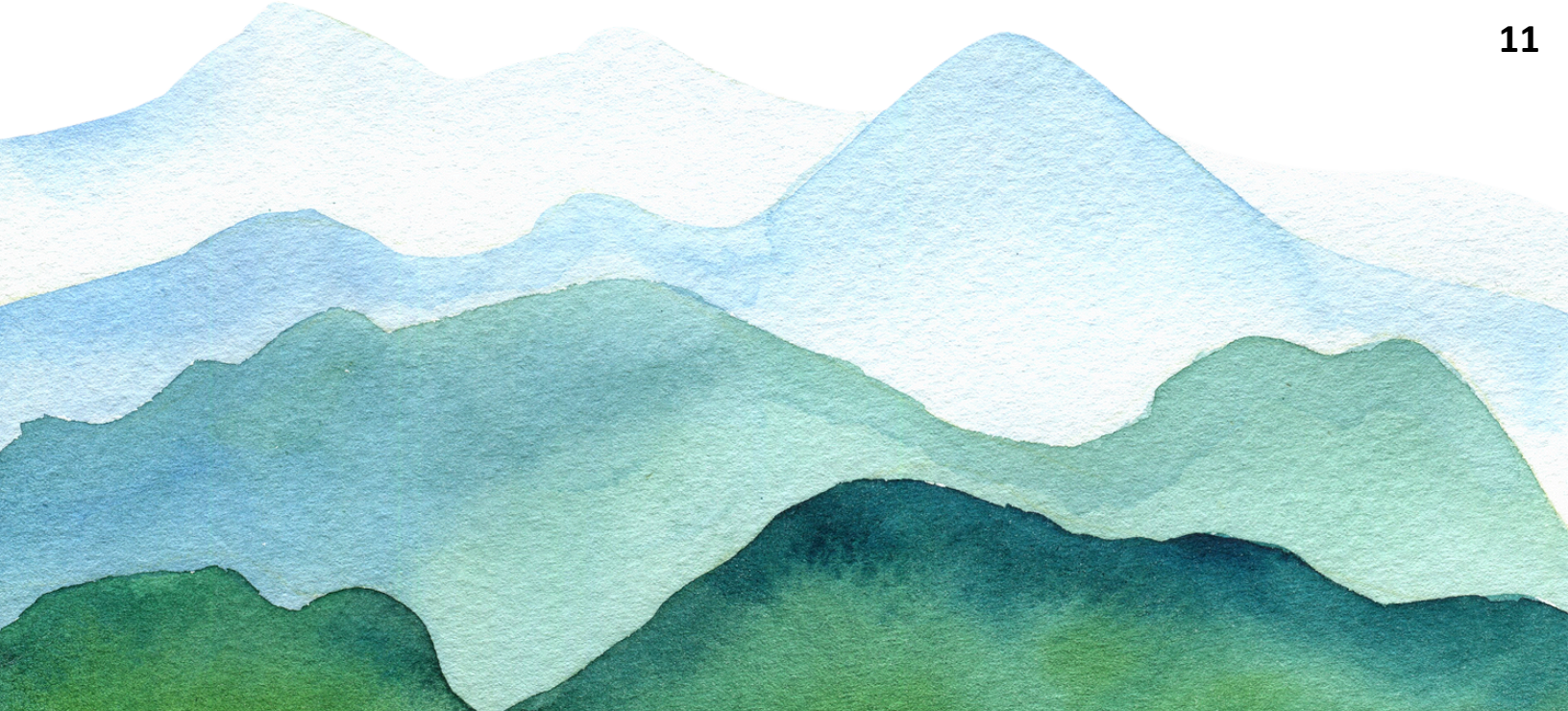
Turner, S. MD, MBS, CCFP(AM), DABAM

Associate Professor, McMaster University

Head of Service, Family Practice Obstetrics, St. Joseph's

Health Centre Hamilton





SUGGESTED CITATION:

Continuum of Care for Pregnant persons diagnosed with OUD Practice Resource Committee, Advisors and Co-Authors in collaboration with the Reproductive Care Program of Nova Scotia, Nova Scotia Health & IWK Health (2025) *Continuum of Care for Pregnant persons diagnosed with OUD: Comprehensive Summary*. Halifax, Nova Scotia.

DISCLAIMERS

GENDER INCLUSIVITY

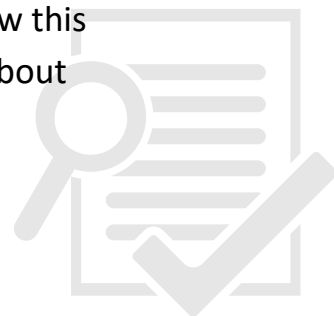
This comprehensive summary was written using gender-neutral language to improve inclusivity for all individuals receiving care regardless of gender identification. The Reproductive Care Program of Nova Scotia (RCP) endeavours to respect gender identity and the multiple ways in which individuals may identify. While most people experiencing pregnancy identify as a woman, this is only one of many genders of people who may experience pregnancy; therefore, we aim to use language that is broad enough to include everyone. We use the terms “pregnant persons” or “birthparents” or “parents” along with breast(chest)feeding to ensure this document is inclusive. As the transition to more gender inclusive and thoughtful language is slowly being integrated within national guidelines and literature, there are some areas throughout the document where the terms “mothers, and woman(men)” may be used as this is reflective of what was used within the literature.

INTENT OF THE RESOURCE

This comprehensive summary is a resource intended to be used by perinatal health professionals. While it’s intended for perinatal care providers, we acknowledge that other providers who do not usually care for the perinatal population may access the resource for guidance when they encounter this patient population. All efforts were made to ensure this summary reflects practice and available resources across the province, however prescriber preferences, training, and resource availability may differ across facilities. This comprehensive summary is intended to assist care providers in making clinical decisions regarding the care of pregnant persons with opioid dependence and their newborns.

LEGAL DISCLAIMER

This resource is not meant to substitute individual judgment brought to each clinical situation by the primary care provider in collaboration with the care team. This clinical resource reflects the best understanding of the most up-to-date evidence available at the time of publication. This resource should be used with the understanding that continued research may result in new knowledge and recommendations. We aim to review this resource every **five** years. Please contact RCP with any questions or concerns about information found in any RCP resource (902) 470-6798.



CONTINUUM OF CARE FOR PREGNANT PERSONS DIAGNOSED WITH OPIOID USE DISORDER & THEIR NEWBORNS

HOW TO USE THIS COMPREHENSIVE SUMMARY & ACCOMPANYING TOOLKIT

This summary is broken into five different sections. Each section contains key priority identified topics to consider as you care for this population throughout the continuum of perinatal care. Accompanying this summary are a series of knowledge translation tools to support the dissemination of this information to healthcare providers within the hospital and community setting. Below you will find the continuum of care diagram along with a breakdown of key topics per section.

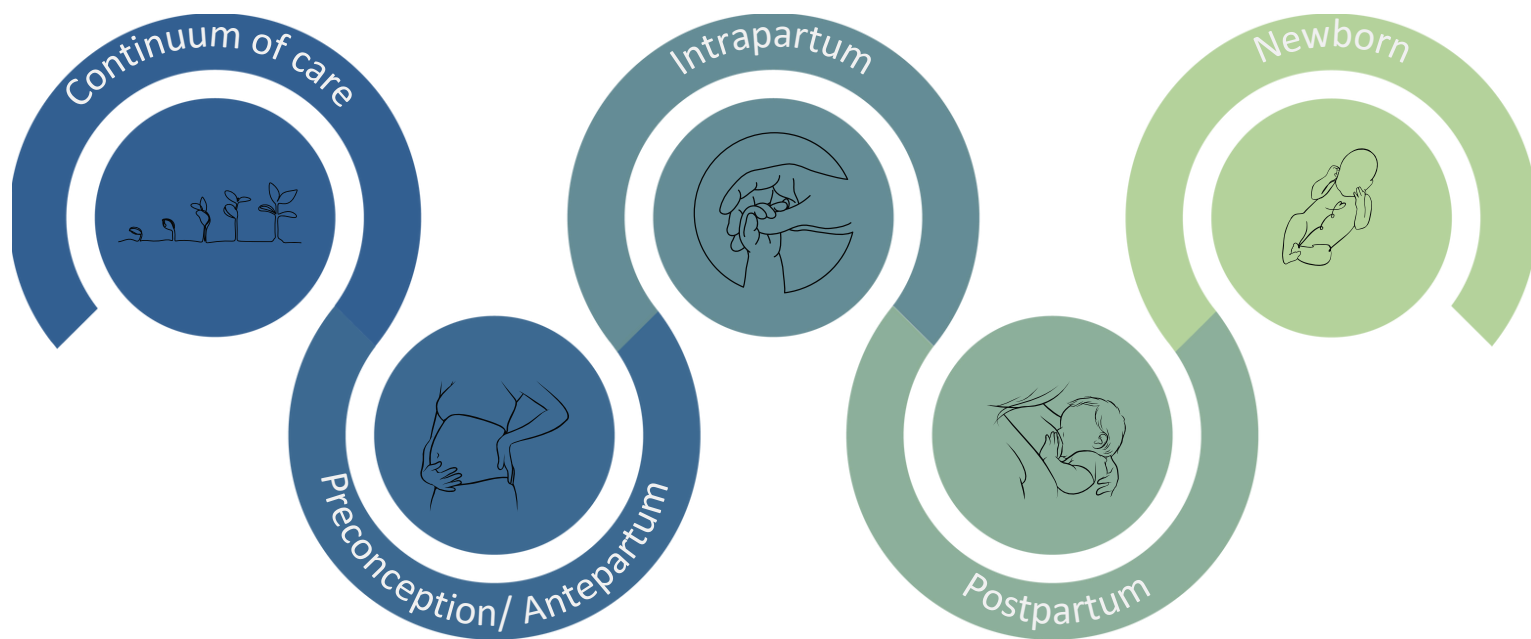


TABLE OF CONTENTS

INTRODUCTION

1. EXECUTIVE SUMMARY	19
2. COMPREHENSIVE SUMMARY DEVELOPMENT PROCESS	20
3. A NOTE: OPIOID VS. SUBSTANCE USE	22



SECTION ONE: CONTINUUM OF CARE

Purpose: Create a foundation for care for pregnant persons diagnosed with OUD and their newborns.

1. POPULATION LANDSCAPE	24
2. EQUITY DESERVING POPULATIONS	25
3. OVERARCHING PRINCIPLES OF CARE	28
a. Unconscious Bias	28
b. Trauma-Informed Care	29
c. Culturally Safe/ Culturally Sensitive Care	32
d. Harm Reduction	34
e. Family Centered Care	36
f. Interprofessional collaboration	38
4. SUMMARY OF CARE PRINCIPLES	40
5. CHILD AND FAMILY WELL BEING	43
6. KEY PATIENT EDUCATION	48
7. RECEIVING CARE CLOSER TO HOME	66
a. Communication Tree	67

TABLE OF CONTENTS

SECTION TWO: PRECONCEPTION AND ANTEPARTUM

Purpose: Establish trust, and foundational relationships. Care is anticipatory.



1. INTRODUCTION	70
2. WHAT IS OPIOID AGONIST THERAPY	71
3. SCREENING PROCESSES	72
4. RECOMMENDED CARE CONSULTATIONS AND CONSIDERATIONS	74
a. Detailed Health Intake	76
b. Foundational Screening and Ongoing Monitoring	78
i. Infectious Diseases and Screening	78
1. Considerations for Hep C and B	80
ii. Diagnostic Imaging	85
5. EARLY CONSULTATIONS AND CONSIDERATIONS	88
a. Obstetrical Care Provider	88
b. Community OAT Provider	89
c. Social Work	92
d. Pharmacists	95
e. Anesthesia	104
f. Newborn Care Provider	105
g. Baby Steps Program	106
h. Dietitian	109
i. Physiotherapy	111
j. Public Health	113
6. SEXUAL HEALTH CONSIDERATIONS	117

SECTION THREE: INTRAPARTUM

Purpose: Be trauma-informed and reflective. Acute pain is not managed with OAT.

1. INTRODUCTION	120
a. Language Matters	121
2. SCREENING	122
3. COMMUNICATION	122
4. DETAILED HISTORY	123
a. Disposition of Carries	124
5. PAIN MANAGEMENT	125
a. Anesthesia Considerations	127
6. MONITORING DURING LABOUR AND BIRTH	128
7. NALOXONE AND BIRTH	130

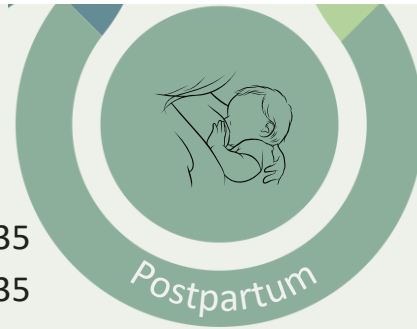


TABLE OF CONTENTS

SECTION FOUR: POSTPARTUM

Purpose: Develop a foundation of support with and empower birthparents to care for their newborn.

1. INTRODUCTION	135	
2. POSTPARTUM CARE CONSIDERATIONS	135	
a. Medication Management	135	
b. Routine Postpartum Monitoring		138
c. Eat, Sleep, Console Model of care		140
d. Postpartum Mood Considerations		143
e. Postpartum Pain Management		146
f. Social Considerations		148
g. Public Health Nursing		153
3. DISCHARGE PLANNING		155



SECTION FIVE: NEWBORN

Purpose: Explore newborn considerations for infants diagnosed with NOWS. Create a solid foundation to support newborns through their withdrawal (in hospital and beyond).

1. INTRODUCTION		161
2. NOWS CONSIDERATIONS		162
a. Physiology		162
b. Clinical Manifestations		164
c. Screening		166
3. EAT, SLEEP, CONSOLE		169
a. How to use the ESC		172
b. Non-Pharmacological Management		182
c. Pharmacological Management		185
d. Family Care Diary		191
4. BIRTHPARENT-NEWBORN TOGETHERNESS		193
5. FEEDING & WEIGHT		193
a. Breast(Chest)feeding	194	
b. Note on Bottle Feeding	203	
c. Weight	207	
6. TRANSFER	213	
7. DISCHARGE PLANNING	227	

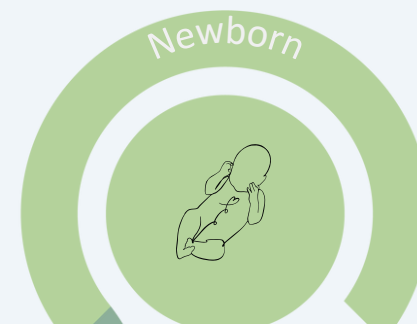
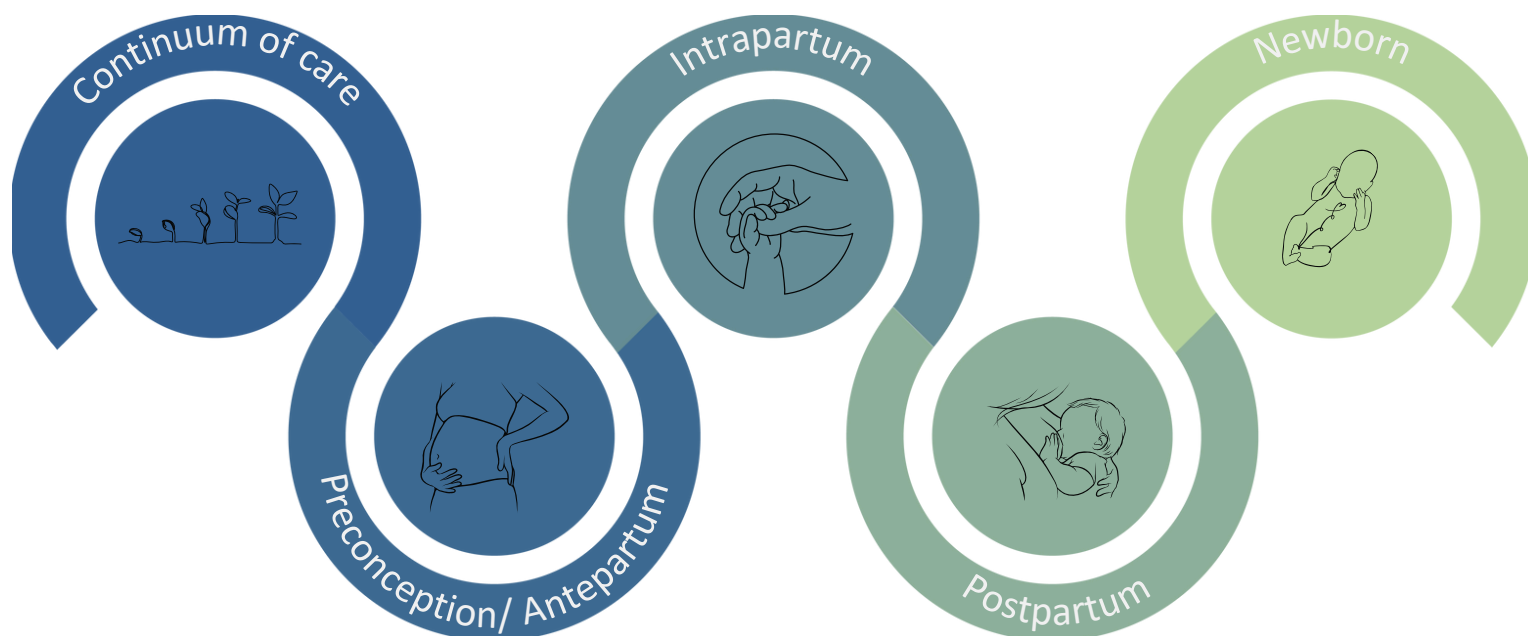


TABLE OF CONTENTS

Summary Sections

1. LIMITATIONS	232
2. REFERENCES	233
3. APPENDIX A	251
a. Opioid agonist Therapy Pre-Printed Order sheet (IWK)	
b. OAT Flow Sheet (IWK)	
c. Weaning Medical Management of the Newborn (IWK)	
d. The Care Tool (Eat, Sleep, Console) (IWK)	
e. Family Care Diary (IWK)	
f. Log Sheet OAT (Community Pharmacy)	



KNOWLEDGE TRANSLATION TOOLS

1. FIVE CARE PRINCIPLES	40
2. EDUCATION TOPICS	
A. ANTEPARTUM	52
B. INTRAPARTUM	56
C. POSTPARTUM	60
D. NEWBORN	64
3. COMMUNICATION TREE	67
4. PRECONCEPTION AND ANTEPARTUM CONSULTATION SNAP SHOT	69
5. CARE ALGORITHM	74
6. PHARMACOLOGICAL CONSIDERATIONS	101
7. INTRAPARTUM CONSIDERATIONS	119
8. PAIN IN LABOUR	131
9. POSTPARTUM CARE CONSIDERATIONS	134
10. NEWBORN CARE CONSIDERATIONS	160
11. EAT, SLEEP, CONSOLE MODEL “HOW TO”	172
12. NON- PHARMACOLOGICAL THERAPY	183
13. FEEDING CONSIDERATIONS	204
14. WEIGHT CONSIDERATIONS	208
15. TRANSFER ALGORITHM	216
16. TRANSFER VIA EHS GROUND	220
17. TRANSFER VIA LIFEFLIGHT	224
18. DISCHARGE TEACHING	230

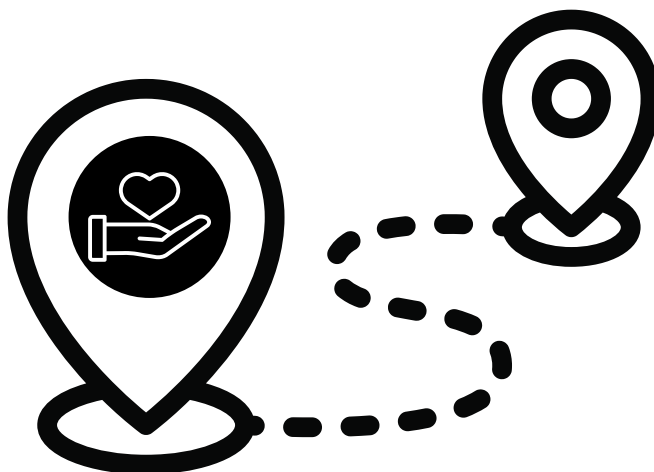
All tools can be retrieved from the [Reproductive Care Program of Nova Scotia Website](#)



EXECUTIVE SUMMARY

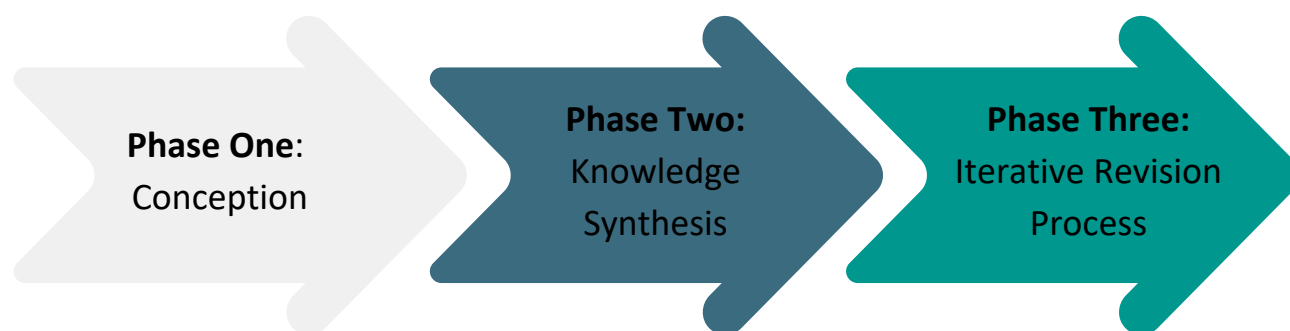


This comprehensive summary is a resource intended to be used by perinatal health professionals. While it is intended for perinatal care providers, we acknowledge that other providers who do not usually care for the perinatal population may access the resource for guidance when they encounter this patient population. All efforts were made to ensure this summary reflects practice and available resources across the province, however prescriber preferences, training, and resource availability may differ across facilities. This comprehensive summary is intended to assist care providers in making clinical decisions regarding the care of pregnant persons with opioid dependence and their newborns.



COMPREHENSIVE SUMMARY DEVELOPMENT PROCESS

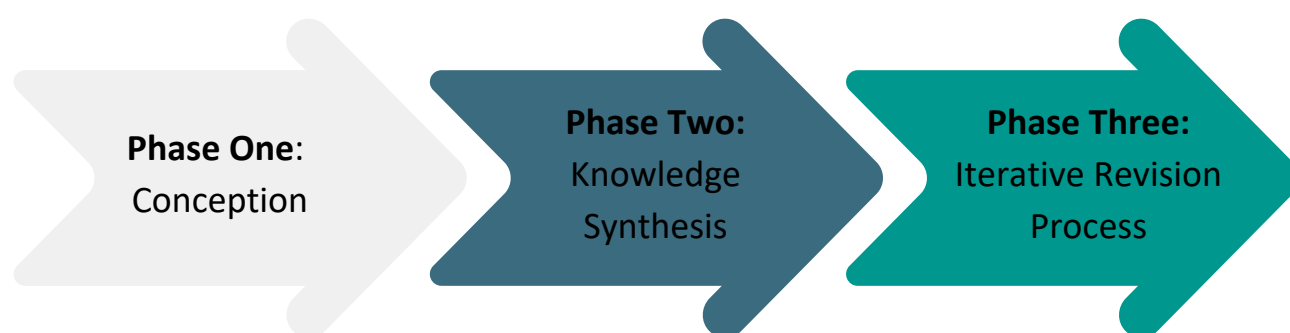
This project originated from priority-identified health concerns in Nova Scotia by pregnant persons and healthcare providers. Pregnant persons diagnosed with OUD sought accessible care and established supports closer to their home region within rural communities rather than the current model of receiving care at a tertiary care facility, IWK Health or at larger regional centres. In response, healthcare providers at regional sites across the province echoed the concern of accessibility and requested educational support and strategic approaches to build capacity within regional facilities to care for this patient population. Accessible care within the patient's home community not only improves patient experience but may also improve continuity and access to holistic care services for this at-risk population.



Phase One: We developed a committee with over 30 diverse disciplines who play a pivotal role in caring for this population across the perinatal continuum, including, but not limited to, obstetricians, registered nurses, family physicians, neonatologists, pharmacists (community and hospital), midwives, Indigenous partners, dietitians, and early childhood interventionists. Our committee met monthly divided into small working groups based on expertise across the perinatal continuum (antepartum, intrapartum, postpartum, and newborn) to complete benchmarking and develop a table of contents to guide literature reviews during phase two of this process. The table of contents was then reviewed with patient partners to identify any gaps. This resource is to support healthcare providers in caring for this population; therefore, pregnant persons were encouraged to reflect on what they thought healthcare providers needed to know in caring for the population. The table of contents is reflective of similar expert opinion, patient perspectives, and benchmarking of resources available across Canada (e.g. British Columbia's Treatment of Opioid Use Disorder in Pregnancy).

COMPREHENSIVE SUMMARY DEVELOPMENT PROCESS

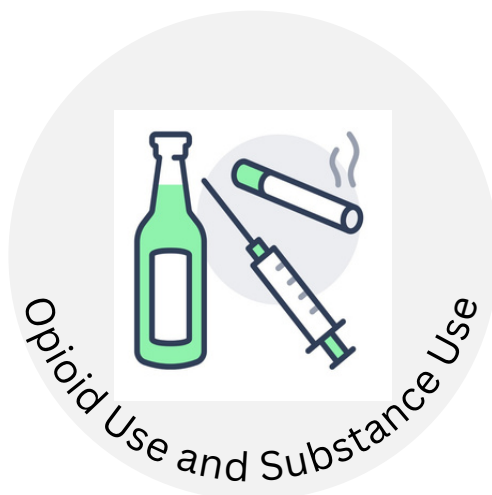
Phase Two: Guided by the comprehensive table of contents, our committee completed numerous literature reviews. Each knowledgeable practitioner completed their own focused literature review seeking the most up-to-date evidence on the topics prioritized by the committee and patient population in Nova Scotia. Literature was reviewed using an expert lens and was summarized for key recommendations to be included within this summary, and findings were compiled into a comprehensive document.



Phase Three: This resource went through three iterations of a ‘back-and-forth’ draft revision process. Gaps were periodically identified and addressed through seeking additional perspectives and literature. For example, one gap noted was the inclusion of an African Nova Scotian (ANS) voice to speak to the unique considerations of this historically marginalized population. This prompted the recruitment and engagement of two ANS partners.

Once the committee finalized the draft, we sent it out for an internal review process to seek perspectives from experts within the field. Our patient partner also provided overarching feedback on the final draft at this stage. The final step of this project is to engage in an external review, which is currently underway with partners across the country.

The purpose of this comprehensive summary is to provide support, information, and guidance for healthcare providers to care for pregnant persons diagnosed with opioid use disorder (OUD), with an emphasis on pregnant persons prescribed methadone, buprenorphine or other opioid agonist therapies (OAT). Although it is possible there are parallels in the care provided to a person prescribed OAT and a person using other substances (e.g., alcohol, or (non) prescription drugs) during pregnancy, it is important to note these two patient populations are distinct (1).



Although the focus of this resource is on pregnant persons diagnosed with OUD, healthcare providers must consider that there is potential for polysubstance use amongst this population, which further complicates their diagnosis of OUD (1,2). Pregnant persons who are diagnosed with substance use disorder (SUD), including those diagnosed with OUD, are more likely to have limited prenatal care and poor nutrition (2). This is often due to the stigma, discrimination and the fear of punishment acting as barriers for pregnant persons to access care in the prenatal period (3). Racialized groups experience additional barriers, further contributing to negative experiences in the perinatal period. The compounding negative experiences stem from systemic, social, and structural racial discrimination due to both intentional and unintentional oppression of the rights and freedoms of Mi'kmaq and African Nova Scotian persons (4–8).



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn



This comprehensive summary provides care principles and resources to guide care for this unique population, keeping in mind that it may be complicated with polysubstance use. The plan of care for each pregnant person should be individualized based on the details of their specific circumstances. Furthermore, since this clinical toolkit is focused on the management of OUD during the perinatal period, the term *Neonatal Opioid Withdrawal Syndrome (NOWS)* will be used to describe the diagnosis of newborns born to persons who use or are prescribed opioids during pregnancy (1). It is important to note that the terms NAS and NOWS are often used interchangeably in the literature and practice. Please see discussion on Neonatal Abstinence Syndrome (NAS) and NOWS found in the Newborn Considerations section of this comprehensive summary for more information.



1

Section One: Continuum
of Care

2

Section Two:
Antepartum

3

Section Three:
Intrapartum

4

Section Four:
Postpartum

5

Section Five:
Newborn



SECTION ONE | CONTINUUM OF CARE

Population Landscape

The incidence of newborns diagnosed with NAS in Canada has grown almost tenfold in the last decade (9). NOWS, a diagnosis given to a newborn demonstrating signs of withdrawal who was exposed to opioids in-utero, is a subset of the NAS population, although literature demonstrates the majority of NAS diagnoses are due primarily to opioid withdrawal (10). Specifically, in Nova Scotia the incidence of NOWS has almost tripled from 2.2 per thousand births (20 cases) in 2009 to 6.3 (44 cases) in 2022 (11).



Pregnant persons prescribed opioid agonist therapy (OAT) during pregnancy and their newborns diagnosed with NOWS demonstrate complex and unique care needs, which challenges the current health care system (12). On average, the hospital costs for this population have nearly doubled in the last decade in Canada increasing from 15.7 million to 26.9 million dollars for patient care costs (9). These staggering hospital costs are largely due to the increased resource utilization at hospitals, including increased lengths of hospital stays. In Nova Scotia, the length of hospital stay in 2022 for an newborn diagnosed with NOWS was just over six times greater as compared to newborns without a NOWS diagnosis (11). Opioid use in pregnancy is often under-reported due to stigma and discrimination associated with the diagnosis; however, with the opioid crisis in Canada, opioid use in pregnancy is a priority public health concern (13). It is imperative to provide holistic care for the birthparent-newborn dyad as suboptimal treatment during the perinatal period for this population has the potential to lead to adverse perinatal outcomes such as overdose, perinatal death, and preterm birth (14). Providing safe and accessible stigma free care has been shown to decrease the rates of (1) preterm birth; (2) newborns who are small for gestational age; and (3) low birth weight newborns (15).



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn



It is anticipated that through dissemination and adoption of this clinical toolkit, healthcare provider capacity will be strengthened, which will ultimately enhance outcomes for pregnant persons diagnosed with OUD and their newborns.

Equity Deserving Populations



Pregnant persons diagnosed with OUD are more likely to be from groups that have historically been oppressed in other ways, such as intersecting stigmas related to social class, occupation, race, sexual orientation, and gender (16). Racialized persons health concerns are often overlooked and not addressed with urgency (4–6). Child welfare services disproportionately target Black and Indigenous families through oversurveillance (5,6). This oversurveillance compounds the already existing oppression found

within the care for pregnant persons prescribed OAT or diagnosed with OUD; therefore, healthcare providers must embody cultural safety and humility as essential care principles to guide decision-making given the multiple forms of oppression are coinciding to affect this patient population(14). The complex interacting influences of oppression for these persons typically lead to presentations of distrust and self-protection within the healthcare system (17). Intentional consideration of these intersecting stigmas are needed when caring for this population to ensure an inclusive and trauma-informed approach, encompassing a holistic assessment of the unique impacts of colonialism, racism and oppression, along with exploration of potential barriers to care.



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn



Indigenous Populations: Care of pregnant persons from equity-deserving populations with substance use is complex. Historical and present-day traumas, colonial policies and influences of intersecting stigmas further complicate the experiences and care for persons diagnosed with opioid use disorder. Indigenous families are impacted by the legacy of national and regional colonialism, Indian Hospitals, Residential School Systems, and the Sixties Scoop (18,19). Indigenous families who use substances experience higher rates of child apprehension than non-Indigenous substance users. It is estimated that three times as many First Nations children are under the care of Child Protection Services (CPS) today than during the height of the Residential School era (20). This has created a transgenerational effect, where children who were involved with CPS in childhood are more likely to use substances in their teenage and early adult years (21). Research indicates that the experience of having a child taken into care is traumatic, leading to re-initiation or increased substance use, feelings of stigma, social instability, symptoms of PTSD, and other mental health outcomes.



Birthparents described coping with the loss of children taken into care through increased drug use and other harmful health behaviours. Conversely, the experience of raising children gives Indigenous birthparents strength to heal from trauma and recover from addictions (22). Existing research suggests that Indigenous birthparents who struggle with substance use require holistic and single-access treatment services that incorporate harm reduction, cultural safety, and support for both birthparents and children (23). Consistent with Indigenous holistic approaches, it is understood that child, family, and community resiliency are interdependent; therefore, culturally based family interventions must be coupled with culturally based community development approaches to address systemic and structural barriers to the safety and welfare of Indigenous children. The Families in Recovery (FIR) Square Combined Care Unit at British Columbia's Women's Hospital is an exemplar of a service offering harm reduction, withdrawal management and methadone treatment for pregnant persons.



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn



These services have supported pregnant persons who have used drugs during pregnancy to maintain custody of their children (23). Cultural interventions and traditional healing methods offer promising approaches to treating problem substance use and addictions among Indigenous peoples (24). Strengths-based, culturally safe, trauma- and violence-informed, and contextually appropriate interventions will improve outcomes for Indigenous children and families (25).

African Nova Scotians: Historic African Nova Scotian communities are one of the oldest distinct populations of people of African descent in Canada (7,8). Despite the ancestral presence and growing populations, the systemic and structural oppression of the health of African Nova Scotians and the access to healthcare remains below expected standards. The Ontario Human Rights Commission illuminates the disproportionate targeting of Black families by Canada's child welfare system. As they report, it is estimated that Black children are 28% more likely to be taken into care compared to the white population (5). Importantly, there is a significant lack of data in Nova Scotia, which is indicative of the historical and continual oppression of African Nova Scotians. Intergenerational impacts of colonialism, slavery, and racism are strongly associated with risk to caregivers and their children (4–6).



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn



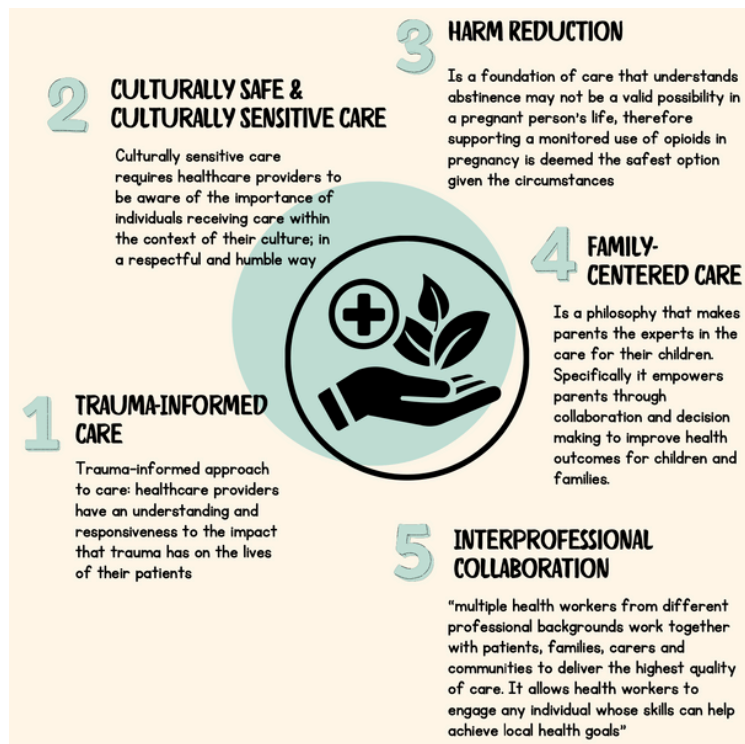
Overarching Principles of Care

A multimodal approach is needed to meet the complex care needs for pregnant persons diagnosed with OUD and their newborns diagnosed with NOWS. Stigma is associated with inadequate education and poor understanding by healthcare providers on the impacts and interactions between the social determinants of health and a diagnosis of OUD. A single care philosophy is not enough to meet the complex, interconnected needs of this population (26,27). Therefore, it is recommended that care providers apply a multimodal approach to care that includes **five key principles** expanded below.

A note on Unconscious Bias

Unconscious bias permeates throughout the care healthcare providers offer and can negatively alter the foundation of care for this population, as such, it is important for healthcare providers to reflect upon their unconscious biases **before** moving through the five key principles of care outlined in this section.

Unconscious bias can lead to the mistreatment of pregnant persons, including discrimination, failure to meet standards of care and loss of autonomy (16). The effects of unconscious bias are even more pronounced in people of colour or with other compounding social determinants of health, such as low socioeconomic status (16). Healthcare providers must remain reflective and mindful of potentially ingrained biases in their practice. Engaging in opportunities for education and advocacy within and for this population are key ways to help mitigate the effects of



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn

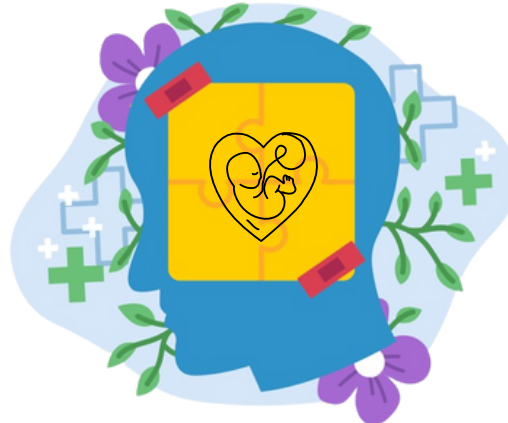


unconscious bias in caring for this population (16). As you move through this section, we encourage you to be mindful and reflective of your unconscious biases, challenging the ingrained conceptions and altering the way you approach and understand the care for this population.

Pregnant persons diagnosed with SUD have experienced trauma within the healthcare system. They are often labeled as being “conflictual” in their relationships with healthcare providers; however, when the relationships are supportive, pregnant persons noted positive interactions with healthcare providers citing accepting, recovery-based and effective care (28). Healthcare providers must acknowledge that the way a pregnant person presents in their care may be derived from their past negative experiences (16). It is key for healthcare providers to recognize how their biases, unconscious and conscious, influence the care they provide (16).

Trauma-Informed Care

Trauma-informed care is a foundational philosophy, developed to address the complex intricacies of trauma experienced by persons (29). A traumatic experience is defined as an event that has the elements of terror, isolation, and helplessness. The details of the event itself are less important but rather what is important is how the traumatic experience has been experienced and processed by the survivor (12). Trauma can arise from situations that overwhelm a person’s ability to cope, such as situations involving abuse and neglect, violence, life threatening illnesses, painful or unexpected medical interventions, accidents, intergenerational events, etc. (30). Trauma has permeating impacts that move beyond the birthparent, specifically exhibiting in the effects of toxic stress in the immediate neonatal period. For more information about toxic stress, please visit the **Center on the Developing Child**.



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn



In using a Trauma-informed approach to care, healthcare providers have an understanding and a responsiveness to the impact that trauma has on the lives of pregnant persons (30). In keeping with a trauma-informed approach to care, health care providers can create:

1. A safe and trustworthy practice.
2. An environment that is safe for pregnant persons both physically and emotionally.
3. Interactions and relationships that are positive for families (30).

Substance use disorder (SUD) is a biopsychosocial condition encompassing many interrelated factors contributing to the complex lived experiences of pregnant persons (29). Pregnant persons diagnosed with SUD may experience a history of trauma and violence (29). More specifically a history of opioid use disorder (OUD) has been associated with a high lifetime prevalence of trauma, including physical and sexual abuse (31). This history places pregnant persons in a vulnerable and high stress state when accessing health care services. Trauma is cited as a powerful barrier in accessing appropriate care (29). Trauma has lasting adverse effects, that if not acknowledged, addressed, and cared for can lead to re-traumatization and continuation of intergenerational trauma. Without a trauma-informed care approach, pregnant persons diagnosed with OUD are at risk for re-traumatization, poor attachment, and inadequate care (29).



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

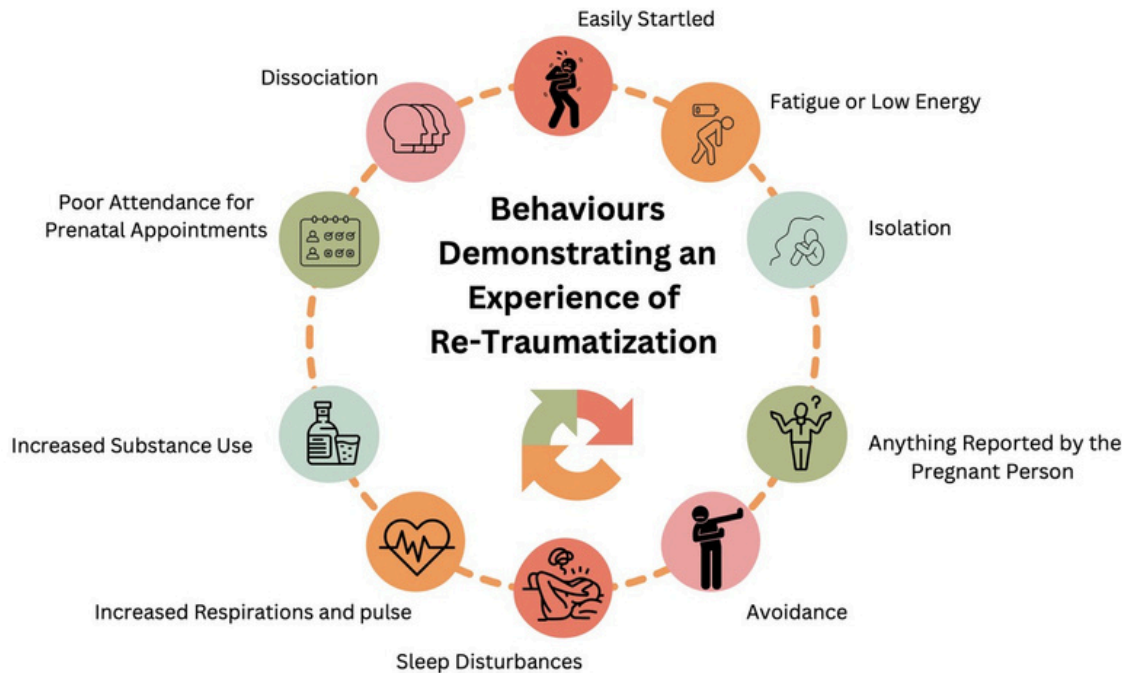
Section Four: Postpartum

5

Section Five: Newborn



Many aspects of routine perinatal care may lead to unintentional re-traumatization of pregnant persons. For example, intimate exams, overwhelming physical symptoms of pregnancy and postpartum, and pain that can mimic opioid withdrawal are all potentially traumatizing to this patient population. Pregnant persons may demonstrate that they have experienced re-traumatization by (32):



***Anything Reported by the Pregnant Persons:** refers to the individuality of re-traumatization. Anything a person reports as re-traumatization is re-traumatization.

Using a trauma-informed care approach encompasses principles of (1) safety, (2) trust and transparency, (3) peer support, (4) collaboration, (5) empowerment, and (6) cultural, historical and gender considerations (33). By making trauma-informed care a foundational part of caring with pregnant persons diagnosed with OUD, the effects of trauma can be mitigated, leading to improved health outcomes such as increased early attachment and a decrease in stress and anxiety (29).

Clinicians involved in the care of pregnant persons with OUD should be familiar with the principles of trauma-informed practice (e.g., trauma awareness; safety and trustworthiness; choice, collaboration and connection; strengths-based approaches and skill building) (31). More information on Trauma-informed Care can be found at the following site: [Your Experience Matters, a website dedicated to Trauma-informed Care.](#)



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn



Culturally Safe and Sensitive Care

It is important to acknowledge that culture and healthcare are closely linked. Healthcare providers must provide competent care within the context of their patient's culture as providing culturally relevant, appropriate and competent care can positively influence health outcomes (34). Culture influences many aspects of a pregnant person's life, including their decision-making and views on how they approach healthcare. It can also influence what is important to pregnant persons during illness, and what role their family plays in recovery. Similarly, culture impacts personal views of health and decision-making behavior during the perinatal period.



Culturally safe and sensitive care

Culturally sensitive care is care provision that includes adoption of consistent attitudes, knowledge, skills, behaviors, and policies that effectively meet the needs of pregnant persons. To be fully culturally sensitive, it is essential that care providers practice cultural humility. When care providers are culturally humble, they acknowledge the importance of self-reflection and the continuous need for healthcare providers to understand a patient's unique experience. This process assists individual care providers to understand personal and systemic biases and to develop skills that support respectful and trusting relationships. Perinatal care should align with principles of cultural competence and be based on the basic human rights of respect, dignity, empowerment, safety, and autonomy, while also placing the pregnant person at the



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

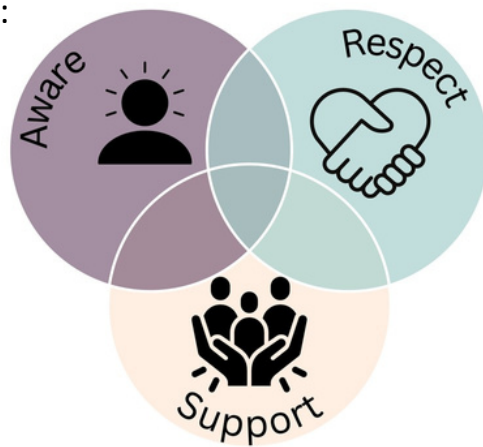
5

Section Five: Newborn



center of care by identifying individual needs and establishing a partnership and therapeutic relationship built on trust. Pregnant persons who use opioids or are prescribed opioid agonist therapy during pregnancy may experience high levels of substance-related stigma, both inside and outside of health care settings. This often creates the view that health care is not safe due to fear of judgements and stereotyping by health care providers. Adopting a culturally sensitive approach to the provision of perinatal care for persons who use opioids can assist with improving overall care experiences.

Care providers should consider incorporating the following principles into their clinical practice:



- **Aware:** Have an awareness of and responsiveness to the cultural values, beliefs, and behaviors of pregnant persons in their care.
- **Respect:** Treat persons fairly and with respect. Healthcare providers should refrain from making assumptions and recognize diversity and individual choice.
- **Support:** Encompass an approach in all interactions that is supportive, non-judgmental, respectful and supports building trusting and safe therapeutic relationships with pregnant persons and their families (35–39).
 - **Transparency in communication** is an important aspect of delivering services, specifically when building relationships and trust. Acknowledging when you do not have the answer(s) will build trust, specifically when you are willing to search for possible answers or solutions. It demonstrates humility, a key quality in building rapport. When appropriate, this could look like a collaborative effort between the service provider and the pregnant person.



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

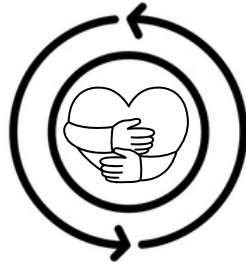
Section Four: Postpartum

5

Section Five: Newborn



Using culturally safe and sensitive care is imperative in caring for pregnant persons diagnosed with OUD, as this population often experiences intergenerational trauma and racism, which can impact access to quality treatment (18). Providing care that is culturally safe and trauma-informed will not only improve mental health for pregnant persons, but will also increase the likelihood of interaction with healthcare in pregnancy (18,21,26).



Additional information on culturally safe and sensitive care can be found at the following sites:

- [San'yas Antiracism Indigenous Cultural Safety Training Program](#)
- [Cultural Safety Collection - National Collaborating Centre for Indigenous Health](#)

Harm Reduction

Harm Reduction attempts to reduce adverse outcomes associated with substance use rather than aim for complete abstinence. Harm reduction is a foundation of care that understands abstinence may not be a valid possibility in a pregnant person's life, therefore supporting a monitored use of opioids in pregnancy is deemed the safest option given the circumstances (40). Harm reduction in substance use is a spectrum and may look different for each person; however, in pregnancy, **weaning is not recommended for opioid use disorder (40), due to the high rates of relapse in pregnancy, leading to increased risks for perinatal morbidity and mortality.**

Harm reduction reduces barriers to treatment, as it takes a holistic approach to care, considering all facets of an individual's life beyond the use of opioids. One of the most important aspects of harm reduction is that it improves outcomes by reducing stigma (41). Stigma has been associated with avoidance or delay in seeking healthcare, especially with



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn



persons who have experienced a history of mistreatment (21). Experiences of mistreatment in this population stem from previous experiences of stigma from healthcare providers. Furthermore, fear of losing custody of their children and being criminalized can prevent pregnant persons from sharing their opioid use or accessing care (21,26,42). In the absence of stigma pregnant persons using opioids are more likely to disclose substance use, seek care and continue with treatment (26,42).

Harm reduction in pregnancy could include coordinating the following (42):

- Providing transportation
- Childcare
- Prenatal Vitamins
- Meals
- Parenting Resources
- Sexual Healthcare
- Safe Supply of OAT



Harm reduction including OAT, can decrease the risk of overdose, infections, such as sexually transmitted and blood borne infections, and improve pregnancy outcomes, reducing preterm birth and low birth weight (42). Health care providers can integrate a harm reduction approach into their care by using neutral language and treating people with empathy and respect. In taking this approach, healthcare providers can work with pregnant persons collaboratively rather than punitively, which can increase the pregnant persons' self-confidence regarding parenting (26,42). Furthermore, healthcare providers must reflect on their own values and beliefs, providing evidence-based information and care to pregnant persons, rather than providing care based on moral judgment. This will enact trust and respect, further supporting a collaborative partnership between care providers and pregnant persons prescribed OAT (26,42).



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn



Family-Centered Care

Family-centered care (FCC) is a philosophy that makes parents the experts in the care of their children (29). It empowers parents through collaboration and decision-making to improve health outcomes for children and families. The World Health Organization and the Public Health Agency of Canada endorses family-centered perinatal care. Family-centered perinatal care is largely grounded in an approach that increases the pregnant person's and their families' involvement in decisions related to their pregnancy, birth, and early postpartum experiences to promote optimal health outcomes and well-being. This is supported by healthcare providers and settings that uphold collaboration, partnership, respect, and information-sharing between persons/families and their healthcare providers.

The Institute for Patient – and Family – Centered Care defines FCC as:

“An approach to the planning, delivery, and evaluation of health care that is grounded in mutually beneficial partnerships among pregnant persons, families, and health care professionals. These partnerships at the clinical, program, and policy levels are essential to assuring the quality and safety of health care (p.2).”(43)



Family-centered perinatal care is a holistic approach to care that encompasses a complex process of providing safe and individualized expert care. The approach is holistic and responsive to the needs of the pregnant person, the newborn, and the family, including physical, emotional, psychosocial and spiritual. Family-centered care is grounded in 17 principles that support the seamless integration of FCC into care. The following principles are key to consider in caring for pregnant persons diagnosed with OUD to empower pregnant persons in their care, addressing stigma and other systemic barriers as described above (19).



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn



- **“To make informed choices, women and their families require knowledge about their care”:** This principle ensures pregnant persons diagnosed with OUD have the necessary information to be empowered to make informed decisions for their families.
- **“Women and their families play an integral role in decision making”:** This approach helps to ensure trust and collaboration is established with pregnant persons diagnosed with OUD.
- **“The attitudes and language of health care providers have an impact on a family's experience of maternal and newborn care”:** This principle is especially important for this population due to the impact of stigma on the care received by pregnant persons diagnosed with OUD. Paying close attention to the language used is imperative to ensure power differentials are mitigated.

Additional details related to the principles and care approach can be accessed via Public Health Agency of Canada website – ***Family-Centered Maternity and Newborn Care: National Guidelines*** (19,39,43,44).

Family-centred maternity and newborn care: National guidelines

From [Public Health Agency of Canada](#)

It is important to note, however, that given the complexities found within the histories of this population, using only a family-centered care approach is limited in meeting the holistic needs of pregnant persons diagnosed with OUD and their families (29). Integrating a trauma-informed care approach can help to mitigate the limitations of an FCC approach (29).



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn



Interprofessional collaboration

Interprofessional collaboration is defined by the World Health Organization as:

“collaborative practice happens when multiple health workers from different professional backgrounds work together with pregnant persons, families, carers and communities to deliver the highest quality of care. It allows health workers to engage any individual whose skills can help achieve local health goals (p.7)” (45).



When healthcare workers engage in interprofessional collaboration, families and pregnant persons can feel empowered to make their own care decisions. This, in turn, ensures that all healthcare team members are coordinated, improving access and effectiveness of healthcare services (46). Interprofessional collaboration is essential in caring for pregnant persons, especially those who are equity-deserving and experiencing compounding impacts of oppression. By engaging in interprofessional collaboration, all healthcare providers practice to their fullest scope, using their expertise to meet the unique needs of the pregnant individual (47).



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

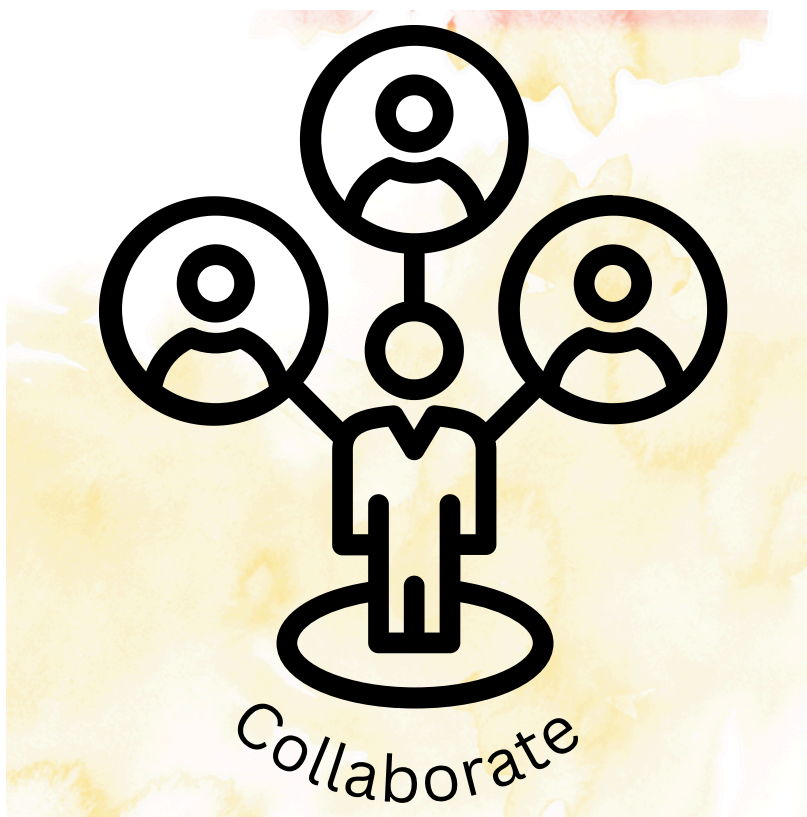
5

Section Five: Newborn



Each healthcare provider must be aware of their role within the team. Interprofessional collaboration in the care of pregnant persons diagnosed with OUD could be shown as (48):

- The patient is at the center of the collaboration, leading the care,
- Creation of a care team with an explicit care plan,
 - Including a communication plan
 - Pre-booked multidisciplinary conferences with all members involved (set early to ensure adequate attendance from all people involved)
- All care members know their role and the expertise they have to offer,
- Open communication among all care team members,
- Discussion of planning early in pregnancy with necessary consultations of multidisciplinary and professional engagement (40,46,49).



1

Section One: Continuum
of Care

2

Section Two:
Antepartum

3

Section Three:
Intrapartum

4

Section Four:
Postpartum

5

Section Five:
Newborn



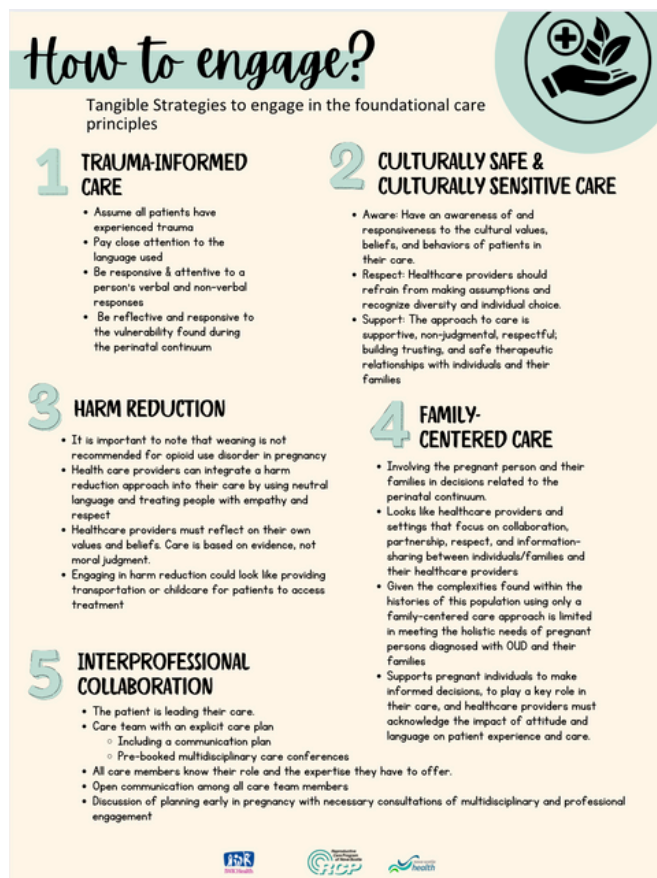
SUMMARY OF CARE PRINCIPLES

Description: This is a knowledge translation tool that can be used to support various disciplines in establishing a core foundation of care principles that can be used to empower pregnant persons throughout the continuum of perinatal care.

Content: This infographic summarizes the key care principles on the front. The back of this infographic (found on the next page) outlines key actionable ways that healthcare providers can demonstrate these care principles within their practice.

Suggested Implementation: We recommend placing this infographic in high traffic areas of staff. This will encourage engagement with the tool and opportunity for healthcare providers to engage in critical reflection and responsive application of learning at their own pace.

Digital Copy available at the following link: **Clinical Toolkit**



five Care Principles

Caring perinatally for pregnant individuals diagnosed with opioid use disorder: a multimodal approach to care

2 CULTURALLY SAFE & CULTURALLY SENSITIVE CARE

Culturally sensitive care requires healthcare providers to be aware of the importance of individuals receiving care within the context of their culture; in a respectful and humble way

3 HARM REDUCTION

Is a foundation of care that understands abstinence may not be a valid possibility in a pregnant person's life, therefore supporting a monitored use of opioids in pregnancy is deemed the safest option given the circumstances

4 FAMILY-CENTERED CARE

Is a philosophy that makes parents the experts in the care for their children. Specifically it empowers parents through collaboration and decision making to improve health outcomes for children and families.

1 TRAUMA-INFORMED CARE

Trauma-informed approach to care: healthcare providers have an understanding and responsiveness to the impact that trauma has on the lives of their patients

5 INTERPROFESSIONAL COLLABORATION

"multiple health workers from different professional backgrounds work together with patients, families, carers and communities to deliver the highest quality of care. It allows health workers to engage any individual whose skills can help achieve local health goals"



How to engage?

Tangible Strategies to engage in the foundational care principles



1 TRAUMA-INFORMED CARE

- Assume all patients have experienced trauma
- Pay close attention to the language used
- Be responsive & attentive to a person's verbal and non-verbal responses
- Be reflective and responsive to the vulnerability found during the perinatal continuum

2 CULTURALLY SAFE & CULTURALLY SENSITIVE CARE

- **Aware:** Have an awareness of and responsiveness to the cultural values, beliefs, and behaviors of patients in their care.
- **Respect:** Healthcare providers should refrain from making assumptions and recognize diversity and individual choice.
- **Support:** The approach to care is supportive, non-judgmental, respectful; building trusting, and safe therapeutic relationships with individuals and their families

3 HARM REDUCTION

- It is important to note that weaning is not recommended for opioid use disorder in pregnancy
- Health care providers can integrate a harm reduction approach into their care by using neutral language and treating people with empathy and respect
- Healthcare providers must reflect on their own values and beliefs. Care is based on evidence, not moral judgment.
- Engaging in harm reduction could look like providing transportation or childcare for patients to access treatment

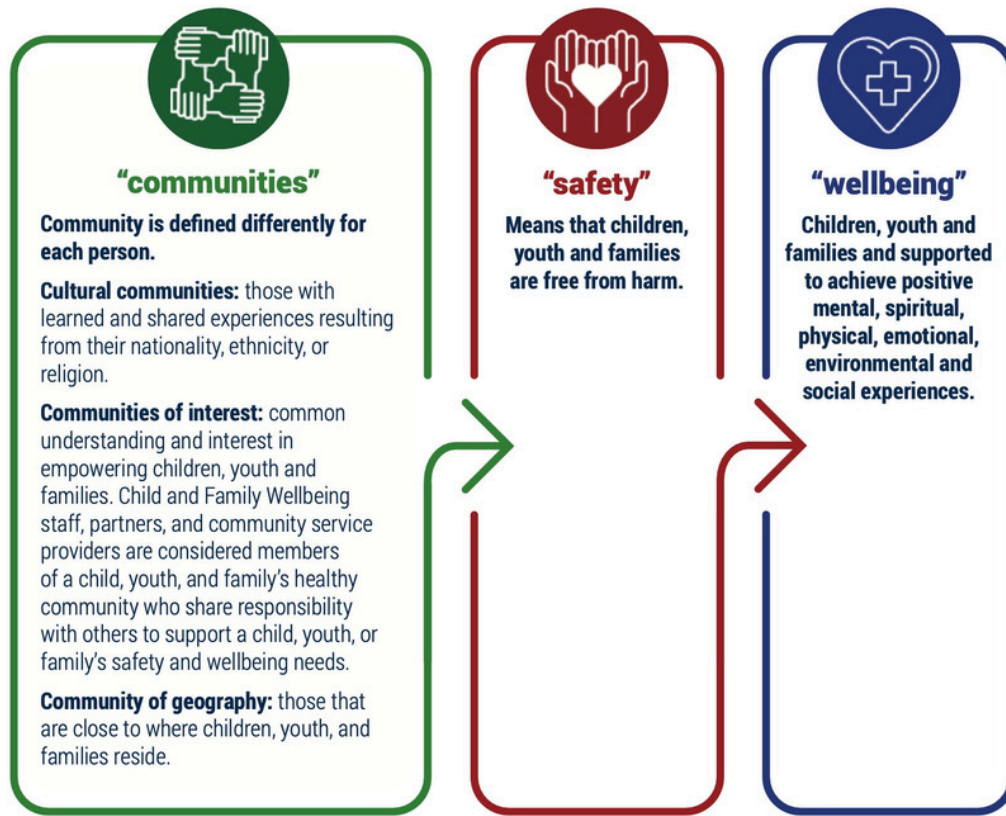
4 FAMILY-CENTERED CARE

- Involving the pregnant person and their families in decisions related to the perinatal continuum.
- Looks like healthcare providers and settings that focus on collaboration, partnership, respect, and information-sharing between individuals/families and their healthcare providers
- Given the complexities found within the histories of this population using only a family-centered care approach is limited in meeting the holistic needs of pregnant persons diagnosed with OUD and their families
- Supports pregnant individuals to make informed decisions, to play a key role in their care, and healthcare providers must acknowledge the impact of attitude and language on patient experience and care.

5 INTERPROFESSIONAL COLLABORATION

- The patient is leading their care.
- Care team with an explicit care plan
 - Including a communication plan
 - Pre-booked multidisciplinary care conferences
- All care members know their role and the expertise they have to offer.
- Open communication among all care team members
- Discussion of planning early in pregnancy with necessary consultations of multidisciplinary and professional engagement

Communities support the **safety** and wellbeing of children, youth, and families.



Over the past couple of years, the Department of Community Services' Child Welfare or Child, Youth and Family Supports has restructured into the **Child and Family Wellbeing Program**. The culture shift encouraged the department to look at families and communities, supporting care through a trauma-informed approach. The values that *the Child and Family Wellbeing Program* practice under are the following:

- **Honesty** (Practice with children, youth, families and communities is transparent and timely)
- **Dignity** (treat all people with honour and respect)
- **Relationships** (Connection is foundational to the identity of children, youth, families and community)



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn



Moreover, the Standards of Practice underlying the approach for the Child and Family Wellbeing Program include:

- Engaging children, youth, and families as experts in their own lives
- Keeping families together within their community
- Engaging in reflective practice
- Building and maintaining relationships
- Valuing community as part of the family
- Embracing individuality and diversity
- Advocating for and with children, youth, and families

The Child and Family Wellbeing program is designed to work collaboratively with equity-deserving populations during times of high stress. It is a multidisciplinary team with a common goal: **Keeping a family together.**



There is a historical stigma surrounding the Child and Family Wellbeing Program. It is essential to discuss with the birthparent the involvement of the Child and Family Wellbeing Program as it is often deemed a stressor for families in the perinatal period (50). The stress associated with these programs stems from historical negative experiences and trauma with child protection services (50). Ideally, this will occur during the antenatal period, but may also happen postpartum. It is important to recognize that in equity-deserving populations, such as pregnant persons prescribed OAT, this fear may be even more pronounced (50). Birthing parents are at risk for substance use relapse and increased substance use in the postpartum period and are especially vulnerable if their children are removed from their care (21).



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn



The process for persons who give birth who are at high risk for the Child and Family Wellbeing Program involvement has changed. Historically, Nova Scotia had Birth Alerts, in which the social worker would submit a referral to all hospitals throughout Nova Scotia. Child and Family Wellbeing Program has been restructured to include a new outreach program, the *Family Connections Program*. The Family Connections program is submitted via referral from a social worker or can be connected through other professionals. The outreach program connects persons to **a variety of programs**.



Not all birthparents prescribed OAT need to be or are referred to the Child and Family Wellbeing Program, which practitioners should thoughtfully consider before referral. If supportive services from the Child and Family Wellbeing program are indicated, healthcare providers can coordinate access to such services; however, it is entirely voluntary for the pregnant person. **After the baby is born, the Child and Family Wellbeing Program can be involved involuntarily if there are concerns regarding the newborn's safety.**

Prenatal Period

If the pregnant person has a history of involvement with the Child and Family Wellbeing Program, formerly Child Welfare, with their previous children, the healthcare team should determine collaboratively if this is an important aspect of care to be discussed with the pregnant person antenatally during the **current** pregnancy. Deciding which provider will engage the patient during discussions with the pregnant person is critical. While the medical social worker may take on this role, this resource may not be available in all facilities, appropriate, or well received by the patient, depending on their experience with and perception of the Child and Family Wellbeing Program. Therefore, engagements should be individualized based on assessing the pregnant person's situation.



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn



Neonatal Period

If the medical team has concerns of a child protection nature about a pregnant person's ability to care for their baby, they should discuss this collaboratively as a team, including the medical social worker if possible. All healthcare professionals **must** report child protection concerns if they have first-hand knowledge of the situation and should contact the Child and Family Wellbeing program office in their area. Please visit the following **website** to select your community.



Reproductive Care Program of
Nova Scotia
5991 Spring Garden Road, Suite 700
Halifax, NS B3H 1Y6
Phone: 902.470.6798
Fax: 902.470.6791
<https://rcp.nshalth.ca>

Nova Scotia Prenatal Record
Companion Document

2022 Edition

Intimate partner violence is abuse (psychological, physical, sexual, financial, or emotional) between adults who are or have been intimate partners or family members, regardless of gender or sexuality. If IPV is identified, care team members should clearly document their concerns including signs of coercive controlling behaviour. “Coercive control” is a pattern of behaviour that is associated with negative parenting practices up to and including child maltreatment. To read more on Coercive Control explore **the Government of Canada’s Making appropriate parenting arrangements in family violence cases**, in addition to the Nova Scotia Prenatal Record Companion Document discussing screening for IPV in the antenatal period.



1

Section One: Continuum
of Care

2

Section Two:
Antepartum

3

Section Three:
Intrapartum

4

Section Four:
Postpartum

5

Section Five:
Newborn



- The health care team is legally obligated under Section 23 of the Child and Family Services Act (CFSA) to report child protection concerns to Child and Family Well Being.
 - Before making a report, clinicians should refer to **Section 22 of CFSA** for a comprehensive outline of circumstances under which notifying Child and Family Well Being is warranted. The decision to report should be made with the greatest care, on a case-by-case basis, in consultation with the full healthcare team. Healthcare providers must also recognize the variety of emotions that birthparents and caregivers may experience, especially the ongoing over-surveillance of racialized parents by child welfare systems. Child and Family Well Being involvement necessitates transparent communication and involvement of the birthing parents.

***If there is intimate partner violence (including emotional abuse) of any type present in the patient's life, the care team has a duty to report this to the Child and Family Wellbeing program when the baby is born or during pregnancy if the birthparent has other children within their care.**

Antepartum visits provide an excellent opportunity to engage in screening for intimate partner violence (IPV) by using the **Women Abuse Screening Tool (WAST)** (51)

Women Abuse Screening Tool (WAST)²

The WAST specifically screens for verbal, emotional, physical, and sexual abuse and is used to help determine if the pregnant person is experiencing domestic violence. If the answers to questions 1 and 2 are "a lot of tension" and "great difficulty" the screen is considered positive and the remaining 6 questions should be answered.

- | | | | |
|--|---|--|-------------------------------------|
| 1. In general how would you describe your relationship? | <input type="checkbox"/> A lot of tension | <input type="checkbox"/> Some tension | <input type="checkbox"/> No tension |
| 2. Do you and your partner work out your arguments with: | <input type="checkbox"/> Great difficulty | <input type="checkbox"/> Some difficulty | <input type="checkbox"/> No tension |
| 3. Do arguments ever result in you feeling down or bad about yourself? | <input type="checkbox"/> Often | <input type="checkbox"/> Sometimes | <input type="checkbox"/> Never |
| 4. Do arguments ever result in hitting, kicking, or pushing? | <input type="checkbox"/> Often | <input type="checkbox"/> Sometimes | <input type="checkbox"/> Never |
| 5. Do you ever feel frightened by what your partner says or does? | <input type="checkbox"/> Often | <input type="checkbox"/> Sometimes | <input type="checkbox"/> Never |
| 6. Has your partner ever abused you physically? | <input type="checkbox"/> Often | <input type="checkbox"/> Sometimes | <input type="checkbox"/> Never |
| 7. Has your partner ever abused you emotionally? | <input type="checkbox"/> Often | <input type="checkbox"/> Sometimes | <input type="checkbox"/> Never |
| 8. Has your partner ever abused you sexually? | <input type="checkbox"/> Often | <input type="checkbox"/> Sometimes | <input type="checkbox"/> Never |



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn



KEY PATIENT EDUCATION

This section of the resource includes a detailed summary of key education points to discuss across the continuum of care for pregnant persons diagnosed with opioid use disorder. Education is imperative at all stages of the continuum, but it is **especially important during the antenatal period** to build a trusting relationship and a foundation of knowledge for pregnant persons as they navigate their newest journey as a birth parent. Below, are important detailed education points, situated across the continuum of care for healthcare providers.



Antepartum | Building a Foundation

The antepartum period is the time to build a foundation of education needed to support pregnant persons throughout the perinatal continuum. There are many vulnerabilities experienced by pregnant persons across the perinatal continuum and education has been shown to serve as a form of anticipatory guidance to mitigate anxieties faced in the unknown (52,53). The following are key education points for healthcare providers to consider supporting patient empowerment and improved care provider understanding in this population. It is important that care providers engage pregnant persons in discussions antenatally related to the topics provided below:

- **Medication Dosage Changes:** This discussion should happen early and often as pregnant persons may feel discouraged by increasing their OAT medication dosages to address the physiologic changes during pregnancy. For more information on medication management antenatally, **please see information** beginning on p.89.



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

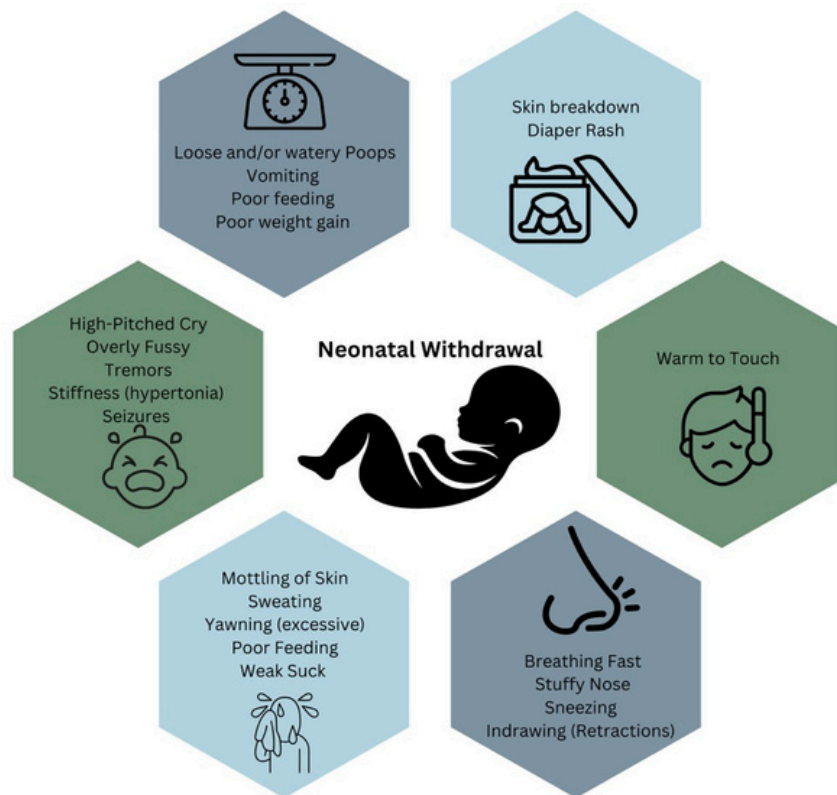
5

Section Five: Newborn



- **Newborn Care:** A discussion on what to expect in the immediate postpartum period regarding their role in the care of their newborn. This is imperative to support the transition from pregnancy to postpartum for the birthparent (12). Discussion topics include:

- Neonatal withdrawal assessment tools (see Eat, Sleep, Console below).
- Potential signs and symptoms of neonatal withdrawal.
- The expected length of a newborn stay is at least **5-7 days**.



- **Eat, Sleep, Console (ESC):** The ESC model is an innovative healthcare approach that is shown to improve patient care experiences for newborns diagnosed with NOWS and their families (54). It is imperative to begin discussions with the family and provide education antenatally to improve continuity of care throughout the perinatal continuum. Discussion topics include:



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

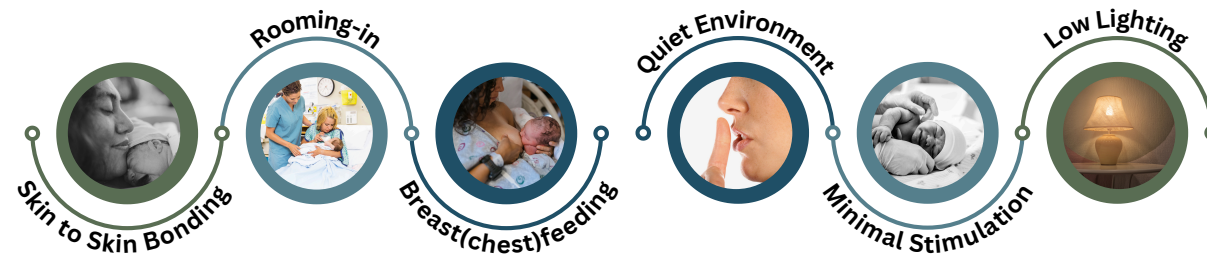
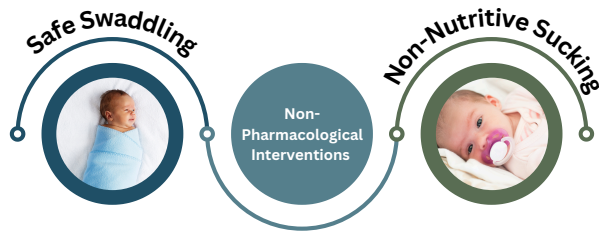
Section Four: Postpartum

5

Section Five: Newborn



- **Treatment Options:** First line are non-pharmacologic supportive interventions such as (12):



- **Pharmacological Therapy:** Medication management provides anticipatory guidance for the birthing parent should their newborn require pharmacologic treatment for opioid withdrawal.
 - Reviewing the algorithm to care for the newborn (please see **Appendix A** for a clinical example)
- **Role of the Birthing Parent:** The birthing parent plays a significant role in newborn care and is considered the “treatment” for the newborn. The caregiver leads the care and decision-making for their newborn, providing responsive newborn-centered care (55).



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn



- **Hospital Stay:** It is important to discuss with pregnant persons what to expect during their hospital stay. This includes the plan for rooming-in with their newborn and any details related to hospital policies that may apply to them during their stay. For example, some hospitals require the birthing parent to have a pass to leave the hospital (e.g., smoking, etc.). If this is applicable, a discussion and plan to address it should occur before admission to the hospital to facilitate meeting the needs of the birthing parent.
 - The birthing parent-newborn dyad begins to grow and develop during the immediate postpartum period. Literature demonstrates that newborns diagnosed with NOWS who room in with their birthing-parents demonstrate a shorter neonatal hospital stay, less time spent in the NICU, increased rates of breast(chest)feeding initiation and a decreased need for pharmacologic therapy (12).
- **Breast(chest)feeding:** Breast(chest)feeding is safe and encouraged in pregnant persons who are prescribed opioid agonist therapy, not using non-prescription drugs, and have no other contraindications (56). It is important to highlight for pregnant persons that regardless of the dose, OAT is not a contraindication to breast(chest)feeding their newborn (57).
- **Financial disparities:** Healthcare providers must create a safe space to allow pregnant persons diagnosed with OUD to identify whether they have concerns related to finances and/or social support. These factors will impact the choice of method of feeding and guide care providers in identifying the need for additional resources. Educating families on the available supports is important during the antenatal period to ensure sufficient time to explore the concerns and barriers present.



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn

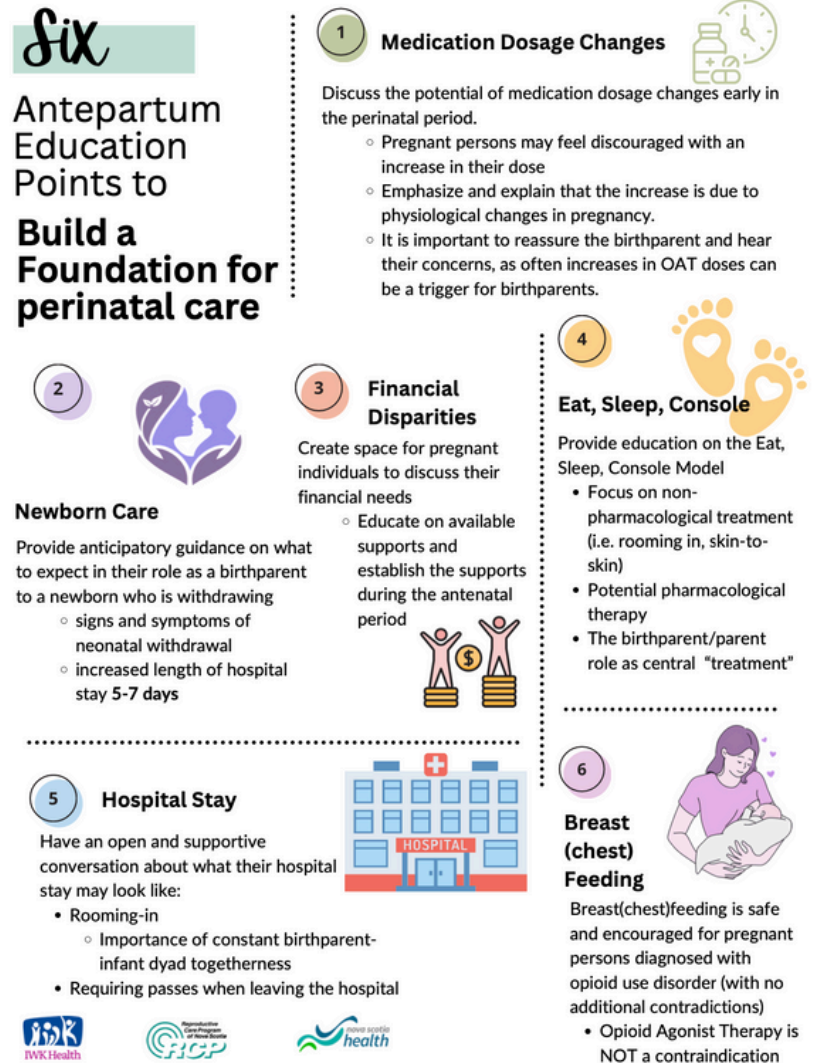


ANTENATAL EDUCATION POINTS

Description: This is a knowledge translation tool that can be used to support various disciplines in establishing and exploring key antenatal education for pregnant persons diagnosed with opioid use disorder.

Content: This infographic summarizes the key education points that should be discussed during the antenatal period in order to support development of a foundation for perinatal care.

Suggested Implementation: We recommend placing this infographic in prenatal clinics and primary care provider offices. These are topics that should be explored during the antenatal period repetitively. Pregnant persons have voiced the importance of continuous engagement in these topics in the antenatal period to help prepare for the postpartum period in caring for their newborns diagnosed with NOWS.



Digital Copy available at the following link: **Clinical Toolkit**



Six

Antepartum Education Points to Build a Foundation for perinatal care

2



Newborn Care

Provide anticipatory guidance on what to expect in their role as a birthparent to a newborn who is withdrawing

- signs and symptoms of neonatal withdrawal
- increased length of hospital stay 5-7 days

5

Hospital Stay

Have an open and supportive conversation about what their hospital stay may look like:

- Rooming-in
 - Importance of constant birthparent-infant dyad togetherness
- Requiring passes when leaving the hospital



Financial Disparities

Create space for pregnant individuals to discuss their financial needs

- Educate on available supports and establish the supports during the antenatal period



1 Medication Dosage Changes

Discuss the potential of medication dosage changes early in the perinatal period.

- Pregnant persons may feel discouraged with an increase in their dose
- Emphasize and explain that the increase is due to physiological changes in pregnancy.
- It is important to reassure the birthparent and hear their concerns, as often increases in OAT doses can be a trigger for birthparents.



4

Eat, Sleep, Console

Provide education on the Eat, Sleep, Console Model

- Focus on non-pharmacological treatment (i.e. rooming in, skin-to-skin)
- Potential pharmacological therapy
- The birthparent/parent role as central “treatment”



6

Breast (chest) Feeding

Breast(chest)feeding is safe and encouraged for pregnant persons diagnosed with opioid use disorder (with no additional contradictions)

- Opioid Agonist Therapy is NOT a contraindication



Intrapartum | Establishing Support in the Unknown

The following key points should be discussed with pregnant persons in anticipation of the labour and birth period of the perinatal continuum. It is important to discuss these education points before the intrapartum period due to the acuity and vulnerability during this period.

- **Opioids for Acute Pain:**

Ensure there is a discussion about the safety of opioid use in labour, along with the potential need for increased dosages of acute pain medication due to hyperalgesia (increased sensitivity), competitive inhibition at opioid receptors from certain OAT medications and/or tolerance to opioids.

- **History of Trauma:** Discuss with pregnant persons if they have a history of trauma. There is a potential for labour and birth to be triggering for pregnant persons, especially those who have experienced sexual abuse. Having an open dialogue early in pregnancy in the antenatal period and revisiting it early in the intrapartum period can help to improve communication and dialogue during a vulnerable time. Healthcare providers should engage in a trauma-informed care approach described in the **Care Principles Section** of this resource.

- Some people who have experienced trauma may also find labour and birth empowering and a healing experience.



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

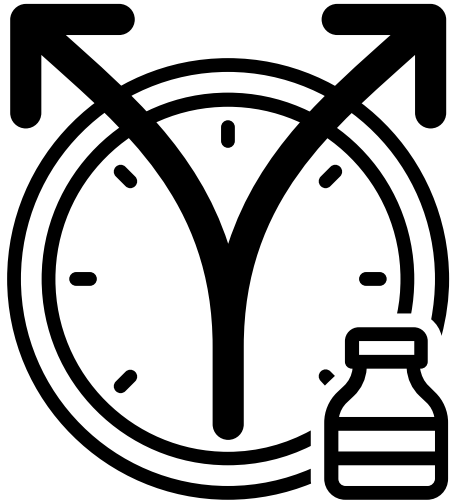
5

Section Five: Newborn





- **Daily Dose (including split-dosing):** Include education regarding how OAT is not an effective pain management medication to manage acute pain associated with labour and birth. Maintenance of OAT mitigates the risk of withdrawal symptoms or relapse rather than managing acute pain. OAT manages the withdrawal but will not provide any support for acute labour pain.



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn



INTRAPARTUM EDUCATION POINTS

Description: This is a knowledge translation tool that can be used to support various disciplines in exploring key education points that should be covered during the intrapartum period.

Content: This infographic summarizes the key education points that should be discussed during the intrapartum period.

Suggested Implementation: We recommend placing this infographic in high traffic labour and birth areas to support care providers during this unique and time sensitive period.

Digital Copy available at the following link: **Clinical Toolkit**



Three Intrapartum education points to Establish Support in the Unknown

1 Opioids for Acute Pain

Opioids for acute pain are **SAFE** and **RECOMMENDED** during labour and birth.

- Some pregnant persons need **INCREASED** dosages of opioids for acute pain
 - Due to hyperalgesia and/or tolerance to opioids

2 History of Trauma

It is important for healthcare providers to have conversations about the pregnant person's history and experience of trauma.

- labour and birth can be triggering - especially for those who have a history of sexual abuse.
- Open dialogue early in pregnancy and then revisiting it in the early intrapartum period can help to establish a trauma-informed approach to care.

3 Daily Dose (Including Split Doses)

The pregnant person's prescribed opioid agonist therapy medication is **NOT** an effective method for pain control.

- The daily dose should still be taken
 - This dose of opioids will mitigate the risk of withdrawal and relapse
- Additional opioids are needed to address **ACUTE** pain



Three

Intrapartum education points to Establish Support in the Unknown



1

Opioids for Acute Pain



Opioids for acute pain are **SAFE** and **RECOMMENDED** during labour and birth.

- Some pregnant persons need **INCREASED** dosages of opioids for acute pain
 - Due to hyperalgesia and/or tolerance to opioids



History of Trauma

2

It is important for healthcare providers to have conversations about the pregnant person's history and experience of trauma.

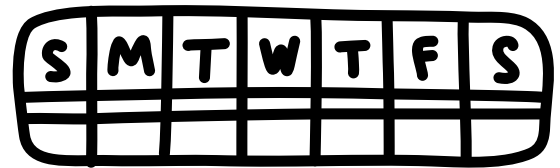
- labour and birth can be triggering - especially for those who have a history of sexual abuse.
- Open dialogue early in pregnancy and then revisiting it in the early intrapartum period can help to establish a trauma-informed approach to care.

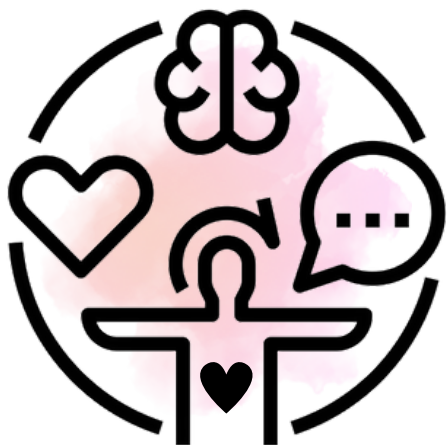
3

Daily Dose (Including Split Doses)

The pregnant person's prescribed opioid agonist therapy medication is **NOT** an effective method for pain control.

- The daily dose should still be taken
 - This dose of opioids will mitigate the risk of withdrawal and relapse
- Additional opioids are needed to address **ACUTE** pain





The postpartum period is the time to provide ongoing and timely support and guidance for families. The foundational knowledge developed during the antenatal period will be crucial during this time and will continue to build throughout their postpartum stay in hospital. Providing families with the knowledge, tools and resources prior to discharge is essential for managing care for themselves and their baby at home.

- **Life in Hospital:** The postpartum length of stay can vary depending on the clinical picture and individualized care planning. Routine postpartum care, as well as an emphasis on postpartum pain management and thorough discharge planning, is essential for these families. The potential feeling of isolation should be explored with pregnant persons, given the longer length of stay for this population. Discussing this early can support anticipatory guidance and planning to mitigate the effects of isolation.
- **Medication Changes:** Discuss current medication needs and any adjustments that may be required immediately postpartum. Throughout the stay in the hospital, other concerns or changes may arise. Pregnant persons should continue to receive their daily dose of OAT, which may need to be adjusted postpartum. Changes in medication dosages should be discussed with the patient, as well as the availability of any relevant community resources, to facilitate a smooth discharge and transition to home.



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn



- **Sedation:** Health care providers should educate pregnant persons on the signs of sedation to monitor along with what to do should they experience signs and symptoms of sedation.

Signs of Excess OAT Sedation and Action Response

Signs of Excess OAT Sedation	What to do
<ul style="list-style-type: none"> • Feeling extra fatigued • Feeling weak • Cold or clammy skin • Dozing off 	<ul style="list-style-type: none"> • Inform pregnant persons to contact their healthcare provider as they likely need an adjustment in their dosing
<ul style="list-style-type: none"> • Difficulty staying alert or awake • Not responsive • Difficulty breathing • Pain in chest 	<ul style="list-style-type: none"> • Inform pregnant persons that experiencing any of these symptoms requires immediate medical attention. Either call 911 or go to their nearest emergency department

- **Family/Social Support:** Create an open environment for discussion on what social supports are available to the pregnant person. Discuss what has worked in the past to develop feelings of safety and build on this in an individualized way to develop a plan.



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn



POSTPARTUM EDUCATION POINTS

Description: This is a knowledge translation tool that can be used to support various disciplines in exploring key education points that should be covered during the postpartum period.

Content: This infographic summarizes the key education points that should be discussed during the postpartum period. Most importantly is taking a collaborative approach and tailoring it to the individuals needs.

Suggested Implementation: We recommend placing this infographic in high traffic postpartum floors. These topics are important to discuss on admission, throughout their stay and on discharge.

Digital Copy available at the following link: **Clinical Toolkit**



Three Postpartum Education Points to Support and Build Capacity for Discharge

1 Life in Hospital

Share with birthparents/parents that their length of stay will vary and is dependent on their newborns' response to extrauterine life.

- Feelings of isolation should be explored, and anticipatory guidance should be provided
- Support birthparents to develop a plan to mitigate the potential feelings of isolation given the potentially prolonged hospital stay (i.e. community support, visitors, etc.)



2 Medication Changes



Medication changes are likely in the postpartum period; however, they may not necessarily occur in the hospital. Birthparents will continue to receive the prescribed pregnancy dose, and it will be adjusted as they transition into the postpartum period.

- Changes in medication dosages must be completed collaboratively with the most responsible practitioner and the patient
- Discussion on which community pharmacist is used for dosages is imperative to support a smooth transition home.

3 Postpartum Sedation

Educate pregnant persons on the signs of sedation to monitor along with what to do should they experience signs of sedation.



Signs of Excess OAT Sedation	What to do?
<ul style="list-style-type: none"> • Feeling extra fatigued, weak • Cold or clammy skin • Dozing off 	Encourage patients with these symptoms to contact their healthcare providers - there is likely a change in medication needed.
<ul style="list-style-type: none"> • Difficulty staying alert or awake • Not responsive • Difficulty breathing • Pain in their chest 	Encourage any patients experiencing these symptoms to call 911 or seek immediate medical treatment at their nearest emergency department.



Three

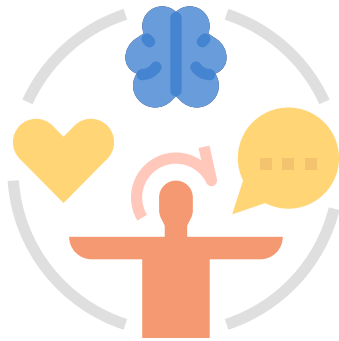
Postpartum Education Points to Support and Build Capacity for Discharge

1

Life in Hospital

Share with birthparents/parents that their length of stay will vary and is dependent on their newborns' response to extrauterine life.

- Feelings of isolation should be explored, and anticipatory guidance should be provided
- Support birthparents to develop a plan to mitigate the potential feelings of isolation given the potentially prolonged hospital stay (i.e. community support, visitors, etc.)



Medication Changes

2

Medication changes are likely in the postpartum period; however, they may not necessarily occur in the hospital. Birthparents will continue to receive the prescribed pregnancy dose, and it will be adjusted as they transition into the postpartum period.

- Changes in medication dosages must be completed collaboratively with the most responsible practitioner and the patient
- Discussion on which community pharmacist is used for dosages is imperative to support a smooth transition home.

3

Postpartum Sedation

Educate pregnant persons on the signs of sedation to monitor along with what to do should they experience signs of sedation.



Signs of Excess OAT Sedation	What to do?
<ul style="list-style-type: none">• Feeling extra fatigued, weak• Cold or clammy skin• Dozing off	Encourage patients with these symptoms to contact their healthcare providers - there is likely a change in medication needed.
<ul style="list-style-type: none">• Difficulty staying alert or awake• Not responsive• Difficulty breathing• Pain in their chest	Encourage any patients experiencing these symptoms to call 911 or seek immediate medical treatment at their nearest emergency department.

Newborn | Supporting Newborns and their Families

Education about the newborn serves as a form of anticipatory guidance and provides the birthparent/caregiver with information that will prepare them for what to expect with their newborn including the potential for withdrawal. This section of education also provides an opportunity to highlight the significance of birthparent-newborn togetherness and prepares the birthparent/parents for their involvement in non-pharmacologic management of their newborn's withdrawal.



In addition to the standard newborn education provided to families before hospital discharge, there are additional aspects that should be emphasized when caring for a newborn diagnosed with NOWS. In hospital, and prior to discharge, it is essential to ensure birthparents/parents receive appropriate education regarding:

- **Safe Sleep:** Safe sleep practices, please see **RCP's safe newborn sleep resource** for newborns, as this population is at a heightened risk of sleep-related death (58).

<http://rcp.nshealth.ca>

Safe Infant Sleep

Clinical Practice Resource



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn



- **Newborn feeding:** Discuss the importance and protective aspect of breast(chest)feeding. Ideally, prenatal counselling and education provided antenatally should include the benefits of providing the birthparents' own milk and that any amount of their own milk provided is beneficial. This includes a discussion around the method the birthparent wishes to use to provide milk to their newborn baby, e.g.: via direct breast(chest)feeding or by bottle.
 - Healthcare providers must also respect that newborn feeding decisions require parents to make an informed choice and there may be instances when people choose to formula feed.
 - Healthcare providers should also consider potential polypharmacy considerations and safety with breast(chest) feeding. Consultations with a lactation consultant and/or pharmacist are helpful to determine lactation safety with polypharmacy.
- **Non-Pharmacological Care:** Birthparents and families should understand the importance of the non-pharmacologic aspects of care for the newborn and continue this approach following discharge from the hospital.
- **Signs of Withdrawal at Home:** Birthparents should continue to monitor their newborn at home for signs of withdrawal behaviours. Healthcare providers must support parents with information to assist them with recognizing when consultation with a healthcare provider is needed.



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn



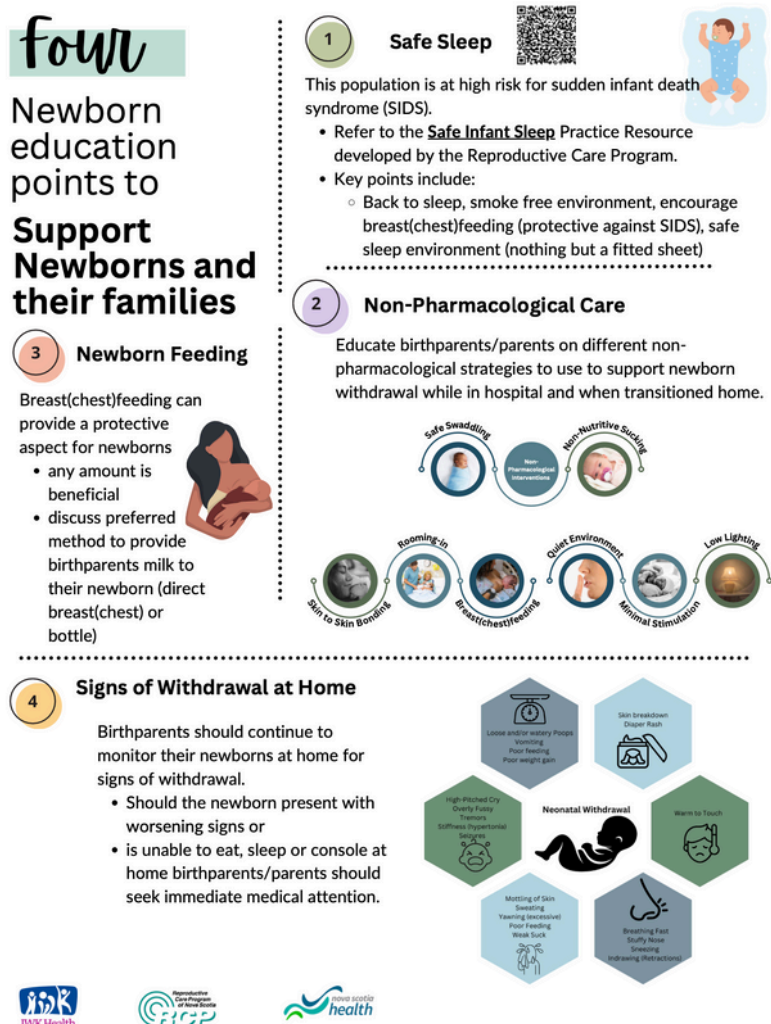
NEWBORN EDUCATION POINTS

Description: This is a knowledge translation tool that can be used to support various disciplines in exploring key education points that should be covered during the newborn period.

Content: This infographic summarizes the key education points that should be discussed with birthparents/parents during the newborn period. There is important emphasis on teaching these points during discharge teaching to support empowered discharge home of birthparents and their newborns.

Suggested Implementation: We recommend placing this infographic in high traffic postpartum floors. These topics are important to discuss on admission, throughout their stay and on discharge.

Digital Copy available at the following link: **Clinical Toolkit**



four

Newborn education points to Support Newborns and their families

3 Newborn Feeding

Breast(chest)feeding can provide a protective aspect for newborns

- any amount is beneficial
- discuss preferred method to provide birthparents milk to their newborn (direct breast(chest) or bottle)



1 Safe Sleep

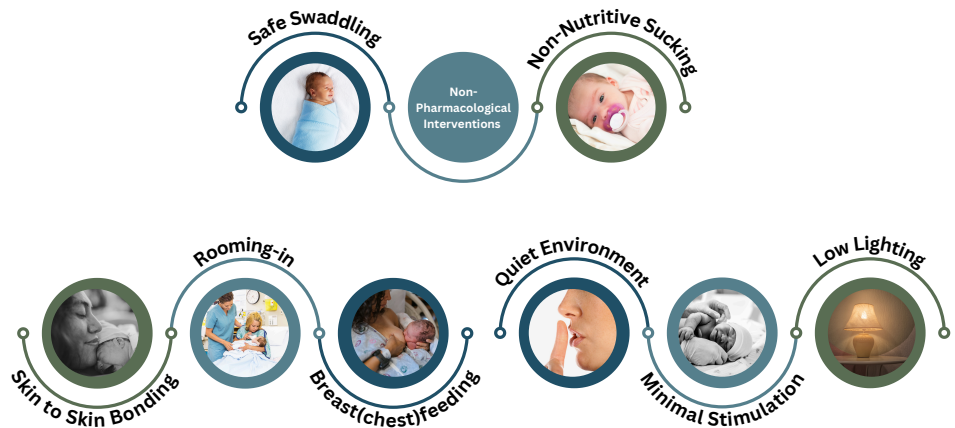


This population is at high risk for sudden infant death syndrome (SIDS).

- Refer to the **Safe Infant Sleep** Practice Resource developed by the Reproductive Care Program.
- Key points include:
 - Back to sleep, smoke free environment, encourage breast(chest)feeding (protective against SIDS), safe sleep environment (nothing but a fitted sheet)

2 Non-Pharmacological Care

Educate birthparents/parents on different non-pharmacological strategies to use to support newborn withdrawal while in hospital and when transitioned home.



4 Signs of Withdrawal at Home

Birthparents should continue to monitor their newborns at home for signs of withdrawal.

- Should the newborn present with worsening signs or
- is unable to eat, sleep or console at home birthparents/parents should seek immediate medical attention.





Historically, care for this population has occurred primarily in larger regional and tertiary care hospitals in Nova Scotia. Displacing pregnant persons from their home communities removes them from their known support networks and from familiarity within their home community. This can cause further disruption and anxiety for families, further complicating an already intense situation.

This summary aims to provide a comprehensive description of the best available evidence to support the care of this population; however, not all facilities will have ready access to all interdisciplinary team members. Holistic care can still be provided for this population when critically reflecting on the individualized needs of the pregnant person in care. **Foundational care principles** must remain consistent; however, the care team members may vary. In cases where there is limited access to a wide variety of disciplines, such as dietitians, social workers, or physiotherapists, we hope this resource can address this gap by providing foundational considerations for each pregnant person.

As regional facilities in NS begin to expand their capacities to care for this population, it is important to consider the regional resources available to support the pregnant person throughout the duration of the perinatal continuum. As capacity grows, support and consultations may be needed. Below is a communication tree for facilities as they grow in capacity and seek collaboration from persons with experience in caring for pregnant persons diagnosed with OUD and their newborns diagnosed with NOWS.



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn





1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn



During Office Hours
Monday -Friday
8:00am - 4:00pm

After working hours
and holidays



COMMUNICATION TREE: CARING FOR PREGNANT PERSONS PRESCRIBED OAT AND THEIR NEWBORNS DIAGNOSED WITH NOWS.

Antepartum /
Intrapartum
Obstretical
Consultations

IWK Health Perinatal Centre
Phone 902-470-6445
Fax 902-470-7467

Maternal-Fetal Medicine
(MFM) Physician
Phone: 902-470-8888
Ask for MFM on-call

Antepartum/
Intrapartum
Consultations
Nursing

IWK FNCU Clinical Nurse
Specialist
Phone: 902-470-8888
Ask for Family Newborn Care
Unit Clinical Nurse Specialist

IWK FNCU Charge Nurse
Telephone: 902-470-7135
or 902-470-7078

Postpartum
Consultations
Nursing

Postpartum
Consultations
Healthcare provider:
Newborn

IWK Newborn Service Program
Phone: 902-470-8888
Ask for Newborn Service Physician

If newborn presents with additional Co-
morbidities needing neonatology consult

IWK Neonatologist on Call
Phone: 902-470-8888
Ask for Neonatologist on Call

Communication Tree (updated September 2024)

Documentation

Consultations should be accurately documented. This includes documentation from both the facility seeking consultation and the facility providing consultation.

2 PRECONCEPTION & ANTEPARTUM CONSIDERATIONS

Knowledge Translation Toolkit can be found [here](#) and includes:

- Chapter Summary
- Snap Shot Consultation Infographic (p.69)
- Continuum of Care Algorithm (p.74)
- Pharmacy Considerations (p.97)



1. Introduction

- The preconception/ antepartum period of the perinatal continuum is the optimal time to develop collaborative and empowering relationships, while building a foundation of care for pregnant persons diagnosed with opioid use disorder.
- Social determinants of health greatly affect this population and must be considered in all aspects of care.

2. What is OAT?

- Opioid Agonist Therapy involves administration of an opioid agonist medication to prevent withdrawal and reduce cravings.
- Methadone and Buprenorphine/naloxone are the two most commonly prescribed OAT medications in the pregnant population in Nova Scotia.
- **Withdrawal management is not recommended as an option in pregnancy.**

3. Screening

- Substance use screening should be completed as part of initial prenatal assessments and repeated periodically across the perinatal continuum.
- T-ACE and ALPHA tool are two tools available to support/guide screening.
- **Recommended Care Consultations and Considerations** (p.74) Outlines key care plan considerations for individuals who are prescribed pre-existing OAT.
- Persons not prescribed pre-existing OAT with substance use should be promptly consulted with an addiction medicine specialist.

4. Complex Care Needs: Diverse Consultations

- Dynamic and responsive care is required to manage care for this population.
- Beginning with a detailed health intake is critical in establishing trust and a foundation of personal knowledge to assist in care planning.
 - Substance use history and last intake is critical to document
- Next, screening for infectious diseases is particularly relevant for pregnant persons diagnosed with OUD with a history of IV drug use due to the increased risks of contracting various infectious diseases.
 - e.g. Hep B & C infections and associated considerations for pregnancy and newborn care
- Early Consultations are needed (and are elaborated on the next page)

SNAPSHOT:

Diverse & Dynamic Consultations and Considerations



Obstetrical Care Provider

- Early consultations with an Obstetrical care provider with experience in OAT in pregnancy is key
- **IWK Health Centre: Referral to the IWK pregnancy and dependency clinic [Phone: 902-470-6445 | Fax 902-470-7467]**
- Birth and postpartum care location: determine early and have a plan



Community OAT Provider

- Open and continuous communication
- Fluctuations in OAT are to be expected; increases are likely and should not be avoided due to maternal metabolism.
- Most commonly prescribed: methadone & buprenorphine/naloxone
- Care considerations re: Missed doses



Social Work

- There is a potentially fractured relationship between social workers and this population.
- Consultations are **VOLUNTARY**
- Social Workers are equipped with a wealth of knowledge regarding social determinants of health.
 - Including emotional and mental health support, financial navigation, advocacy, etc.
- Hospital and Community system navigation



Hospital and Community Based Pharmacists

- Consultation should occur early in the antepartum period.
- **Hospital Pharmacist:** Transparent communication is needed to ensure continuity of care (discharge planning, changes in and access to OAT doses)
 - OAT Flow sheets & verifying dosages are needed (from two sources)
- **Community Pharmacist:** provide excellent support in bridging from hospital to community (e.g. education, medication access)



Anesthesia

- Early consultations are recommended with Anesthesia.
- Pregnant persons may experience challenges like hyperalgesia, difficulties with IV access, and heightened anxiety around pain.
- Create a pain plan that treats the pain. **OAT alone is not adequate for acute pain control.**
- **Opioids when used to address acute pain, such as labour pain or post-operative pain, are not associated with relapse.**



Newborn Care Provider

- Early consultation during the antenatal period is recommended to establish both trust and a transparent postpartum plan.
- Introduce important topics such as:
 - Eat, Sleep, Console Model of Care
 - Emphasizing and empowering the birthparent holding an essential role in their newborn's care
 - Importance of non-pharmacological care



Baby Steps Program

- Newborn program offered to families in Nova Scotia to support early childhood development.
- The program is offered beginning in the antepartum period to support building foundational relationships between Baby Steps interventionists and pregnant persons/families
- The program includes many initiatives to support families such as: home visits and child development support
- Referrals are voluntary and can be completed at <https://www.nsecdis.ca/>



Dietitians

- Nutrition has an impact on maternal mood and well being.
- Nutritional education has been shown to improve health outcomes for this population such as decreasing neural tube defects and low birth weights.
- Early referrals are recommended to mitigate potential nutrition deficiencies and manage constipation
- Pregnant persons prescribed OAT should have access to regular meals with nutrient dense foods
- Constipation can be exacerbated due to chronic OAT use.



Physiotherapy

- Physiotherapy consults should be considered in the antenatal period to support pain management and anticipatory guidance of pain management.
- Physiotherapy can help to support engagement in supportive and safe exercise, along with education on falls risk and multimodal pain management strategies.
- Pelvic health education is key, especially for those experiencing significant constipation challenges.

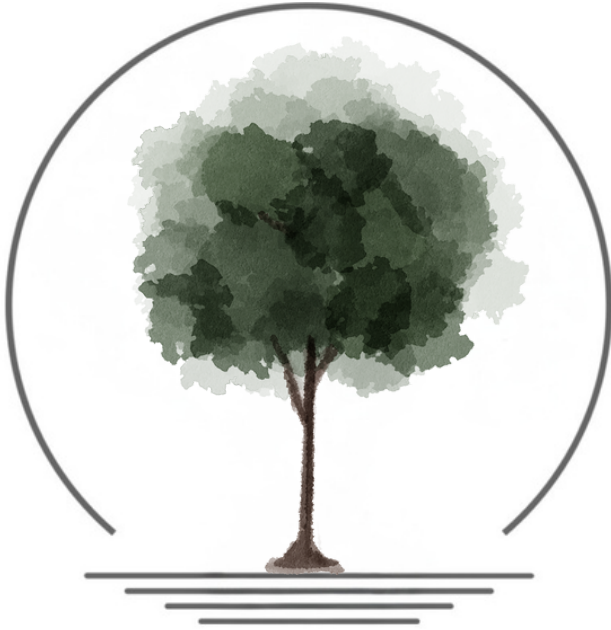


Public Health Services

- Public health early years program can provide a wealth of knowledge and education for families.
- Early antepartum referrals are recommended to ensure public health nurses can connect families with adequate community supports along with developing trusting relationships.
- The Nurse-Family Partnership Program is available for this population to support transitions in the perinatal period and beyond
 - This program is voluntary and offers support up until the child's second birthday.

This care period encompasses preconception and the antepartum period of the perinatal continuum. This resource section will describe special considerations for this period, emphasizing the screening algorithm and recommended consultations to support the entire perinatal continuum.

Introduction



The care of pregnant persons during the preconception/antepartum period provides a foundation for care moving forward across the continuum. Prenatal care providers should work together with a shared understanding and involvement of the pregnant person to ensure unrealistic expectations are not placed on pregnant persons (26,59). The impacts of the social determinants of health

including the intersectionality of race and gender within this population, which must be considered, especially regarding housing, childcare, and transportation availability (26). Lack of housing, childcare, and transportation makes it difficult to access care and can prevent people from completing recommended care (26). Collaborative health care across the perinatal continuum, combined with non-judgmental approaches to care, will reduce barriers to care by making treatment more accessible. Factors that increase the likelihood of successful long-term treatment in this population include (1) combining prenatal care and substance use treatment in one location (18); (2) comprehensive programs that provide assistance with stable housing; and (3) mental health supports (26,59). Caring for this population in one location is challenging in Nova Scotia; therefore, centres in Nova Scotia have adopted an elective model, providing integrated obstetrical, addiction medicine and other



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn



interdisciplinary expertise while not necessarily based in the same location. This is facilitated by well-developed communication processes.

What is Opioid Antagonist Therapy (OAT)?

Opioid agonist therapy (OAT)

involves administration of opioid agonist medication to prevent withdrawal and reduce cravings for opioid drugs related to prolonged use.

These medications include:

methadone,

buprenorphine/naloxone

(Suboxone®), long-acting injectable buprenorphine (Sublocade®),

buprenorphine (Subutex®) and slow-

release oral morphine (Kadian®). These medications are prescribed in a supervised clinic setting to ensure patient safety and are only one part of a comprehensive, multidisciplinary approach to supporting persons with opioid use disorder (OUD). Pregnant persons usually receive their medications at their community pharmacy, and many have unsupervised take-home doses, also known as “carries.”

OAT has long been the gold standard treatment for OUD in pregnant persons, specifically, the use of methadone and buprenorphine/naloxone (Suboxone®). OAT has repeatedly demonstrated success with substantially reducing and even discontinuing unscheduled opioid use in the perinatal population. Moreover, treatment with OAT has demonstrated minimal adverse effects on the fetus in comparison to rapid withdrawal management and medically untreated OUD (60–63).

Methadone has traditionally been recognized as the first-line option for the treatment of OUD in pregnancy. The use of buprenorphine/naloxone has increased in the non-pregnant and subsequently pregnant population and is, therefore, an effective alternative first-line medication for this population. Slow-release oral morphine may be considered for pregnant persons in whom the first-line options were not effective in treatment retention; also, this would be an off-label use and would be prescribed through close consultation with an addiction medicine specialist (31).



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

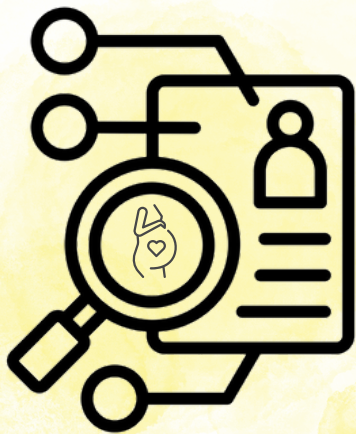
5

Section Five: Newborn



Withdrawal management is not recommended as an option during pregnancy, due to the high rates of relapse in pregnancy, leading to increased risks for perinatal morbidity and mortality. Numerous studies have demonstrated that the physiological fluctuations associated with withdrawal from opioid use and subsequent relapse can lead to adverse outcomes that are more severe and longer lasting than NOWS, including maternal and fetal distress, preterm labour, fetal hypoxia, fetal demise, and long-term developmental issues in the newborn (64).

Screening Processes



In general, substance use screening is part of the first prenatal assessment and is repeated periodically throughout pregnancy and postpartum when clinically relevant (31). SUD affects a diverse population, and therefore requires screening measures to be universal (56). Ideally screening should occur at the first prenatal appointment and occur periodically throughout the pregnancy.

Using a non-judgmental approach and open-ended questions such as “are you taking any prescription or non-prescription medication?” can help to open relational space to discuss substance use with pregnant persons. There is not an optimal screening tool recommended for the perinatal population to identify substance use in pregnancy; however, there are a number of validated tools available for use in the perinatal population, including the T-ACE questionnaire and the ALPHA tool (57). The T-ACE questionnaire focuses on screening for high-risk pregnancy alcohol consumption, whereas the ALPHA tool encompasses questions related to recreational drug use along with risk factors including family violence and postpartum depression (57). The T-ACE tool has been included in the **NS RCP Prenatal Record**.



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn





The T-ACE Questionnaire:(65)

T-ACE Alcohol Screening Tool¹

The T-ACE screening tool is a measurement tool of four questions that are significant identifiers of pregnancy risk drinking (i.e., alcohol intake sufficient to potentially damage the embryo/fetus).

The T-ACE score has a range of 0-5. The value of each answer to the four questions is totaled to determine the final T-ACE score.

A total score of 2 or more indicates a positive outcome for pregnancy risk drinking and the pregnant person should be referred for further assessment.

Screening is not required if initial assessment reveals no alcohol is consumed.

One drink is equivalent to: 12 ounces of beer or cooler; 5 ounces of wine; 1.5 ounces of hard liquor

Tolerance	How many drinks does it take to make you feel high?	≤ 2 drinks = 0 > 2 drinks = 2	_____ score
Annoyed	Have people annoyed you by criticizing your drinking?	Yes = 1 No = 0	_____ score
Cut Down	Have you felt you ought to cut down on your drinking?	Yes = 1 No = 0	_____ score
Eye Opener	Have you ever had a drink first thing in the morning to steady your nerves or get rid of a hangover	Yes = 1 No = 0	_____ score
		Total Score:	_____

The ALPHA Tool:(66)

ANTENATAL FACTORS	COMMENTS/PLAN																								
SUBSTANCE USE Alcohol/drug abuse (WA, CA) • How many drinks of alcohol do you have per week? • Are there times when you drink more than that? • Do you or your partner use recreational drugs? • Do you or your partner have a problem with alcohol or drugs? • Consider CAGE (Cut down, Annoyed, Guilty, Eye opener)																									
FAMILY VIOLENCE Woman or partner experienced or witnessed abuse (physical, emotional, sexual) (CA, WA) • What was your parents' relationship like? • Did your father ever scare or hurt your mother? • Did your parents ever scare or hurt you? • Were you ever sexually abused as a child?																									
Current or past woman abuse (WA, CA, PD) • How do you and your partner solve arguments? • Do you ever feel frightened by what your partner says or does? • Have you ever been hit/pushed/slapped by a partner? • Has your partner ever humiliated you or psychologically abused you in other ways? • Have you ever been forced to have sex against your will?																									
Previous child abuse by woman or partner (CA) • Do you/your partner have children not living with you? If so, why? • Have you ever had involvement with a child protection agency (i.e., Children's Aid Society)?																									
Child discipline (CA) • How were you disciplined as a child? • How do you think you will discipline your child? • How do you deal with your kids at home when they misbehave?																									
FOLLOW-UP PLAN: <table border="0"> <tr> <td><input type="checkbox"/> Supportive counselling by provider</td> <td><input type="checkbox"/> Homecare</td> <td><input type="checkbox"/> Assaulted women's helpline / shelter / counselling</td> </tr> <tr> <td><input type="checkbox"/> Additional prenatal appointments</td> <td><input type="checkbox"/> Parenting classes / parents' support group</td> <td><input type="checkbox"/> Legal advice</td> </tr> <tr> <td><input type="checkbox"/> Additional postpartum appointments</td> <td><input type="checkbox"/> Addiction treatment programs</td> <td><input type="checkbox"/> Children's Aid Society</td> </tr> <tr> <td><input type="checkbox"/> Additional well baby visits</td> <td><input type="checkbox"/> Smoking cessation resources</td> <td><input type="checkbox"/> Other: _____</td> </tr> <tr> <td><input type="checkbox"/> Public Health referral</td> <td><input type="checkbox"/> Social Worker</td> <td><input type="checkbox"/> Other: _____</td> </tr> <tr> <td><input type="checkbox"/> Prenatal education services</td> <td><input type="checkbox"/> Psychologist / Psychiatrist</td> <td><input type="checkbox"/> Other: _____</td> </tr> <tr> <td><input type="checkbox"/> Nutritionist</td> <td><input type="checkbox"/> Psychotherapist / marital / family therapist</td> <td><input type="checkbox"/> Other: _____</td> </tr> <tr> <td><input type="checkbox"/> Community resources / mothers' group</td> <td></td> <td></td> </tr> </table>		<input type="checkbox"/> Supportive counselling by provider	<input type="checkbox"/> Homecare	<input type="checkbox"/> Assaulted women's helpline / shelter / counselling	<input type="checkbox"/> Additional prenatal appointments	<input type="checkbox"/> Parenting classes / parents' support group	<input type="checkbox"/> Legal advice	<input type="checkbox"/> Additional postpartum appointments	<input type="checkbox"/> Addiction treatment programs	<input type="checkbox"/> Children's Aid Society	<input type="checkbox"/> Additional well baby visits	<input type="checkbox"/> Smoking cessation resources	<input type="checkbox"/> Other: _____	<input type="checkbox"/> Public Health referral	<input type="checkbox"/> Social Worker	<input type="checkbox"/> Other: _____	<input type="checkbox"/> Prenatal education services	<input type="checkbox"/> Psychologist / Psychiatrist	<input type="checkbox"/> Other: _____	<input type="checkbox"/> Nutritionist	<input type="checkbox"/> Psychotherapist / marital / family therapist	<input type="checkbox"/> Other: _____	<input type="checkbox"/> Community resources / mothers' group		
<input type="checkbox"/> Supportive counselling by provider	<input type="checkbox"/> Homecare	<input type="checkbox"/> Assaulted women's helpline / shelter / counselling																							
<input type="checkbox"/> Additional prenatal appointments	<input type="checkbox"/> Parenting classes / parents' support group	<input type="checkbox"/> Legal advice																							
<input type="checkbox"/> Additional postpartum appointments	<input type="checkbox"/> Addiction treatment programs	<input type="checkbox"/> Children's Aid Society																							
<input type="checkbox"/> Additional well baby visits	<input type="checkbox"/> Smoking cessation resources	<input type="checkbox"/> Other: _____																							
<input type="checkbox"/> Public Health referral	<input type="checkbox"/> Social Worker	<input type="checkbox"/> Other: _____																							
<input type="checkbox"/> Prenatal education services	<input type="checkbox"/> Psychologist / Psychiatrist	<input type="checkbox"/> Other: _____																							
<input type="checkbox"/> Nutritionist	<input type="checkbox"/> Psychotherapist / marital / family therapist	<input type="checkbox"/> Other: _____																							
<input type="checkbox"/> Community resources / mothers' group																									
COMMENTS: _____ _____ _____ _____																									
Date Completed _____ Signature _____ <small>Copyright © ALPHA Project 1993 Version: May 1998 *The ALPHA Guide is available through the Department of Family and Community Medicine, University of Toronto.</small>																									

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn



Continuum of Care for Pregnant Individuals Prescribed OAT



Recommended Care Consultations and Considerations

Screening

All pregnant persons should be screened for substance use during pregnancy.

If your patient screens positive for opioid use disorder, we recommend following the below care path for the antepartum period.

Building a Foundation

Detailed Health Intake

- Substance use history
- Social determinants of health
- Hepatitis C, HIV other transmissible disease exploration
- Exploration of comorbidities

Foundational Screening

- Dating/viability ultrasound
- Recommended prenatal investigations
- Additional investigations as clinically indicated, including transmissible diseases
- Counseling for screening for fetal aneuploidy

Education (examples):

- Effect of maternal physiology on OAT dose requirements
- Hospital of delivery responsibilities
- Harm reduction: Take home Naloxone Kits
- Discharge planning and continuity of care

Early Consultations:

- Obstetrical Care Provider
- Community OAT Provider
- Social Work
- Pharmacist
- Anesthesia
- Newborn Care Provider
- Babysteps Program
- More consultations outlined on page 70+

Special Considerations

- Consultation as needed with an obstetrical care provider who has experience in OAT management in pregnancy
- Counseling

Considerations by Trimester

01 First Trimester

- Dating/viability ultrasound
- Early Pregnancy Review for selected indications
- Nutrition Considerations
- Antiemetics
- Discussion of access to transportation, childcare, financial support, etc.
- Discussion of the care plan for the duration of the perinatal continuum.

02 Second Trimester

- Screening anatomy ultrasound
- Ongoing collaborative care with the full care team
- Discussion of the care plan across the perinatal continuum
- Discussion of newborn care

03 Third Trimester

- Plan for birth (including support from family)
- Growth ultrasound at 32-34 weeks, unless earlier concerns
- BPP Weekly after 36 weeks
- Repeat Hepatitis C viral load as indicated
- Induction of labour/cesarean section for obstetrical indications
- Postpartum care plan (i.e. passes and discussing family support and NOWS)

1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

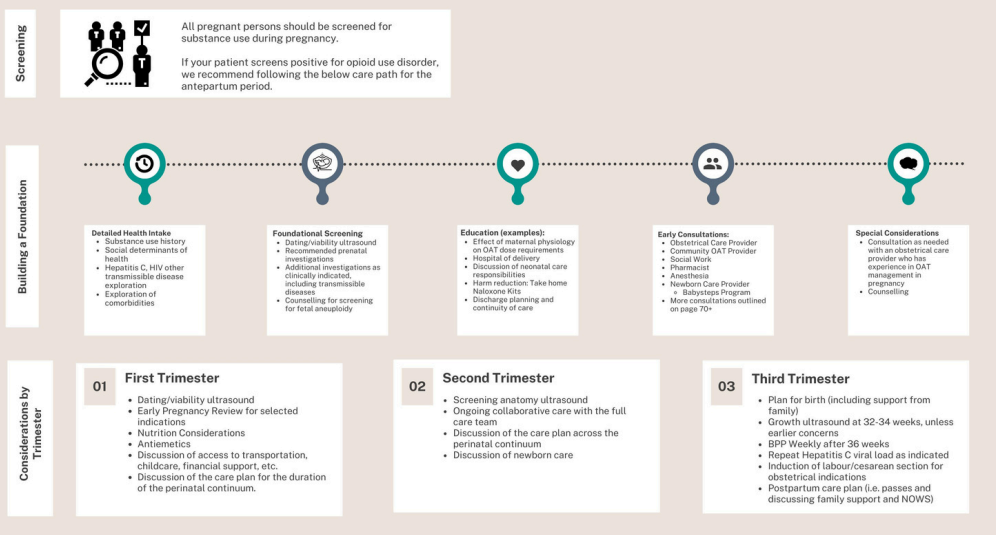
5

Section Five: Newborn





Continuum of Care for Pregnant Individuals Prescribed OAT



Recommended Care Consultations and Considerations

For persons on pre-existing OAT: Healthcare providers should refer to the care algorithm for recommended consultation and care considerations.

For persons not on pre-existing OAT with substance use identified: Prompt consultation with an addiction medicine specialist is recommended to enable care plan management and begin a dialogue with the pregnant person and family regarding access to OAT during the perinatal period (57). **The Addiction Medicine Consult Service (AMCS)** is available Monday to Friday 8:30 am to 4:30 pm, offering rapid telephone advice to physicians, pharmacists and nurse practitioners: **1-855-970-0234**

Following consultation with addiction medicine specialists, healthcare providers can refer to the care algorithm outlined above to support care management planning.

If a person declines OAT treatment, an individualized care plan should be developed in collaboration with the patient. Although the information within this resource is centered around birthparents and pregnant persons who are prescribed OAT, the information and guidance within the toolkit would still be applicable – with added unique reflections.

Section One: Continuum of Care

Section Two: Antepartum

Section Three: Intrapartum

Section Four: Postpartum

Section Five: Newborn



Plan Management

Dynamic care is required for persons prescribed OAT; care that is grounded in dignity, respect, and collaboration, is focused on harm reduction and includes foundational care approaches that are family-centered, trauma-informed, and culturally safe. This population experiences unique challenges and requires responsive planning and care management considerations across the perinatal continuum (56). Care management includes considering all elements affecting the pregnant person's life, including mental, physical, and psychosocial considerations (67). A thorough discussion encompassing open and honest communication can help to build the foundation of care needed to meet the holistic care needs of this population (67).

Planning for the perinatal period begins in the preconception/antepartum period. This includes effective communication and the inclusion of a variety of multidisciplinary care team members to meet the diverse needs of this population. **Recommended Care Consultations and Considerations** demonstrates a flow chart encompassing the unique considerations and consultations recommended across the perinatal continuum beginning in the antenatally.

Detailed Health Intake

A detailed health intake is needed, beginning at the pregnant person's first contact with the health system. This will provide a foundation for care. Standard health intake questionnaires should be used, including considerations of physical and mental health histories. Unique considerations for health history for this population include:

- **Detailed substance use history:** Healthcare providers should document a detailed understanding of the complexity of substances used or being used. This includes documenting the last time substances (including prescribed opioids) were ingested.



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

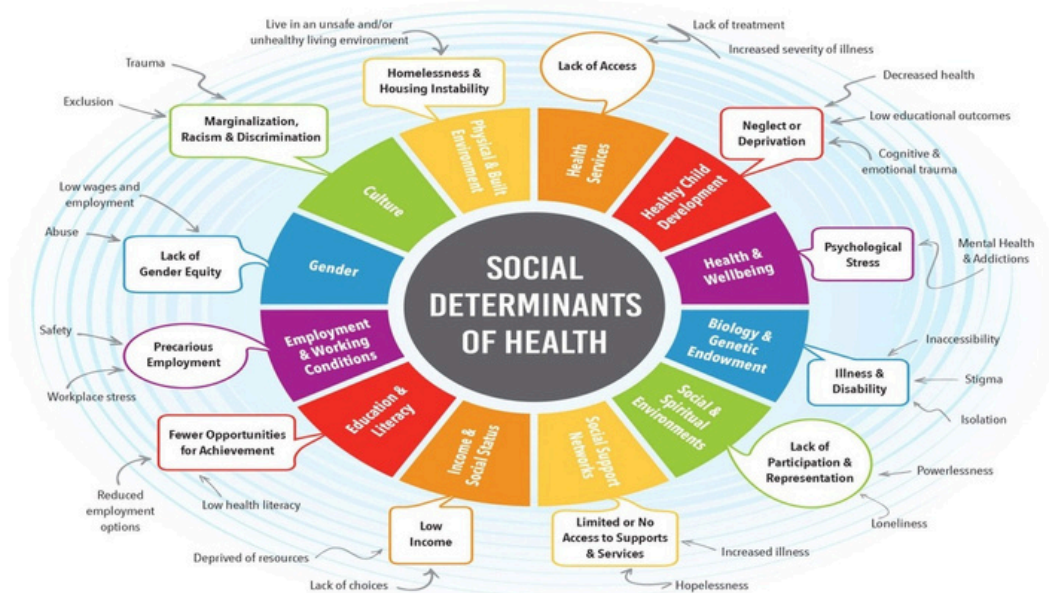
Section Five: Newborn



IMPORTANT: It is crucial to update this information every visit, especially regarding the time and type of substances ingested, prescribed and/or non-prescribed.

- **Social Determinants of Health:** Exploring the social determinants of health (SDOH) is especially important in this population. It is important to begin conversations early about any areas that could demonstrate inequities, such as housing, financial considerations, and food security. Having an open discussion of the impacts of SDOHs on the pregnant person's life can ensure explicit consideration of influences within and beyond the pregnant person's control that can potentially impact their pregnancy and parenting, along with their health and wellbeing.

FIGURE 1: SOCIAL DETERMINANTS OF HEALTH AND WELL-BEING¹⁴



BUILDING POVERTY SOLUTIONS: IDEAS FOR ACTION

A COMMUNITY REPORT

UNITED WAY HALIFAX | HALIFAX REGIONAL MUNICIPALITY

United Way Halifax, Boyer, T., Hutchinson, P., Johnson, M., & Wilcox, J. (2020). *Building poverty solutions: Ideas for Action HALIFAX REGIONAL MUNICIPALITY – 2018 A Community Report* (pp. 1–61) [A Community Report] (68).



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn



Foundational Screening and Ongoing Monitoring

Persons diagnosed with OUD often experience increased rates and complications of infectious diseases as compared to persons without the diagnosis. As such, it is important to have additional considerations for Hepatitis C, Hepatitis B, Syphilis, and HIV testing, along with special considerations of Bacterial Vaginosis and Trichomonas, Chlamydia and Gonorrhea, beyond the routine perinatal screening (69).

Summary of infectious diseases and screening recommendations as per the Society for Obstetricians and Gynecologists of Canada (SOGC) Clinical Practice 2023 Guideline (69).

Infectious Disease	Description	Screening and Recommendations
Hepatitis C*	<p>Diagnosis is common with rates of exposure being 53-60% and active infection being 37% of pregnant persons.</p> <p>A diagnosis of Hepatitis C Virus (HCV) complicates pregnancies and puts pregnant persons and their newborns at risk for complications such as gestational diabetes, low birthweight and intra uterine growth restriction (IUGR) (70)</p>	<p>Universal screening is recommended for this population.</p> <p>Screening should be completed in pregnancy to improve access and planning of treatment during the postpartum period.</p> <p>If a pregnant person is Hep C + it is important to consider birth and care plan for the pregnant person perinatally and their newborn. A caesarean section is not recommended over a vaginal delivery, however membrane ruptures over 6 hours and internal fetal monitoring has been associated with an increased risk for perinatal transmission in addition it is recommended to avoid episiotomies (71)</p>



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn





1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn



Infectious Disease	Description	Screening and Recommendations
Hepatitis B*	Diagnosis is more common with this population.	<p>Universal screening is recommended for all pregnant persons.</p> <p>Offer Hepatitis B screening early pregnancy and repeated later in pregnancy (with an ongoing risk present).</p> <p>Hepatitis B vaccination should be offered if persons are not immune via an accelerated schedule, as described below.</p> <p>“(i.e., Schedule 1: day 0, day 7, day 21, and 12 months later; or Schedule 2: day 0, 1 month, 2 months, and 12 months) [p.11]”(69)</p>
HIV	<p>There is a potential intersection of the diagnosis of HIV with a diagnosis of OUD.</p> <p>HIV-positive diagnosis is associated with preterm birth, poor fetal growth, and spontaneous abortion, along with experiences polysubstance use (alcohol and tobacco) and comorbidities such as depression and sepsis.</p>	<p>Universal screening is recommended for all pregnant persons.</p> <p>Persons of high-risk Antepartum Recommendations There is no consensus of frequency of screening in pregnancy; however, we recommend all pregnant persons who test negative and continue to engage in high-risk behavior, be retested every trimester (72).</p> <p>Intrapartum/postpartum recommendations:</p> <p>“In pregnant persons presenting without a recent HIV antibody test and within the window period of HIV, a polymerase chain-reaction (PCR)</p>



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn



Infectious Disease	Description	Screening and Recommendations
HIV	Pregnant persons with ongoing use of non-prescription drugs are at increased risk for acquiring HIV in pregnancy. The risk of vertical transmission is increased if HIV is undiagnosed and/or untreated.	<p>HIV test should be completed, zidovudine should be administered during labour, and the newborn should be given prophylactic treatment with zidovudine until HIV can be ruled out. (p.11)“(69) Consider pediatric infectious disease specialist consult if starting treatment.</p> <p>BREAST(CHEST)FEEDING: Important to note that until a birthparents and child’s HIV status are confirmed, breast(chest)feeding should be avoided.</p>
Bacterial Vaginosis and Trichomonas	Infections are more common in persons who use non-prescription substances, and are associated with preterm birth, low birth weight and premature rupture of membranes.	Targeted screening of this population is recommended given the adverse outcomes and increased risks for infection in this population.
Chlamydia and Gonorrhea	Chlamydia and Gonorrhea infections are more common among this population.	<p>Vaginal swabs are recommended during pregnancy.</p> <p>The first morning void can also be used should the use of vaginal swabs be unavailable.</p> <p>Follow universal recommendations for positive test result.</p>



Additional Screening Recommended Beyond the SOGC Guideline

Infectious Disease	Description	Screening and Recommendations
Syphilis	Pregnant persons diagnosed with OUD are at an increased risk for syphilis. This paired with late or no prenatal care increases the risk for congenital syphilis of the newborn as treatment is required 30 days prior to birth (73)	<p>Universal screening is recommended for all pregnant persons.</p> <p>Timeline: Screening should occur in the first trimester (or at the first prenatal visit)</p> <p>Repeat: Screening should be repeated at 24-28 weeks of pregnancy and again at delivery for at risk populations</p> <p>If there is a high risk for infection, more frequent intervals of screening may be warranted (74)</p>

- Please see **RCP's Nova Scotia Prenatal Record Companion Document** for additional information on screening and recommendations in the prenatal period.



Reproductive Care Program of
Nova Scotia
5991 Spring Garden Road, Suite 700
Halifax, NS B3H 1Y6
Phone: 902.470.6798
Fax: 902.470.6791
<http://rcp.nshealth.ca>

Nova Scotia Prenatal Record
Companion Document

2022 Edition



1

Section One: Continuum
of Care

2

Section Two:
Antepartum

3

Section Three:
Intrapartum

4

Section Four:
Postpartum

5

Section Five:
Newborn

Considerations for Hepatitis C and B Infections Perinatally

- **Hepatitis C Positive:** If a pregnant person is known to be positive to Hepatitis C, the newborn's primary care provider must consider the following (70,71):
- **Immediate post-birth:**
 - **Breast(chest)feeding:** Breast(chest)feeding is encouraged in individuals with mono-infection (e.g. no comorbid infections such as HIV) (71,75), however should be carefully monitored as cracked or bleeding nipples can increase the risk for HCV transmission to the newborn.
- **Long Term considerations**
 - **HCV Testing:** The Canadian Pediatric Society's position statement on HCV infection in infants recommends an individualized approach to HCV testing for infants born to birthparents with a known HCV diagnosis (71):
 - For newborns born to birthparents with an HCV positive diagnosis, serology testing for HCV should be completed between 12 to 18 months of age.
 - Infants who demonstrate reactive serology at 12 to 18 months are recommended to undergo HCV polymerase chain reaction (PCR) testing.
 - In some cases where follow up at 12 to 18 months is not guaranteed (such as adverse impacts of social determinants of health, continued engagement in high-risk behavior e.g. drug injection) earlier screening may be warranted.
 - Screening over 2 months of age is recommended due to the limited sensitivity of the assay before 2 months.
 - Negative PCR at 2 months indicates vertical transmission likely did not occur, however it is still recommended to have a repeat serology test between 12 to 18 months to confirm.
 - Positive HCV PCR is recommended to be referred to a pediatrician with experience in HCV management.
 - **Pediatric Referrals:** We also recommend a referral to a pediatric gastroenterologist or a pediatric infectious disease specialist.



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn



For more information on **up-to-date information of Hepatitis C**
Considerations for newborns please visit the following website:



Canadian Paediatric Society

A home for paediatricians. A voice for children and youth.

Policy & Advocacy Clinical Practice Professional Education News & Publications Programs

HOME / CLINICAL PRACTICE / POSITION STATEMENTS AND... / THE MANAGEMENT OF...

POSITION STATEMENT

73 Shares

The management of infants, children, and youth at risk for hepatitis C virus (HCV) infection

Test Your Knowledge

Posted: Nov 5, 2021

The Canadian Paediatric Society gives permission to print single copies of this document from our website. For permission to reprint or reproduce multiple copies, please see our [copyright policy](#).

Principal author(s)

Ari Bitnun; Canadian Paediatric Society, Infectious Diseases and Immunization Committee, [Infectious Diseases and Immunization Committee](#)

[Paediatr Child Health 2021\(7\): 440 \(Abstract\)](#)

Abstract

Hepatitis C virus (HCV) infection affects 0.5% to 1.0% of the Canadian population. Most paediatric HCV infections are a consequence of vertical transmission or, among youth and young adults, the result of engaging in high-risk behaviours, such as injection drug use and unprotected sexual activity. It is now recommended that all infants, children, and youth with one or more risk factors be screened for HCV infection. Treating chronic HCV infection with direct-acting antivirals has been shown to achieve sustained virologic suppression in 97% to 100% of children as young as 3 years old. Paediatricians and family physicians have an important role in educating youth regarding HCV infection risks and prevention, and in advocating to government and public health authorities for comprehensive harm reduction interventions targeting at-risk youth, accessible treatments, and routine prenatal screening for HCV.



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

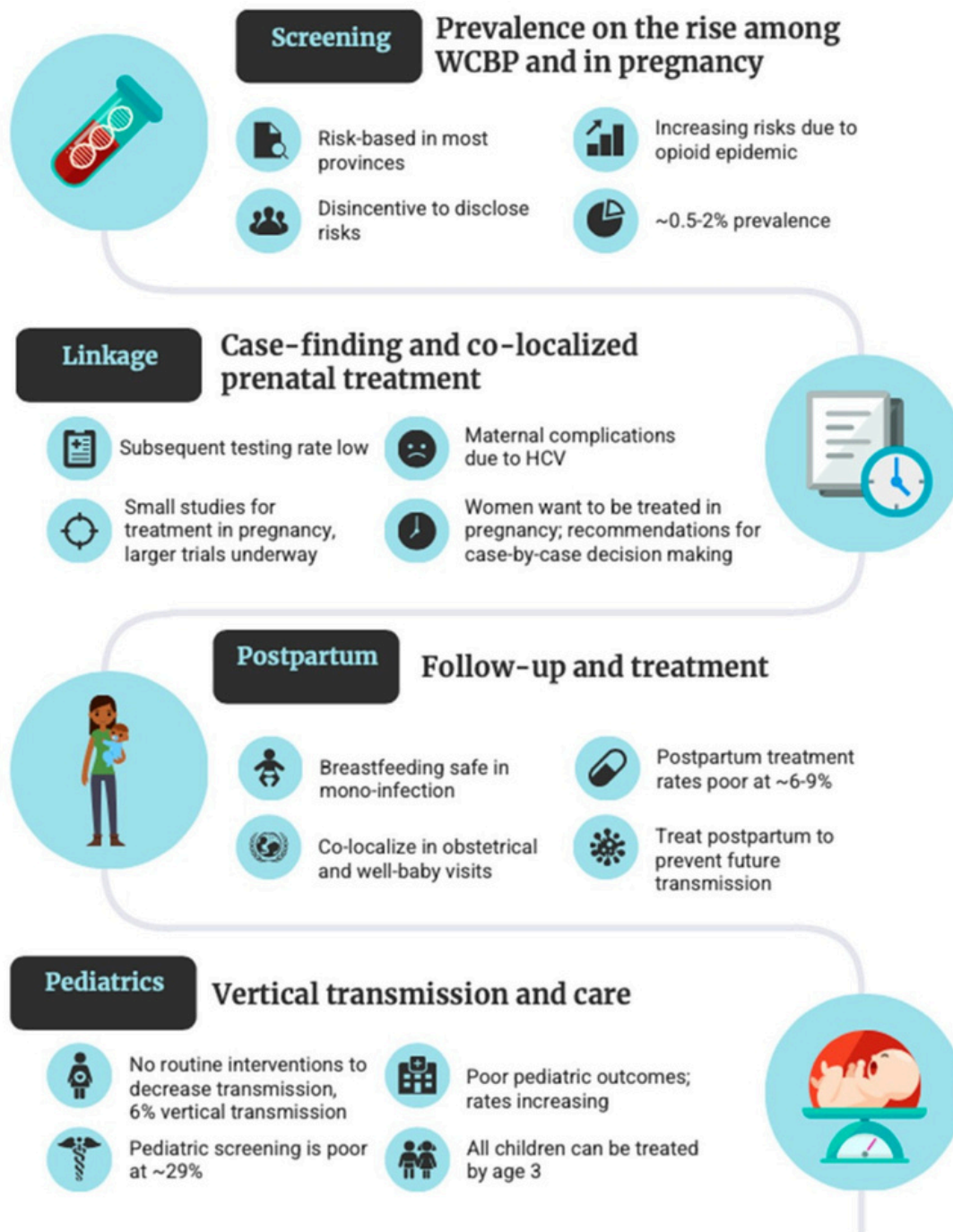
Section Four: Postpartum

5

Section Five: Newborn



Key considerations in the care pathway for HCV positive pregnant persons and their newborns.



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn



Retrieved from: Mendlowitz AB, Feld JJ, Biondi MJ. Hepatitis B and C in Pregnancy and Children: A Canadian Perspective. *Viruses*. 2023;15(1). doi:10.3390/v15010091

Hepatitis B Positive or Unknown status: The most important intervention for an exposure to Hep B is **the HB Vaccine**. Universal and routine HB screening should be completed in pregnant persons, due to the significant risk for newborns to become chronic HB carriers (76). In addition to the HB Vaccine the HBIG (immunoglobulin) can be given for added protection.

- The Newborn care provider must order the vaccine and immunoglobulin to be administered within 12 hours of birth, as the efficacy of the immunoglobulin significantly decreases 48 hours after birth. The immunoglobulin, however, can be given for up to 7 days following the birth of the newborn (76).

Long-term follow-up: Arrangements must be made to have follow up doses with the newborn's primary care provider or local public health practitioners, depending on where the family lives. Follow-up doses are required at 1 and 6 months of age, with the 6-month dose able to be given as the *DTaP-HB-IPV-Hib* Vaccine (76). HB testing should be completed between 1-4 months after the last dose of the vaccine administration, but no sooner than 9 months of age due to potential detection of passive anti-HBs from immunoglobulin administration at birth (76). If the infant presents as a "non-responder" (negative for both HBsAg and anti-HBs) additional doses should be given of the vaccine and the infant's serology should be monitored.



The Canadian Paediatric Society position statement on reducing perinatal infection risk in newborns provides evidence based guidance on screening and treating newborns at risk for infectious diseases.



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

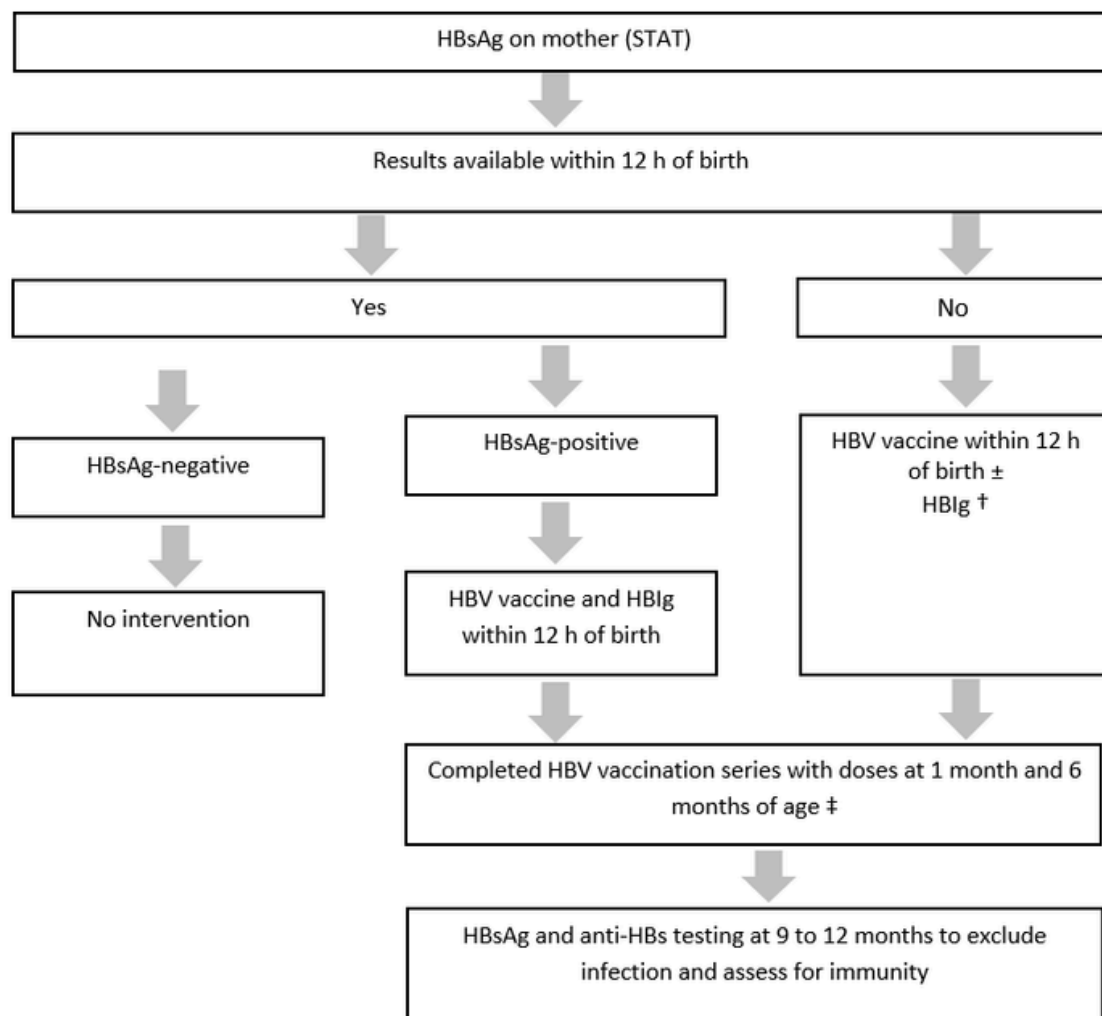
5

Section Five: Newborn





Figure 2. Infant HBV-related management when the mother is available for testing *



HBV Hepatitis B virus; Anti-HBs Anti-hepatitis B surface antibody; HBsAg Hepatitis B surface antigen; HBIg Hepatitis B immune globulin

* When a mother with unknown HbsAg status is not available for testing, HBV vaccine is indicated within 12 hours of birth; administration of HBIg should also be considered depending on maternal risk assessment.

† HBIg should be administered if the mother is found to be acutely infected or a chronic carrier and may be considered otherwise based on individual case risk assessment. HBIg can be delayed for up to 7 days when maternal HBV status is unknown and test results are pending, provided infant's birth weight ≥ 2 kg. For preterm infants < 2 kg, administer HBIg within 12 h

‡ For infants < 2.0 kg at birth, a 4-dose schedule is recommended (at 0, 1, 2 and 6 months)

Retrieved from: Bitnun A, Sauve L, Fanella S, Infectious Diseases and Immunization Committee, Canadian Pediatric Society. Reducing perinatal infection risk in newborns of mothers who received inadequate prenatal care. Published online 2024.



Section One: Continuum of Care

Section Two: Antepartum

Section Three: Intrapartum

Section Four: Postpartum

Section Five: Newborn

Diagnostic Imaging

There is limited literature regarding recommendations for antenatal screening for fetal well-being (69); however, the following ultrasounds are recommended to monitor fetal well-being throughout the antepartum period, given the importance of routine antepartum monitoring:



- **First Trimester:** Dating and viability ultrasound and an early pregnancy review (EPR) in the Fetal Assessment and Treatment Centre at IWK Health if indicated for obstetrical reasons.
- **Second Trimester:** Routine screening anatomy ultrasound
- **Third Trimester:** Between 32-34 weeks (unless otherwise indicated), a growth ultrasound should be completed. After 36 weeks gestation, weekly Biophysical Profile Scores should be completed.

Early Consultation and Considerations in the Perinatal Continuum



This next section includes a discussion of recommended consultations with healthcare providers. While the following care provider referrals are recommended, they are completely voluntary, and the pregnant person diagnosed with OUD **must consent** before initiating referrals for consultation with the acute/community care providers.



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn



Obstetrical Care Provider

Each pregnant person should have access to holistic obstetrical care services and expertise with OAT in pregnancy. Obstetrical care services can act as the anchor in which care can stem from throughout the perinatal continuum. Early consultation with an obstetrical care provider is essential to establish trust between a pregnant person and a healthcare provider and identify any necessary perinatal consultations that must occur early on during this period.

Consultation with a maternity care provider (obstetrician or family doctor) with experience in caring for pregnant persons prescribed OAT.

As regional facilities expand their capacities to care for this population, it is important to consider the regional resources available to support the pregnant person throughout the duration of the perinatal continuum. **The table below** demonstrates the central booking office for consultations to the IWK.

Contact Information for IWK Referral for OAT in Pregnancy Consultations	
Location	Contact
IWK Health Centre: Referral to the IWK pregnancy and dependency clinic	<p>PNC Booking Office Phone: 902-470-6445 Fax 902-470-7467</p> <p>Reasons: For preconception counselling, consultation only, shared care, or ongoing care.</p>



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

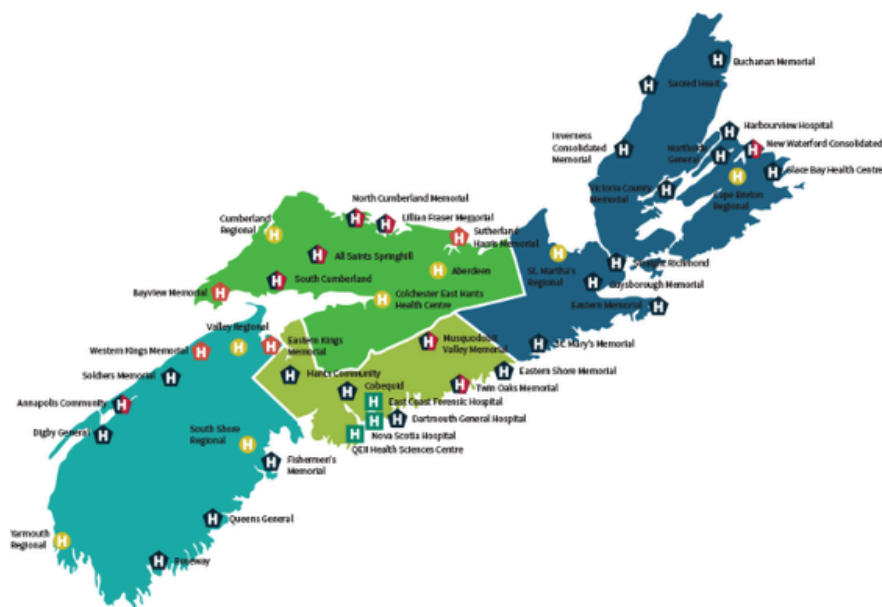
4

Section Four: Postpartum

5

Section Five: Newborn





Birth and Postpartum Care Location: It is important to have careful considerations of the location for birth. Optimization of the birth-parent-newborn dyad is critical for positive patient health outcomes. It is important to consider the unique patient needs, along with what resources their home hospital offers, when considering the safety of keeping families closer to their home communities. There is a total of 9 hospitals with a birthing service in NS (denoted by the yellow circles with an “H” on the NS map shown above).

Community Opioid Agonist Therapy Provider



One of the most important collaborations that occur in the preconception/antepartum period is the open and continuous communication between acute care providers and community care providers. Ongoing discussions between the acute and community care providers are recommended to ensure seamless and responsive medication dosing for pregnant persons prescribed OAT (34).

This is especially important in managing the expected fluctuations that occur with OAT. Maternal metabolism increases during pregnancy; therefore, pregnant persons may require an increase in their daily OAT dose to manage withdrawal symptoms and prevent fetal stress,



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn



particularly in the second and third trimesters. Split doses may be required because there is a risk that higher doses given once daily may cause fluctuations in serum opioid levels and, in turn, fetal stress. It is important to note that buprenorphine is somewhat less likely to require significant dose changes because its extended half-life makes changes in maternal hepatic metabolism less concerning (64).

Commonly Prescribed Opioid Agonist Therapy (OAT)

Name	Administration Route	Inadequate OAT	Excessive OAT
Methadone	Oral (PO)	<ul style="list-style-type: none"> • Withdrawal • Agitation • Restlessness • Diaphoresis • Rhinorrhea • Cravings • Anxiety • Insomnia • Yawning • Nausea/ Vomiting • Pain • Joint/ Muscle Pain • Tremors 	<ul style="list-style-type: none"> • Sedation • Drowsiness • Confusion • Clammy Skin • Constricted pupils • Dizziness • Slow/ Decreased respirations • Inability to wake up
Buprenorphine/ Naloxone	Sublingual (SL)		
Buprenorphine extended- release injection*	Subcutaneous (SubCut)		
Sustained Release Oral Morphine (off-label)	Oral (PO)		

*Buprenorphine extended-release injection is not recommended in pregnancy



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn





Missed and Vomited Dose Recommendations

Adapted from: Centre for Addiction and Mental Health. Opioid Agonist Therapy: A Synthesis of Canadian Guidelines for Treating Opioid Use Disorder. Published May 2021. Available at www.camh.ca

Methadone

The recommended plan for a missed dose is dependent on how many doses have been missed along with the clinical presentation of the individual.

1. **One or two doses missed:** do not reduce the dose unless there are concerns of loss of tolerance or adverse events (A potential example of an 'adverse event' could be a situation where a pregnant person missed 1-2 doses of methadone and was experiencing acute alcohol intoxication or withdrawal treated with high dose benzodiazepines. We then may give a lower dose even if we don't suspect a loss of tolerance).
2. **Three doses:** decrease the dose by 50 percent
3. **Four or more doses:** decrease the dose to 30mg or less.

Should the individual miss several doses, you may need to **re-establish a stable methadone** dose (this may not be the same dose as previous). The number of missed dosages spurring the commencement of re-establishment is individualized and should be discussed on a case-by-case basis.

Buprenorphine

It is important to consider whether your patient has experienced relapse or not to full opioid agonist use before deciding on which treatment plan will be decided.

For missed doses with NO relapse to full opioid agonist use:

- If **less** than or equal to **5 days**: resume the previous dose
- If **more** than or equal to **6 days**: adjust the dose based on the total daily dose and number of missed doses (as demonstrated below):

1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn





Buprenorphine

Missed days	Dose	Suggested adjustment
≥ 6 days	2 mg/0.5 mg–4 mg/1 mg	No change
≥ 6 days	6 mg/1.5 mg–8 mg/2 mg	Restart at 4 mg/1 mg
6–7 days	> 8 mg/2 mg	Restart at 8 mg/2 mg
> 7 days	> 8 mg/2 mg	Restart at 4 mg/1 mg

Should a patient be on an **alternate-day dosing**:

Suspend the buprenorphine/naloxone until the patient can be reassessed. Then, return the patient to a daily dose schedule (potentially at a lowered dose) to ensure re-stabilization before resuming an alternate-day dosing schedule.

For missed doses WITH relapse or return to full opioid agonist use:

Advise the patient to **suspend the buprenorphine/naloxone and reassess the patient as soon as possible to induct them onto treatment.**

Vomited Dose Recommendations

Methadone

As pregnancy is a time for potential frequent episodes of emesis, it is important to understand the recommendations for maintaining methadone dosing:

Should a patient vomit the dose:

- **IF the emesis has been witnessed by a healthcare provider and occurred within 15 minutes of the observed dose** Offer one replacement dose of methadone (**replacement dose = 50 percent of the regular dose**)
- Should the patient continue to have frequent episodes of emesis, healthcare providers may wish to consider recommending **spreading the dose over 30 minutes** with observation for 15-20 minutes following the dose.

Buprenorphine

As buprenorphine is sublingual there is no concern of vomiting doses.

1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn



Social workers can be an invaluable resource for pregnant persons during the perinatal period, as it is a time of heightened vulnerability and transition, and where persons navigate many changes including physical and complex psychosocial. Social workers provide essential emotional support, utilizing their expertise in understanding the broader systems impacting pregnant persons. Social workers play a pivotal role in addressing the psychosocial aspects of pregnancy, offering counselling, resources, and advocacy to ensure holistic care for both the birthparent and the newborn. The social work lens offers a comprehensive and person-centered perspective that contributes significantly to the well-being of pregnant persons, recognizing and addressing their unique needs beyond the medical realm (77).



Some pregnant persons diagnosed with OUD may have had negative past experiences with social work and may be fearful or suspicious due to concerns of child apprehension or the inclusion of child protection services; additional information can be found in the **Child and Family Wellbeing section** (p.43). Their negative experiences might support their decision to decline a social work referral. Pregnant persons diagnosed with OUD often experience various social problems, including a disruption in social support services. The lack of social support can further compound a history of trauma, mental health disorders and usage of other substances, such as tobacco (56).



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn





Social workers are equipped with the necessary knowledge and skills to support this population throughout the perinatal continuum. Social workers complete a thorough assessment of the various social determinants of health that have potential to impact the lives of pregnant persons prescribed OAT, and screen for mental health concerns. Building a rapport early with a social worker can help to establish a trusting foundation between the patient and care provider. Social workers can offer support in many ways including:

- **Emotional and Mental Health Support:** Uses a variety of therapeutic interventions and approaches.
- **Community Resource Connection:** Connect pregnant persons to wrap-around support in the community for enhanced support networks.
- **Financial Navigation:** Assisting families to find solutions or resources for their financial stressors. Such as supporting navigation with the Income Assistance (IA) program of Nova Scotia (e.g. access to prenatal vitamins)
- **Family and Relationship Conflict:** Help pregnant persons navigate family and relationship conflicts and foster healthier dynamics.
- **Advocacy:** Using a social justice lens to advocate for pregnant persons on a variety of needs and systemic disparities.
- **Hospital System Navigation:** Guide pregnant persons and families through the complexities of the hospital system and their care.
- **Crisis Intervention and Safety Planning:** Use escalation skills and create safety plans during challenging times e.g. fleeing domestic violence.



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn



Should the patient decline participation in a consultation with a social worker, social workers remain integral contributors to the healthcare team. The unique lens, diverging from the biomedical model, acknowledges the intricate interplay of social, cultural, and environmental factors impacting perinatal pregnant persons. Collaborating with other interprofessional team members, social workers can aid in the fulfillment of families' needs and facilitate their connection to relevant resources. Consulting with social workers can provide insights and strategies for addressing emerging psychosocial needs while serving as a crucial resource for navigating child protection concerns within the healthcare context. **It is important to note that if a patient declines a social work consultation, it should not be perceived as suspicious behaviour.**

Hospital and Community Based Pharmacists

PHARMACY RECOMMENDATIONS



A pharmacy consult should be completed early in the antepartum period. Pharmacists are often the first point of access for pregnant persons to consult when experiencing a medication query and are equipped with a wealth of knowledge of medication interactions (78). Given this expertise in pharmacologic considerations it is imperative that these persons are consulted members of the health care team (78).

Hospital Pharmacist: In the care for pregnant persons prescribed OAT, the hospital pharmacist often acts as the liaison between the community OAT provider, hospital staff and community pharmacist. An early consult with hospital and community pharmacists can ensure that continuity of care begins early for the patient, including anticipatory planning of OAT dosages if admitted to hospital, planning for birth and the postpartum hospital stay.



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn



Important considerations provided by a pharmacist related to medication management in this population include:

- **Flowsheet:** An OAT Flowsheet used for documentation during hospital admissions (See **Appendix A** for examples)
- **Pre-printed Order set:** A preprinted order set that ensures consistency and continuity of care for pregnant persons during hospital admissions (See **Appendix A** for examples)
- **Toxicity and Withdrawal (T&W) Assessments:** Pharmacists can often be the lead practitioners in assessing toxicity and withdrawal by documenting **COWS scoring** (79) within the patient's chart; however, any healthcare provider can complete this assessment.
 - **Each local facility should reflect on the best process for T&W Assessments.** For instance, one regional facility has the frontline nurses notify the pharmacist during the postpartum admission of birthparents-prescribed methadone, or when the pharmacist reviews the orders, the pharmacist will note the admission for T&W completion.
 - **Communication Liaison:** As mentioned above, pharmacists are often the liaison between community and hospital healthcare providers specifically in communicating dose adjustments. This includes developing clear communication between community OAT prescribers and primary care providers within the hospital, establishing closed-loop communication, and improving the continuum of care.



1

Section One: Continuum
of Care

2

Section Two:
Antepartum

3

Section Three:
Intrapartum

4

Section Four:
Postpartum

5

Section Five:
Newborn



IMPORTANT CONSIDERATIONS

Pharmacist Considerations for Pregnant Persons Prescribed OAT



97



1

Section One: Continuum
of Care

2

Section Two:
Antepartum

3

Section Three:
Intrapartum

4

Section Four:
Postpartum

5

Section Five:
Newborn



STOP AND CONSIDER

When administering medication, complete a pre-assessment of the patient, including:

- Assess for signs of intoxication
- Prior administration of other medications that have the potential to interact with methadone or buprenorphine, such as:
 - medications that are sedating
 - medications that inhibit methadone or buprenorphine metabolism
- If the first administration of OAT is as an inpatient, consider:
 - the dose, date and time of the last ingestion of substances

Signs of Intoxication

- slurred speech
- impaired coordination
- mental signs
 - disorientation
 - confusion
 - over sedation
- Physical signs
 - pinpoint pupils



**If signs are
present,
withhold dose
and contact
prescriber**

Missed or Vomited a dose?

- During the perinatal period, there is an increased chance of vomiting
- Contact the prescriber before administering any additional doses
- **Comprehensive Summary**
Section 2: Table: Missed and Vomited Dose Recommendations

Vomited Dose Recommendations

Methadone

As pregnancy is a time for potential frequent episodes of emesis, it is important to understand the recommendations for maintaining methadone dosing:

Should a patient vomit the dose:

- If the emesis has been witnessed by a healthcare provider and occurred within 15 minutes of the observed dose Offer one replacement dose of methadone (replacement dose = 50 percent of the regular dose)
- Should the patient continue to have frequent episodes of emesis, healthcare providers may wish to consider recommending spreading the dose over 30 minutes with observation for 15-20 minutes following the dose.

Buprenorphine

As buprenorphine is sublingual there is no concern of vomiting doses.

Double Check



- Check with the patient the dosage they are ordered
- Complete an independent check with another healthcare provider
- Finally witness the ingestion
 - ask the patient to speak after taking the dose
 - ask the patient to drink water after the dose

Dose Changes

- The community OAT prescriber manages doses.
- Often, in pregnancy, dosages need to be increased
- Often, in the postpartum period, dosages need to be decreased
- **ANY DOSE ADJUSTMENTS ARE TO BE MADE IN CONSULTATION WITH THE COMMUNITY OAT PRESCRIBER**



Two of the most important times for consultation with the pharmacist is during **the admission and discharge** of persons prescribed OAT. Some important considerations for this sensitive period include:

- Completion of an OAT flow sheet (please see **Appendix A** for example).
- Contact the community pharmacist to inform them of the patient's admission to ensure no red flags are raised in the patient's absence in the community.
- Verify dose with the patient* and a minimum of one other source, such as:
 - Drug System portal (Drug Information System - DIS)
 - Community Pharmacy
 - Prescriber
 - Health record: The health record should be used cautiously due to the potential for adjustment in dosing through gestation.
- Pharmacists can also be consulted during the hospital admission for any concerns such as:
 - Dosage changes
 - Inadequate pain control
 - Toxicity and withdrawal assessments

A note about the patient: there is a potential for pregnant persons to adjust dosage amount and timing, therefore, it is important to have clear communication with the pregnant person and confirm with **one** other source. For example, a patient may choose to take the dose as a split dose rather than follow what was intended or prescribed.

- Verify the last dosage (date/time)
 - This includes the documented disposition of carries.



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn



- **Documenting on a pre-determined Flow Sheet** (see **Appendix A** for an example) how the pregnant person's 'take home' dose was disposed of.
 - For example, the patient may have left their OAT dose at home or brought it in. If they brought the OAT dose in, healthcare providers must document the number of carries and secure them in a place as soon as possible. If pregnant persons leave their carries at home, note the amount and communicate with the community pharmacy.

Community Pharmacist: Community pharmacists play an important role in managing OAT for pregnant persons. Community pharmacists ensure that the OAT dose is safe and appropriate for the pregnant person, by working closely with other healthcare providers, including family physicians and addiction specialists to establish individual treatment plans.



1

Section One: Continuum
of Care

2

Section Two:
Antepartum

3

Section Three:
Intrapartum

4

Section Four:
Postpartum

5

Section Five:
Newborn



Community pharmacists will monitor patient adherence to OAT, support dosage adjustment, assess possible intoxication, and manage additional medication needs to ensure optimal health outcomes.

- **Log sheets:** Log sheets are instrumental in communicating and documenting OAT management for pregnant individuals. The record contains the dose of medication received when they received it, the carries returned, and if there was anything to note during that visit. As a double check, patients verbally confirm doses before dispensing. These logs provide hospital pharmacists with information regarding the strength of the dose, the timing of the last dose, and adherence when the pregnant person becomes admitted (please see **Appendix A**).
- **Community Counseling:** Community pharmacists often serve as the first source of counselling and support for pregnant persons prescribed OAT. Community pharmacists can educate pregnant individuals on the medication, its risks and benefits during pregnancy, and the importance of adherence to the prescribed regimen. The community pharmacist often addresses the concerns and questions surrounding the treatment process during pregnancy and its impact on their health and the health of their newborn.
- **Harm Reduction:** Aside from the direct involvement in OAT dispensing, community pharmacists also play an important role in harm reduction strategies. They provide education on the safe storage and disposal of OAT to reduce the risk of accidental ingestion by others – most importantly, other children in the household. Community pharmacists also work to promote awareness of opioid addiction and the different treatment options available, encouraging others to seek help.



1

Section One: Continuum
of Care

2

Section Two:
Antepartum

3

Section Three:
Intrapartum

4

Section Four:
Postpartum

5

Section Five:
Newborn



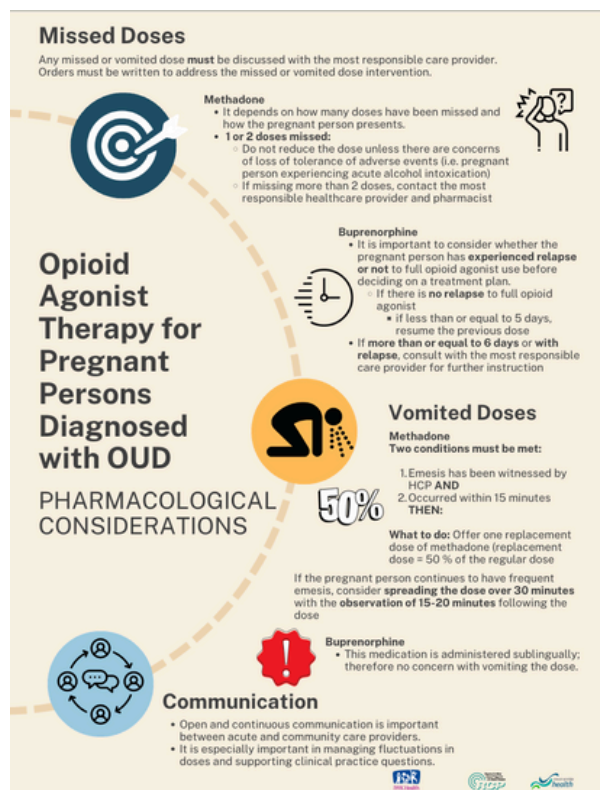
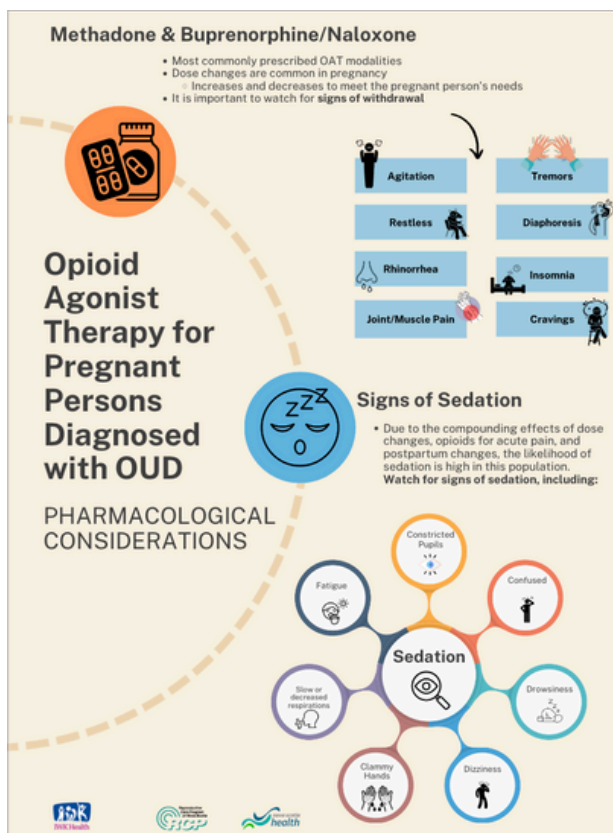
PHARMACOLOGICAL THERAPY CONSIDERATIONS

Description: This is a knowledge translation tool that can be used to support healthcare providers in the administration of opioid agonist therapy.

Content: This infographic summarizes the key considerations surrounding administration of opioid agonist therapy during the perinatal period.

Suggested Implementation: We recommend placing this infographic in areas such as the medication preparation area of the unit and within education binder locations for easy access by frontline care providers.

Digital Copy available at the following link: **Clinical Toolkit**



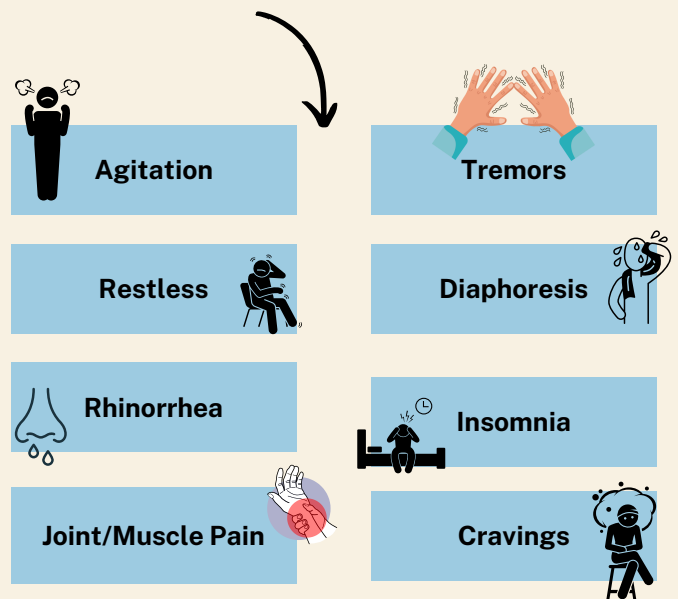
Methadone & Buprenorphine/Naloxone

- Most commonly prescribed OAT modalities
- Dose changes are common in pregnancy
 - Increases and decreases to meet the pregnant person's needs
- It is important to watch for **signs of withdrawal**



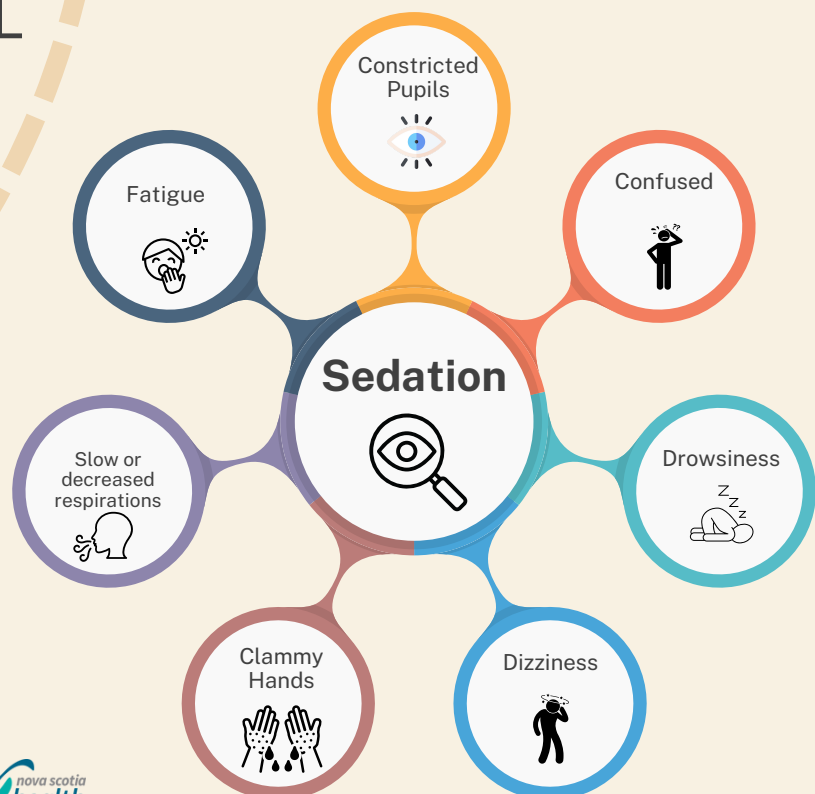
Opioid Agonist Therapy for Pregnant Persons Diagnosed with OUD

PHARMACOLOGICAL CONSIDERATIONS



Signs of Sedation

- Due to the compounding effects of dose changes, opioids for acute pain, and postpartum changes, the likelihood of sedation is high in this population.
Watch for signs of sedation, including:



Missed Doses

Any missed or vomited dose **must** be discussed with the most responsible care provider. Orders must be written to address the missed or vomited dose intervention.



Methadone

- It depends on how many doses have been missed and how the pregnant person presents.
- **1 or 2 doses missed:**
 - Do not reduce the dose unless there are concerns of loss of tolerance or adverse events (i.e. pregnant person experiencing acute alcohol intoxication).
 - If missing **more than 2 doses**, contact the most responsible healthcare provider and pharmacist.

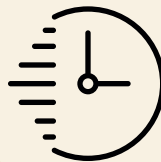


Opioid Agonist Therapy for Pregnant Persons Diagnosed with OUD

PHARMACOLOGICAL CONSIDERATIONS

Buprenorphine

- It is important to consider whether the pregnant person has **experienced relapse or not** to full opioid agonist use before deciding on a treatment plan.
- If there is **no relapse** to full opioid agonist use:
 - if **less than or equal to 5 days**, resume the previous dose.
 - If **more than or equal to 6 days or with relapse**, consult with the most responsible care provider for further instruction.



Vomited Doses

Methadone

Two conditions must be met:

1. Emesis has been witnessed by health care provider **AND**
2. Occurred within 15 minutes of the dose **THEN:**

What to do: Offer one replacement dose of methadone (replacement dose = 50 % of the regular dose)

50%

If the pregnant person continues to have frequent emesis, consider **spreading the dose over 30 minutes** with the **observation of 15-20 minutes** following the dose

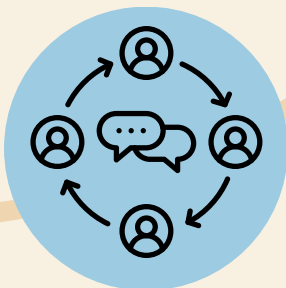
Buprenorphine

- This medication is administered sublingually; therefore no concern with vomiting the dose.



Communication

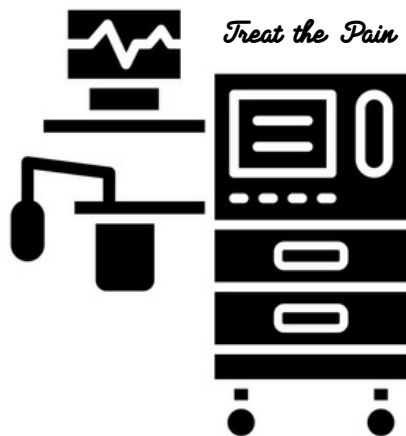
- Open and continuous communication is important between acute and community care providers.
- It is especially important in managing fluctuations in doses and supporting clinical practice questions.



Anesthesia

An early anesthesia consult is recommended due to the complexities found in pain management and usage of anesthesia for persons with a history of OUD and prescribed OAT (80–82).

Pregnant persons prescribed OAT may experience challenges such as increased pain sensitivity (hyperalgesia), difficulty achieving adequate analgesia, difficulty with intravenous access and heightened anxiety and experiences with pain and trauma surrounding the experience of pain due to their history of OUD (57).



The following care considerations should be reviewed and discussed, ideally during the antepartum period, with the pregnant person. There should be an emphasis on ensuring holistic pain management and addressing the stigma and discrimination that exists with pain management for this population.

- **Have a Pain Plan:** Practitioners should anticipate possible increased analgesic requirement, as persons with a history of OUD may experience opioid tolerance (requiring a higher dose of opioid to achieve the same effect) or hyperalgesia (unusually high pain from a painful stimulus) with or without OAT, and even after long-term sobriety (80).
- **Treat the Pain:** Treating acute pain with higher than usual doses of opioids as needed may be necessary for pregnant persons prescribed OAT (80). **OAT alone is not adequate for acute pain control.**
- **Pain Management Plan should be Multimodal:** An early discussion with anesthesia will ensure a multimodal approach focused on appropriately managing acute and chronic pain in persons prescribed OAT across the perinatal continuum (57).



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

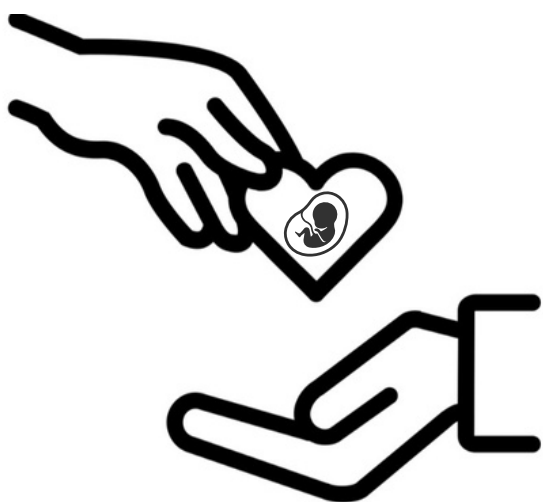
Section Five: Newborn





- **Continuation of baseline OAT:** Continue OAT (methadone or buprenorphine/naloxone therapy) at home doses for baseline therapy throughout the peripartum period (81–83). However, baseline/home doses of OAT often need to be altered (increased or decreased) throughout pregnancy, guided by the prescribing physician. Close monitoring during the perinatal period is essential to address the need for dose adjustments, especially during the extended postpartum period.
- **Educate Pregnant persons on Risk for Relapse:** For pregnant people with a history of OUD who are currently opioid abstinent, there is currently no evidence to suggest that very low doses (e.g. amounts typically used) of intrathecal or epidural fentanyl are associated with relapse (82). **It is important to note that when opioids are used via any route to address acute pain, such as labour pain or post-operative pain, they are not associated with relapse (84).**

Newborn Care Provider



Newborn care providers could include a Nurse Practitioner, Clinical Nurse Specialist, Family Physician, Pediatrician, Midwife, or Neonatologist. Early discussion of the expectations for newborn care in the early postpartum period and beyond is essential and is recommended. This early consultation with the newborn care provider will help to ensure a seamless transition after birth (85).

Health care providers should introduce the *Eat, Sleep, Console model of care* with the pregnant person and family during the antepartum period. This includes a discussion of the possibility for withdrawal by the



Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn

newborn and the essential role that the birthparent will play in providing non-pharmacological care for their newborn. A thorough discussion of the non-pharmacological interventions and the impact of the birthparent-newborn dyad has, will be vital in empowering birthparents to care for their newborns. In addition, discussing the length of expected hospital stay and newborn feeding preference (breast(chest)feeding) is important for anticipatory planning with families.

Baby Steps Program



Pregnant persons prescribed OAT and their newborns diagnosed with NOWS have the potential to experience obstacles in meeting vital newborn developmental milestones. **Baby Steps** is a comprehensive program offered to persons and families in Nova Scotia that is focused on supporting early childhood development all the way through the perinatal continuum. An early referral during the antepartum period is recommended to begin building foundational relationships between Baby Steps developmental interventionists and persons/families.

What is the Baby Steps Program?

The Baby Steps program builds on existing support services and partnerships within Nova Scotia to develop a collaborative, coordinated pathway of support for families of high-risk newborns. The program provides support that begins antenatally and extends to hospitalization, to home and to participate in existing community programs. The program uses an enhanced family-centered, strengths-based model of intervention and care involving a combination of the Newborn Behavior Observation (NBO) System and weekly Nova Scotia Early Childhood



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn



Development Intervention Services (NSECDIS) delivered in the family's home and supported within community programs.

This program is supporting three high-risk groups:

- 1) **newborns with substance exposure in utero;**
- 2) prematurity (less than 1,500 grams or fewer than 31 weeks gestation); and
- 3) medically fragile (early pre, peri or post-natal developmental events impacting the central nervous system, and congenital health or genetic disorders).

Baby Steps strives to enhance care pathways by focusing on strengthening service partnerships for very early engagement (perinatally and in hospital). Another innovative feature of the approach is the focus on very early newborn and parent mental health. This is guided by personal experience, but also supported by one of the best emerging evidence-based interventions, the Neonatal Behavioral Observation (NBO) from the Brazelton Institute in Boston. It helps parents and providers understand the needs of high-risk newborns by building positive relationships in the newborn period, thus building a base for future positive and sensitive caregiving.

Support in building positive connections between you and your baby

Child Development Support:

monitoring of developmental milestones and sharing prevention strategies to support your child's growth and development

Home Visits:

support for you & your baby within your home (weekly or less as needed)

Connections to supports and services:

for you and your baby within your community

Flexible Options:

we follow your lead and will customize our supports and services to meet the individual needs of you and your baby



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn



The NBO is administered from birth to three months and capitalizes on the fact that parent and baby are “relationship-ready”. The NBO is an individualized system that gives the parent a road map on how to

interpret their baby's cues while discovering their individuality. Research studies have indicated that a relationship-based approach to care like the NBO improves newborn cognitive and socio-emotional outcomes and helps to decrease mental health symptoms of depression and anxiety in birthparents (86). Other studies have indicated that the NBO increases parents' and health care providers' confidence in dealing with medically fragile newborns (87).

How to Refer a Patient to Baby Steps:

Providers can make a referral by filling out the referral form and sending it to the central office or the regional director in the region where they are located. The referral form, along with all the contact info, is on **the Nova Scotia Early Childhood Development Intervention Services** website. After visiting the website, you will find a link to review the **referral form in the top right-hand corner**. The referral form lists regions and contacts to which healthcare providers can send the referral. **A referral to this program must be completed with the consent of the family, as the program is voluntary.**

When can you refer? Referrals can be made at any time before a child enters school, but the goal of the Baby Steps program is to connect with families of high-risk newborns as early as possible. Referrals can be made prenatally or after the baby is born.

- **Prenatal Check-in:** Healthcare providers should engage in several check-ins with families to tell them about the Baby Steps program, gauging their interest and knowledge of the program and the referral process.
- **Postnatal Check-in:** If families are not interested in a prenatal referral or a referral immediately after birth, there should be check-ins throughout the child's first few years to make sure development is on track. Furthermore, periodic check-ins provide the opportunity to remind families of the availability of the developmental support services available to them.



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn



For more information about the Baby Steps program please visit:

[Baby Steps Program Website](#)





1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn



An increasing number of studies show that diet and nutrition have a significant effect on maternal mood and mental well-being. Collaborative health care that includes nutrition education and cooking skills training, optimizes patient well-being and medication efficacy (88,89). To ensure a reduction in neural tube defects in this

population, nutrition/folic acid supplementation should be started at preconception or very early in pregnancy. Furthermore, increased nutrition education for pregnant persons prescribed OAT, has been noted to support reductions in neural tube defects, low birth weight, premature birth and can positively affect the cognitive development of the child (89).

Consideration should be given for an early referral to a dietitian to discuss and mitigate the dietary challenges found within the care of pregnant persons diagnosed with OUD. Furthermore, a referral to a dietitian can assist with addressing the following:

- Lack of knowledge of nutritional needs,
- Lack of knowledge on how to cook, and
- Financial strain and inability to purchase foods (90)

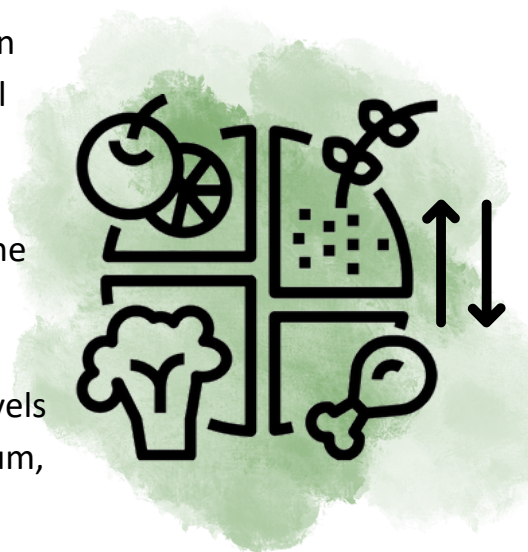


Dietitians can help alleviate these challenges by sourcing financial assistance for food purchases or supplements (*Boost, Ensure*), and provide nutrition education and a connect for pregnant persons to community cooking programs. In caring for this population, there are two main dietary concerns:

- Nutrient Deficiencies
- Constipation



Adequate nutrition and healthy weight gain in pregnancy is critically important for fetal growth and development. Malnutrition increases the risk for neurodevelopmental disorders and mental health disorders in the baby (88,91). Studies examining the nutritional status of pregnant persons prescribed methadone show decreased levels of micronutrients (vit C, potassium, selenium, zinc, calcium, magnesium and B vitamins), protein, Omega-3 fats and fibre. Lower than normal bone mass is another area of concern, in part due to deficiencies in nutrients necessary for bone health.



It is important that persons prescribed OAT have access to regular meals with nutrient dense foods (low in added sugar and fat), as an individual who has/had opioid use is more likely to have insulin resistance. Eating three well balanced meals of carbohydrates (from whole grain or starchy vegetables), protein and vegetables and adding in 1-3 snacks consisting of a carbohydrate plus protein, can help to stabilize blood glucose levels and mood (90). This diet approach has shown to decrease drug cravings and relapse potential (90,91).

Constipation: Constipation in pregnancy is common; it is often exacerbated by the side effects associated with chronic OAT (92). It is important for this population to have adequate fluid intake, as this can help to manage constipation and appetite. Furthermore, fibre rich foods will help promote regularity in bowel movements. Some suggestions for healthcare providers to support adequate fibre intake in this population are:



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn





- Provide pregnant persons with example menus of high-fibre foods
 - such as **Fibre-Unlock Food**
- Use of over-the-counter fibre supplements such as *Metamucil*.
- Consultation with a physiotherapist trained in pelvic floor dysfunction.

When the above interventions are not successful, consult with an approved prescriber. Often a first line of management for constipation includes polyethylene-glycol (PEG). If constipation is severe, stimulant laxatives can be used such as: Senna or Bisacodyl.

Physiotherapy

An antepartum physiotherapy consult is an important consideration as it offers valuable supports to enhance care. Specifically, physiotherapists can provide strategies for managing pain and anticipatory guidance related to expected concerns/discomforts in pregnancy. Key considerations provided by physiotherapy include:

- **Exercise:** Exercise may benefit those with OUD, with potential positive outcomes related to immune function, reduction of pain, cravings, anxiety, and depression, as well as improvements in mood and quality of life (93).



- Persons with long-term opioid use are more likely to develop osteopenia or osteoporosis (94). Exercise is an important way to increase bone density (95).
- **Falls Risk:** Opioids have also been associated with an increased risk of fracture and may negatively impact bone healing (96). When informing pregnant persons of typical activity restrictions during pregnancy, it may be appropriate to emphasize that in addition to harm to their fetus, activities with a risk of falls may have a higher risk of fracture for them.

1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn





1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

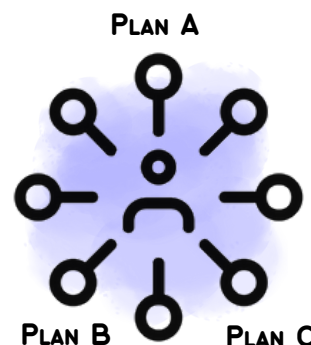
Section Five: Newborn



- Pregnant people have a higher rate of falls, similar to the rates in geriatric populations (97). Practitioners should remind pregnant persons of high-risk situations that may predispose them to falls, such as icy weather, when getting in and out of the bathtub, or in situations with poor lighting
 - It may be useful to review general fall risk prevention tips, such as appropriate footwear, use of handrails, adding nightlights, removing loose rugs, and encouraging pregnant persons to sit down when putting on pants or shoes.
 - Performing a formal fall risk assessment is needed for ambulatory and pregnant persons. Their policies can be found at the following links:
 - [IWK Fall Risk Policy](#) and [NSHA Fall Risk Policy](#).

- **Pain Management:** Review musculoskeletal history (including any pelvic floor dysfunctions) - referral to a physiotherapist may help assist with care.

- Pregnant persons may benefit from conservative pain-relieving strategies available to them from physiotherapists.

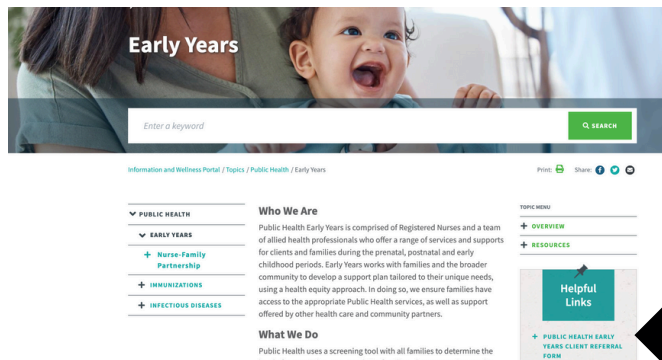


- **Pelvic Health:** Pelvic Health education relating to:
 - Pelvic Floor Exercises (and, if indicated, a referral to a Pelvic floor physiotherapist)
 - Constipation issues – commonly prevalent pre-pregnancy and often increased in pregnancy relating to hormonal effects on the smooth muscle.

The Public Health Early Years program is comprised of a team of public health nurses (registered nurses) and allied health professionals who offer a range of services and support for pregnant persons and families during the antenatal, postnatal, and early childhood periods. Public Health produces the *Loving Care* series, *Breastfeeding Basics*, and *Infant Formula: What You Need to Know*. These resources are distributed to all families in Nova Scotia following the birth of their child but can also be accessed online (**Public Health Parenting Supports | Nova Scotia Health (nshealth.ca)**). Pregnant persons can be referred to the Public Health Early Years team at any time throughout the antenatal, postpartum, or early childhood period. The earlier in their pregnancy, they are referred, the more options they have for services.

The type of support offered by Early Years public health nurses (PHNs) may include in-person visits at home or community setting, or telephone calls and virtual visits, depending on the pregnant person's preference. Prenatally, PHNs can provide support and guidance on things such as: newborn feeding decision making, perinatal mental health screening and support, transition to parenthood, newborn safety, immunization, and referral to community resources. In addition to routine services, Public Health offers two long-term home visiting programs which are described below.

Healthcare providers can learn more about Early Years programming and how to refer pregnant persons at the website below. Pregnant persons and families can also self-refer to Public Health.



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn





Nurse-Family Partnership

Nurse-Family Partnership (NFP) is an evidence-based primary prevention program delivered by PHNs to promote the health and well-being of first-time parents and their children who experience social and economic disadvantage. In NFP, home visits start early in pregnancy and continue regularly until the child's second birthday. Dr. David Olds in the United States developed this program.



Nurse-Family Partnership

Through three randomized-controlled trial (RCT) evaluations, beginning in 1977, NFP has been demonstrated to lead to significant improvements in the health and lives of children and parents living in the United States, with enduring benefits for those experiencing socioeconomic disadvantage (98–100). The NFP program is currently being implemented and evaluated in eight

countries, including Canada where PHNs deliver this program in several health units and health authorities including Ontario, British Columbia and Nova Scotia. In 2022, the Canadian scientific evaluation of NFP was completed which has shown key results to date including: reducing prenatal substance exposure, specifically decreasing cannabis exposure, and reducing cigarette use in smokers (101); and benefits for maternal-reported child language and mental health problem behaviour by age two years (102).

NFP offers specialized support for first-time parents. The NFP program is voluntary and is intended for pregnant persons who are experiencing overlapping challenges and could benefit from additional support

Section One: Continuum of Care

1

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn



through regular home visits by a PHN throughout pregnancy until the child's second birthday. Through this program, Nova Scotia Public Health aims to accomplish three goals: improve pregnancy outcomes, improve child health and development, and improve parents' lifelong outcomes. To achieve these goals, the therapeutic relationship between the nurse and pregnant person is critical, which is why the partnership lasts until the child turns two years of age.

In this program, nurses help pregnant persons focus on solutions and their strengths, while also following the pregnant person's 'heart desire.' Nurses work with pregnant persons to set short- and long-term goals, and to encourage pregnant persons to make choices that are consistent with their values around their education and employment. To learn more about how NFP supports these goals, view this document:

- **Nurse-Family Partnership: Program Goals**

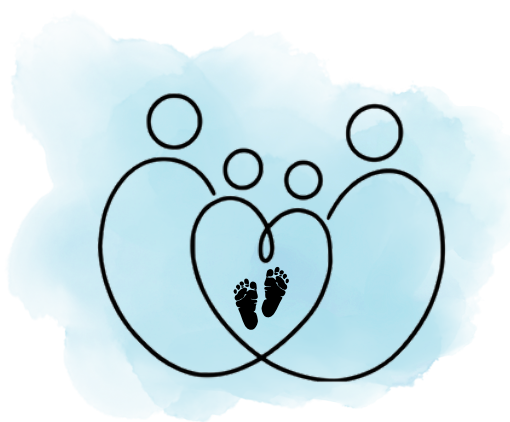
Nurse-Family Partnership

SUPPORTING OUR THREE GOALS

To improve PREGNANCY outcomes, nurses assess and address:

Refer to Nurse Family Partnership Program

Consider referral to NFP if pregnant persons are pregnant with their first child or will be parenting for the first time and are early in their pregnancy (before 28 weeks gestation), and experiencing overlapping challenges, such as income insecurity, less than grade 12 education, negative effects of substance use, no primary care provider, food insecurity, housing insecurity, intellectual disability, mental health history. Even if a pregnant person is not eligible for NFP, they may benefit from other Early Years services and should be referred early in their pregnancy to a PHN.



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn



The Nurse-Family Partnership program has been adapted for the Nova Scotia context, and the program officially launched in March 2024 in the Eastern Zone.



All health zones in Nova Scotia are strengthening their prenatal referral processes to support future expansion. NFP is expected to be available in the rest of the province in 2025. A website has been developed for healthcare providers and community partners with eligibility criteria, referral processes and more: **Nurse-Family Partnership | Information and Wellness Portal (nshealth.ca)**. A website for the public is also available for those seeking information about the program, **Nurse-Family Partnership | Nova Scotia Health (nshealth.ca)**.

Enhanced Home Visiting

Enhanced Home Visiting (EHV) is an in-home support program for families with children aged newborn to three years old. The EHV program can also begin prenatally. Home Visitors within the EHV program deliver a comprehensive parenting, attachment, health/wellness, child development, and family strengthening curriculum called Growing Great Kids (GGK). GGK is designed to help parents grow a secure parent-child attachment relationship and nurture their child's development.

Newborn Feeding Support

Early referral to Public Health Early Years may be helpful for this population in the early identification of risk factors that may compound potential feeding challenges. PHNs can provide direct, in-home breast(chest)feeding or bottle feeding support, create or support feeding plans, refer to a Public Health Infant Feeding Specialist, and/or help families connect with appropriate community feeding resources.



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

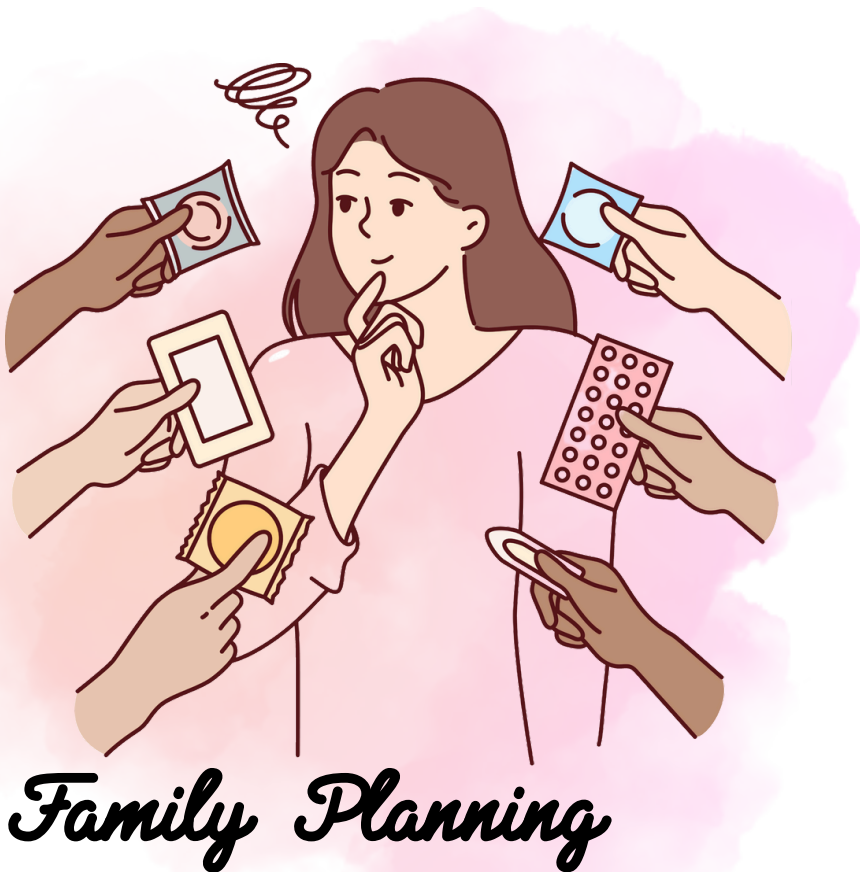
Section Five: Newborn





Discussion on Family Planning: It is important to begin the conversations about contraception during pregnancy as upwards of 80% of pregnancies among persons diagnosed with OUD are unintended. This is potentially attributed to decreased access to reliable contraception for this population.

- **Long-term reversible contraception:** it is suggested that offering an intrauterine device (IUD) or subdermal contraceptive implants are potential and practical solutions to address this concern (56,103).



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn



3 INTRAPARTUM CARE CONSIDERATIONS

Knowledge Translation Toolkit can be found [here](#) and includes:

- Chapter Summary
- Intrapartum Considerations (p.119)



4. Monitoring

- Monitor for signs of sedation after administering opioids for acute labour pain
- cEFM should be considered when perinatal risk factors are present
- Monitor pregnant person for signs of withdrawal (especially if labour and birth span over days)
- Discuss what support is available for the newborn if needed (e.g. respiratory distress)
- **Naloxone and Birth:**
 - **The use of naloxone in newborns born to pregnant persons prescribed OAT/ diagnosed with OUD is contraindicated as naloxone can potentially lead to acute opioid withdrawal.**



3. Pain Management

- OAT is not sufficient pain medication for acute pain.
- Pain in labour is complex:
 - Histories of anxiety, pain sensitivity, and tolerance
- Avoid the use of opioid antagonist medications (such as Naloxone or Naltrexone) due to the potential risk of acute withdrawal.
- Unique Anesthesia Considerations exist:
 - Epidural (early and preferred)
 - Continue daily maintenance dose
 - Puritis treatment:
 - Ondansetron NOT nalbuphine
 - Higher doses may be needed of pain medication
 - Morphine may not be as efficient in a patient who is taking buprenorphine/ naloxone.

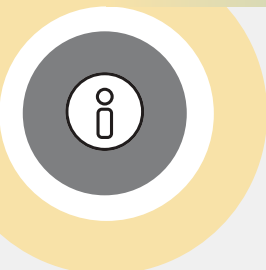


2. Admission

- All pregnant persons should be screened for substance use.
- Communication is key
 - Notify all care team members upon admission
- Detailed history is imperative to develop a transparent and holistic foundation of care
 - Last opioid ingestion, it is important to continue the daily dose
 - Disposition of Carries; discuss the planned disposition of carries within your facility.

1. Introduction

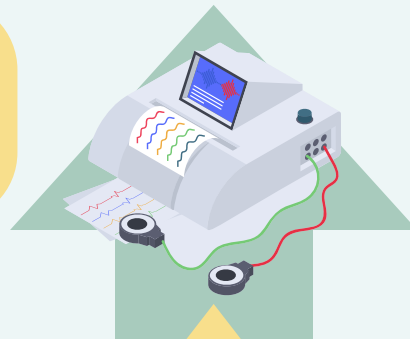
- Small period of time, with a large impact.
- Trauma-informed approaches are critical during this potentially triggering experience.
- Language matters; and reflective and responsive approaches are needed
- Pelvic Exams (Consent, Privacy & Dignity, and Awareness of Physical Touch)



INTRAPARTUM CONSIDERATIONS

Caring with pregnant persons diagnosed with opioid use disorder.

Use of naloxone in newborns born to pregnant persons prescribed OAT/diagnosed with OUD is contraindicated as naloxone can potentially lead to acute opioid withdrawal



Important to monitor for:

1. Sedation
2. Acute Withdrawal

cEFM should be considered with any perinatal risk factors



Foundational **screening** and communication is needed in the intrapartum period. Including communication with community pharmacist, and importance of indicating last opioid ingestion.

PLAN

- ☐ _____
- ☐ _____
- ☐ _____
- ☐ _____

Anesthesia Considerations

1. Epidural (early)
2. Pruritus treatment:
Ondansetron 4-8 mg po/IV as first line for treatment of pruritus instead of nalbuphine.

Create a **plan for the disposition of carries**, including (but not limited to):

1. Inform pregnant persons to bring their carries
2. Create a local policy for the disposal of carries



LANGUAGE MATTERS

THIS	THAT
<ul style="list-style-type: none"> • "Take slow breaths" or "Let your knees fall out until they touch my hand" • "Everyone's experience is different" • "You'll feel my gloves..." • "gel or muko" • "table" • "drape" 	<ul style="list-style-type: none"> • "Just relax" • "This won't hurt" • "You'll feel my fingers" • "lube" • "bed" • "Sheet"

Intrapartum period can be a **triggering** time for pregnant persons diagnosed with OUD; it is key to consider the impact of pelvic exams and language to avoid re-traumatization.

Pain Management:

1. OAT is not for acute pain
2. Multimodal approach needed
3. Increased doses may be needed
4. Avoid opioid antagonists
a. Naloxone/Naltrexone



Introduction

The intrapartum period of the perinatal continuum is often viewed as a small portion of the overall time frame; however, for this population and due to the sensitive nature of care, it is a time that holds potential where care can re-traumatize and stimulate highly emotional responses from pregnant persons diagnosed with OUD. Labour and birth have the potential to cause pregnant persons to experience triggering symptoms, especially when pregnant persons have a history of sexual abuse or trauma (31). It is imperative during this phase of the perinatal continuum that healthcare providers use the foundations of care discussed at the beginning of this resource related to trauma-informed and culturally safe care. It should be assumed that all pregnant persons may have a history of trauma in their lives. It is important to consider the vulnerability of a pelvic exam and the potential for this exam to (re) traumatize persons. Healthcare providers should be cognisant of avoiding potential language that may have been used during a previous sexual assault.

1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn



LANGUAGE MATTERS



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn



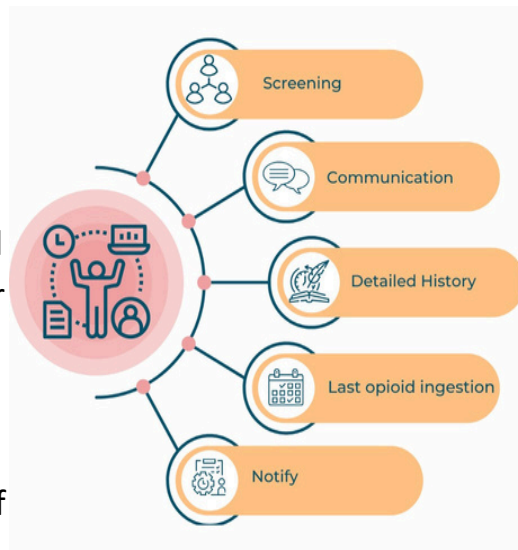
<i>Try</i> THIS	<i>Not</i> THAT
<ul style="list-style-type: none"> • “Take slow breaths” or “Let your knees fall out until they touch my hand” • “Everyone’s experience is different” • “You’ll feel my gloves...” • “gel or muko” • “table” • “drape” 	<ul style="list-style-type: none"> • “Just relax” • “This won’t hurt” • “You’ll feel my fingers” • “lube” • “bed” • “Sheet”

Three considerations should be reflected upon before completing a pelvic exam:

- **Consent:** Obtain consent to complete a pelvic exam. Providing rationale for the exam, the opportunity to ask questions, and empowering the patient, the decision-maker, are ways to ensure consent is obtained and, most importantly, maintained throughout the exam.
- **Privacy & Dignity** means being responsive and attentive to verbal and non-verbal patient cues.
- **Be aware of the impact of physical touch and language:** Avoid putting undue pressure on the patient’s legs and/or holding the patient legs open. Ensure you have a clear communication plan the patient has developed for when and/or if the exam needs to be stopped.
 - Language Matters: Avoid phrases such as “I’m just going to check you” and replace them with “How do you feel about having an internal check?”

Screening

All pregnant persons on admission should be screened for substance use (57). The prenatal record is also a source for this information, given that screening is recommended to first occur antenatally. Pregnant persons who screen positive for the use of opioids during pregnancy should have this information documented on their healthcare record. Ideally, if opioid use is identified during pregnancy, the appropriate referrals will have occurred antenatally, along with the development of a detailed documented plan of care. Screening pregnant persons at admission is imperative to ensure continuity of care and adequate consultation to meet the unique needs of the birthing parent and newborn.



Communication – Notify all care team members



When a pregnant person with a known OUD diagnosis has been admitted to the hospital it is essential that there is a clear and accessible process to ensure the care team members involved in the circle of care have been notified of the pregnant person's admission. Creating a communication plan within the team is helpful to ensure correct members are notified in a

timely process (e.g. if you have an on-call group/shift rotation who is the best person to notify). This will ensure the continuity of care received in



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn





the community transitions seamlessly into the inpatient setting. It is essential to contact the following disciplines:

- **Community Pharmacist:** To ensure communication of proper disposition of carries/methadone management has been received – please refer to the **Disposition of Carries** section (p.124) for further recommendations.
- **Primary care provider of the pregnant person and the newborn care provider** to ensure obstetrical and newborn care providers are aware that the pregnant person has been admitted for labour and birth.
- **Social Work** to ensure social work services can be made available to provide support.
- **Community OAT prescriber** to ensure prescriber is aware of pregnant person's admission to hospital should there be a need for dosage adjustments.
 - In some facilities, based on resource availability, pharmacists can prescribe to lower a dose in the case of toxicity if the prescriber feels they have the knowledge and skills to adjust methadone. **It is important to have a discussion and action plan individualized to your local facility.**

Detailed History

Ensure that during the admission process, intentional consideration is given to the unique needs of the pregnant person. This could include any concerns regarding fetal growth or pregnancy diagnoses (e.g., gestational diabetes). In addition, this could include any social barriers or considerations (e.g., financial barriers). The prenatal record and detailed care plan (if one exists) may also be sources for this information.

- **Last Opioid Ingestion:** Ensure continuity of care and reduce the gap in methadone or suboxone treatment. Verifying this with two independent sources (e.g., the patient and community pharmacist) is essential.
 - It is necessary to begin completing an **OAT flow sheet** during the admission process to improve communication and continuity of care.

1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn





Each healthcare facility should have a policy and procedure around the planned disposition of carries for this population. Carries are accounted for with disposition as this is a necessary part of both opioid stewardship and harm reduction (to minimize the risk of overdose and diversion if unused doses are available). We recommend that each facility adopt a policy and procedure for disposition of carries.



Our Recommendations

- Early in pregnancy, pregnant persons should be educated to bring their carries with them to the hospital for admission.
- Once the patient is admitted, carries will be stored in a specified location such as an opioid vault;
- Doses are disposed of differently based on care location; therefore, it is essential to establish a written policy and procedure for disposition. For example, one regional facility destroys the carries as per Health Canada regulations (for every dose received in the hospital, one carry dose is destroyed). Whereas another facility will store the carries as part of discharge planning.
- If they are not brought to the hospital and are still available in the patient's home or community, the prescriber of the carries needs to be made aware so that prescribing and dispensing of the next supply of carries can be adjusted if necessary.
- We recommend providing pregnant persons with the hospital supply of OAT while an inpatient to ensure product quality and safety of administration.

1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn



Pain Management



Managing pain in labour is critical for all pregnant persons, however with the added layer of anxiety and trauma that this population often faces, it becomes **essential** to the mental and physical well-being of the individual prescribed OAT. All options for pain management should be considered, including non-pharmacologic interventions such as movement,

position changes, relaxation techniques, continuous support in labour, and water immersion if available locally. Considerations for analgesia in labour for persons prescribed OAT include:

- **Daily Dose (including split dosing):** Priority should be placed on continuing the daily dose of OAT even in the intrapartum period to ensure continuity of care. Access to their daily dose is imperative to establish early in the intrapartum period.
- **Anxiety:** Pain management in labour and birth and the postpartum period is often a source of anxiety, especially for pregnant persons diagnosed with OUD. Ensuring discussion and open communication is key to ensuring pregnant persons feel supported and heard during this time.
- **Pain Sensitivity:** It is important to consider that opioid dependence can cause increased pain sensitivity, requiring a multimodal and complex pain control regimen.
- **Increased Tolerance to Opioids:** This population may experience increased tolerance to opioids given their chronic opioid use and, therefore, may require increased dosing of opioids being used to treat acute pain.
- **OAT is not adequate for Acute Pain:** OAT will not provide any acute pain management; therefore, pregnant persons need to be adequately assessed for acute pain and managed appropriately (104). OAT dosing alone is not adequate for intrapartum pain control.



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn





- **Opioid use for acute pain:** Opioid use for acute pain is safe when a patient is prescribed OAT; however, **increased frequency and dosages are often needed to manage the pain.** This is multifactorial due to increased sensitivity, opioid tolerance and especially in the case of suboxone, partial agonist activity and antagonist activity reduce the effect of administered opioids (e.g. the receptor is blocked, and full agonists can't bind and exert pharmacologic effect).
 - **Avoiding opioid of choice:** we recommend avoiding the opioid of choice for the pregnant person as administration of such could increase the risk of relapse.
- **Opioid Antagonist Medications (Naloxone & Naltrexone):** avoid the use of this medication due to the increased risk of acute withdrawal. Naloxone can be administered, if needed, however should be done in consultation with an experienced practitioner in micro-doses.
- Please see:
 - Working with Pain in Labour: Systemic Medications for support on acute pain medication options in labour.



Reproductive Care Program
Halifax Professional Centre
5991 Spring Garden Road, Suite 700
Halifax, NS B3H 1Y6
phone: 902-470-6798
fax: 902-470-6791
<http://rcp.nshealth.ca>

Working with Pain in Labour:

- **IV Access:** Establishing early intravenous access is imperative as there is potential for difficulties in IV access in persons with a history of intravenous drug use (40). Offer pregnant persons a topical anesthetic before IV insertion, especially as some may want to minimize the sensation of an IV being inserted.



1

Section One: Continuum
of Care

2

Section Two:
Antepartum

3

Section Three:
Intrapartum

4

Section Four:
Postpartum

5

Section Five:
Newborn



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn



- **Epidural:** Epidural analgesia is the preferred analgesic modality with no contraindications, and early placement should be encouraged (80,82,105).
- **Exception to daily opioid dose:** Continue maintenance dosing of OAT except for pure opioid antagonists such as naltrexone (80). Opioid antagonists should not be administered alongside OAT medication unless otherwise indicated. Opioid antagonists may be used in pregnant persons prescribed OAT in appropriate clinical contexts, such as overdose. In those situations, pregnant persons need to be closely monitored for withdrawal.
- **Pruritis treatment:** People prescribed OAT who have received neuraxial opioids should have ondansetron 4-8 mg po/IV as the first line for treatment of pruritus instead of nalbuphine.
 - **Nalbuphine Risk:** There is a risk of precipitating withdrawal symptoms and prolonging the QTC interval with the administration of partial opioid agonist-antagonists like nalbuphine (80,81).



Unique considerations for a caesarean birth:

- **Adjusted Dosages:** Anesthesiologists may consider slightly higher doses of intrathecal morphine (e.g. 150-200 mcg instead of 100 mcg) (80). However, without any clear guidelines, this should be at the discretion of the attending anesthesiologist. If a pregnant person is labouring with a functioning epidural and requires an emergency

caesarean birth where there is insufficient time to achieve a surgical block via the epidural, it is strongly recommended to administer epidural morphine even though the patient is under general anesthesia.

- **Complications:** If neuraxial anesthesia is not performed, other regional adjuncts (e.g., transversus abdominal plane (TAP) blocks, quadratus lumborum (QL) blocks) are strongly recommended.

Unique considerations for persons on buprenorphine with or without naloxone (e.g. Suboxone):

- **Morphine in a patient prescribed buprenorphine/naloxone:** Morphine may not be as effective in a patient prescribed buprenorphine due to insufficient binding affinity.

Monitoring During Labour and Birth

There are a few unique considerations for monitoring and surveillance in the intrapartum period for pregnant persons prescribed OAT. It is important to acknowledge the impact that the diagnosis of opioid dependence may have on maternal and fetal adaptation during the labour and birthing process.



- **Sedation:** Monitor for any signs of sedation or respiratory depression after administering opioids for acute labour pain.
- **Continuous Electronic Fetal Monitoring (cEFM):** As recommended by the Society for Obstetricians and Gynecologists of Canada (SOGC) guidelines, cEFM should be considered when perinatal risk factors are present.
- **Withdrawal:** It is important to monitor the pregnant individual for opioid withdrawal during the labour/birthing process, especially if the labour/birthing process occurs over multiple hours or days.
- **Additional Support for the newborn:** Discuss with the care team, including the patient, about having a respiratory therapist and neonatal practitioner present for birth.



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn



Immediate Care of the Newborn Following Birth

It is essential that in the immediate time following birth healthcare providers support birthparents and families to create a safe and quiet space for newborns to transition immediately postpartum.

- Speak in a slow/calm voice.
- Observe hand-to-mouth movement by gently bringing baby's hand to mouth
- Speak softly, place your hand firmly but gently on the abdomen
- Speak softly while bringing the newborn's arms and legs to the center of their body
- Hold skin to skin or swaddle, gently rock to swaddle
- Offer a pacifier or clean finger to suck on OR offer to feed if showing hunger cues



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn



CAUTION: Use of naloxone in newborns born to pregnant persons prescribed OAT/diagnosed with OUD is contraindicated as naloxone can potentially lead to acute opioid withdrawal (106).



Gibbs and colleagues (1989) shared in an editorial a serious clinical complication where a newborn born to a birthparent with chronic opioid use (prescribed methadone) experienced severe convulsions immediately following naloxone administration in the immediate postpartum period. Naloxone was considered the causative agent in this clinical case as convulsions due to neonatal opioid withdrawal do not **often*** happen within the first 48 hours of birth (106).

More recently, a Cochrane review of naloxone use in newborns exposed to opioids in utero was inconclusive to suggest potentially positive or negative effects of naloxone (107). This systematic review, however, indicated that the findings were not readily applicable to pregnant persons with chronic OUD, citing the following:

“There are no trials concerning the use of naloxone for the treatment of newborns that were chronically exposed to opioids in utero, most likely due to concerns that administration of naloxone might cause seizures in these newborns (p.13)” (107)

The neonatal resuscitation program (NRP) recommends the following:

“Naloxone has been used in past editions of NRP for newborns born to mothers with a history of narcotic administration in which there is diminished respiratory drive. There is insufficient evidence to evaluate either the safety or efficacy of using naloxone to manage respiratory depression in these newborns. In addition, there is little known about the pharmacology of naloxone along with concerns regarding possible complications from its use. NRP recommends that these newborns be managed with appropriate respiratory support using PPV as would any newborn in which there is apnea or inadequate respiratory drive (p.1).”(108)

*In rare cases when pregnant persons may miss consecutive OAT doses, withdrawal can occur before 48 hours of birth as the birthparent and newborn could be in a state of withdrawal before, during and immediately after birth.

**1**

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn

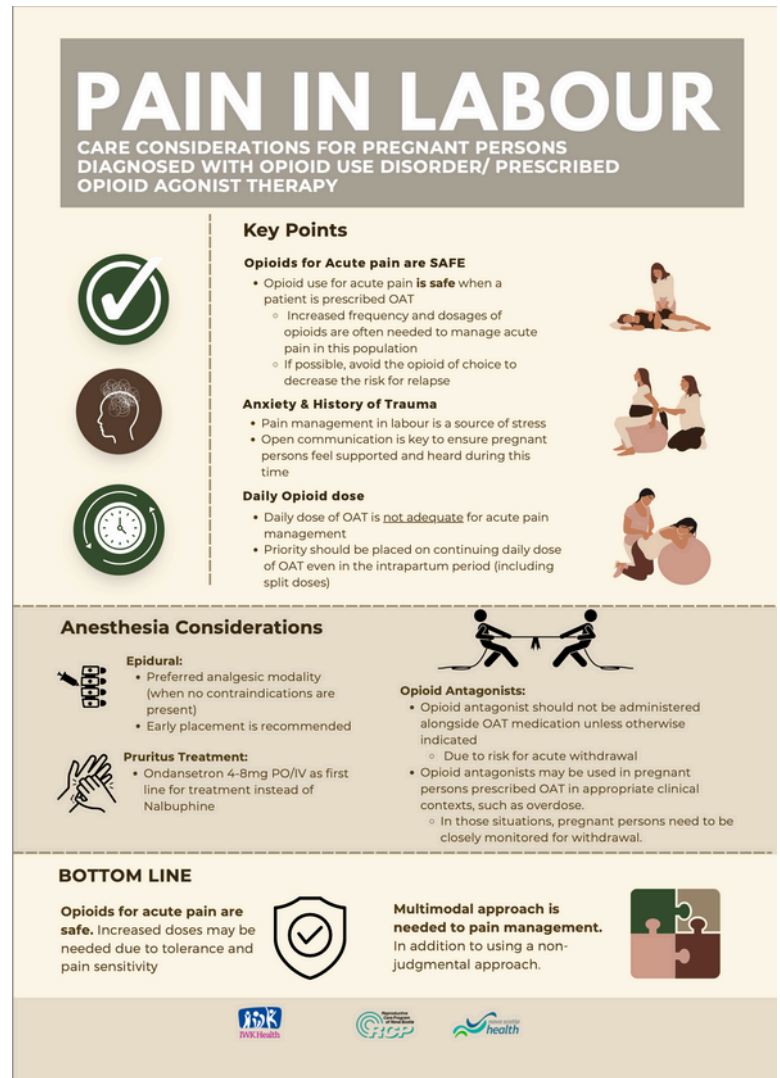


PAIN IN LABOUR

Description: This is a knowledge translation tool that can be used to support healthcare providers in the intrapartum period.

Content: This infographic summarizes the key considerations about pain in labour when caring for pregnant persons prescribed OAT.

Suggested Implementation: We recommend placing this infographic in early labour assessment units or labour and birth units to support healthcare providers in caring for pregnant persons prescribed OAT with their labour pain experience.



Digital Copy available at the following link: **Clinical Toolkit**



PAIN IN LABOUR

CARE CONSIDERATIONS FOR PREGNANT PERSONS DIAGNOSED WITH OPIOID USE DISORDER/ PRESCRIBED OPIOID AGONIST THERAPY



Key Points

Opioids for Acute pain are **SAFE**

- Opioid use for acute pain **is safe** when a patient is prescribed OAT
 - Increased frequency and dosages of opioids are often needed to manage acute pain in this population
 - If possible, avoid the opioid of choice to decrease the risk for relapse



Anxiety & History of Trauma

- Pain management in labour is a source of stress
- Open communication is key to ensure pregnant persons feel supported and heard during this time

Daily Opioid dose

- Daily dose of OAT is not adequate for acute pain management
- Priority should be placed on continuing daily dose of OAT even in the intrapartum period (including split doses)



Anesthesia Considerations



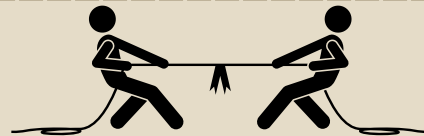
Epidural:

- Preferred analgesic modality (when no contraindications are present)
- Early placement is recommended



Pruritus Treatment:

- Ondansetron 4-8mg PO/IV as first line for treatment instead of Nalbuphine



Opioid Antagonists:

- Opioid antagonist should not be administered alongside OAT medication unless otherwise indicated
 - Due to risk for acute withdrawal
- Opioid antagonists may be used in pregnant persons prescribed OAT in appropriate clinical contexts, such as overdose.
 - In those situations, pregnant persons need to be closely monitored for withdrawal.

BOTTOM LINE

Opioids for acute pain are safe. Increased doses may be needed due to tolerance and pain sensitivity



Multimodal approach is needed to pain management. In addition to using a non-judgmental approach.



4 POSTPARTUM CARE CONSIDERATIONS

Knowledge Translation Toolkit can be found [here](#) and includes:

- Chapter Summary
- Key Care Considerations Postpartum (p.134)



4. Discharge Planning

- The fourth trimester is a vulnerable time for birthparents
 - Screening is needed for postpartum depression and co-morbid mental health conditions.
- Pain management must be adequately addressed due to the increased stress placed on birthparents when inadequately managed.
 - Non-opioids should be administered as a first line.
- Social work can provide overall support for all social determinants of health - it is a voluntary support.
- Discharge supports should be established pre-discharge.
 - Public health nursing can provide continuity of care in the community.
 - Follow up with the most responsible care provider in the early weeks.
 - Pharmacy communication and liaison must be completed to ensure the continuity of OAT in the community.
 - No discharge should occur until the OAT dose is secured in the community.



3. Transition to Parenthood

- Eat, Sleep, Console Model of care is centered around empowerment of the birthparent in the care for the newborn diagnosed with NOWS.
- Empowering parents is key:
 - Educate birthparents on how to advocate for themselves and their infants.
 - Recognize the many emotions postpartum, including, if applicable, education on child and family well-being.
 - Use a non-judgmental approach to care.
 - Educate birthparents on tangible ways of how they can care for their newborn.
 - Emphasize and support the importance of self-care of the birthparent.



2. Routine Monitoring

- There is a potential for sedation during the postpartum period due to the compounding effects of neuraxial morphine and changes in OAT needs postpartum.
 - Signs of sedation could include: overly drowsy, unresponsive, slowed, irregular or shallow breathing, slowed or irregular heartbeat, cold clammy skin, pupillary constriction or weak muscle tone.
- This is an important period to discuss postpartum needs and provide anticipatory guidance on what to expect in the early postpartum period.



1. Introduction & Medication Considerations

- A vulnerable period for birthparents.
- Big changes are occurring; including potential changes in medication needs
 - continuous assessment is needed
 - doses may increase or decrease
 - regularly recording oxygen saturation levels is recommended

Chapter Summary

Key Care Considerations

POSTPARTUM

FOR PREGNANT PERSONS DIAGNOSED WITH OUD.



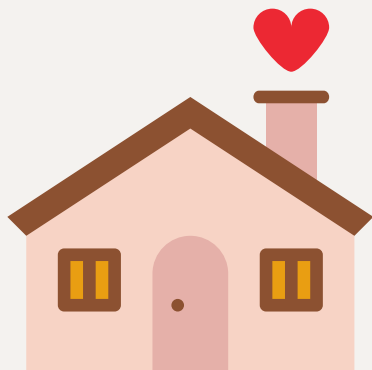
SUPPORT



EMPOWER



DISCHARGE



01

Medication Considerations

- Dosage changes may happen in the postpartum period; however, will likely occur once the pregnant person is discharged
 - Educate pregnant persons and families on the signs of sedation
- Adjustments may include increases and decreases in medication needs
 - Changes need to be individualized
 - Ongoing assessment (with regular oxygen saturation monitoring)
- Seamless two-way communication is needed with community pharmacy

02

Eat, Sleep, Console Birthparent Role

- Eat, Sleep, Console Model of care is centered around the empowerment of the birthparent
- Empower birthparents in the care of their newborn by:
 - Providing education on a) how to advocate b) their role as a birthparent in their newborn's care and c) the importance of self-care

03

Postpartum Mood Considerations

- Postpartum is a vulnerable and emotional period for birthparents
 - range of emotions including guilt, and fear that is further compounded by exhaustion, pain and normal postpartum changes
 - emotions can be triggering and without adequate support can potentially lead to relapse
- Healthcare providers can support birthparents through education, relational practice and access to additional care support if needed (including social work or psychology services)

04

Postpartum Pain Management

- Pain during the postpartum period is often a stress inducer
- Managed as expected with non-opioid treatment as a first-line and with a multimodal approach (NSAIDs + Acetaminophen)
 - Opioids should be considered on a short-term basis if needed due to increased pain sensitivity and tolerance (individualized or post-surgery)
 - Ensure pain is adequately managed before removing the epidural catheter
- Use functional-based tools to assess pain

05

Social Considerations

- A dynamic and comprehensive approach encompassing the intersecting social determinants of health
 - SDOH are rooted in historical, cultural, and political power relations such as colonization, systemic racism, ableism, and gender inequality
 - Critical to reflect on your own power and privilege when caring with this population
 - Social workers can provide holistic and dynamic support

06

Public Health Nursing

- Public Health Early Years Program
 - An early referral can facilitate continuity of care and established supports prior to the postpartum period or discharge
- Ongoing support can be provided by way of education, feeding support, mental health support, connection to community resources and programs available

07

Discharge Planning

- Comprehensive discharge planning is needed to ensure a seamless transition to community for pregnant persons diagnosed with OUD
 - If not completed antenatally, early intervention (Baby steps) and Public Health referrals are recommended.
 - Must establish early visits with the most responsible care provider (before 6 weeks)
 - Community pharmacy collaborations are needed
 - Discharge should not occur until the OAT dose is secured in the community

POSTPARTUM CARE CONSIDERATIONS

Introduction

The postpartum period is innately a vulnerable period for birthparents. This period of vulnerability is often compounded by the complexities found in the care for this population. It is important to continue the collaborative and holistic care by an interdisciplinary team to support seamless discharge of birthparents and their newborns diagnosed with NOWS (12). This includes involving both hospital and community partners that support the transition from hospital-to-home. In this section of the resource, we explore key postpartum considerations for the birthparent during this period. For specific considerations for their newborns, please see **Section Five: Newborn Considerations (p. 161)**



Postpartum Care Considerations

Medication Considerations

In the postpartum period (until six weeks postpartum), there is a potential for changes in OAT dosages, although it **is often unlikely to occur during the hospital stay**. In the postpartum period, there is a shift in blood volume and hepatic metabolism, which leads to the need to adjust dosages of OAT (104). There is some evidence to support that persons prescribed methadone require a reduction of 20% of their total daily dose in the immediate postpartum period; however, the evidence is limited. Alternatively, OAT may even need to be increased in the postpartum period. As such, adjustments to OAT dosage should be individualized (109). Some persons never return to pre-pregnancy doses, while others need increased dosages of OAT given the increased stressors of new parenthood.



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

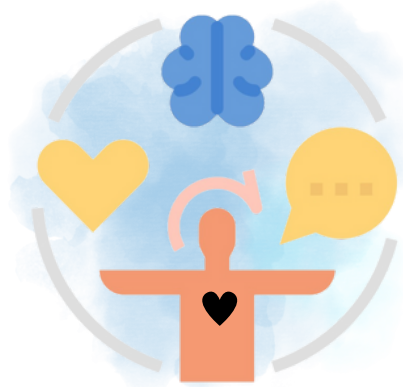
Section Five: Newborn



Some physiologic (including neuropsychiatric) changes in pregnancy may be long-lasting. Although not the majority, some persons do return to the pre-pregnancy dose. Given this dynamic presentation of needs

postpartum, it is important to manage expectations of potential changes in dosages to provide anticipatory guidance to birthparents to mitigate feelings of disappointment or failure if they don't return to baseline (e.g. the goal of OAT dosage postpartum is not to get back to a pre-pregnancy dosage) (109). The following points are imperative to consider in medication management in the postpartum period:

- **Patient-Centered & Individualized:** An individualized and patient-centered approach is recommended for the first twelve weeks postpartum (104).
- **Ongoing Assessment:** Assess pregnant persons in the postpartum period for signs of over-sedation and adjust dosages based on observations. Split dosing is usually discontinued postpartum, however, in some cases, it can be safe to continue until a new stable dose can be determined (104). Split dosing can be challenging postpartum and requires an individualized approach and close monitoring to determine how and when to transition to a single daily dose. It is important to record oxygen saturations regularly with scheduled vital sign checks.
- **Community Communication:** The postpartum period for an individual prescribed OAT can lead to a prolonged hospital stay. There must be seamless communication with the community OAT provider and in-patient care team, including the patient. Frequent communication helps ensure that all care needs are integrated across the perinatal continuum. This includes providing a detailed summary for all care providers about intrapartum history, changes in medication requirements, discharge planning, and follow-up postpartum.



1

Section One: Continuum
of Care

2

Section Two:
Antepartum

3

Section Three:
Intrapartum

4

Section Four:
Postpartum

5

Section Five:
Newborn





- **Polypharmacy:** There is an increased likelihood in this population for polysubstance use, in addition to their OAT; therefore, it is important to consider not only the impacts of polysubstance use, but also the ways in which we can mitigate any potential negative effects.

For example:

- **Nicotine:** Nicotine use is seen at increased rates within this population. Nicotine Replacement Therapy (NRT) is a potential intervention to support birthparents who are used to smoking. It is important to inform pregnant persons who do not want to quit that this is for symptom and craving relief while admitted and that if able to smoke, this is still possible.
 - Nova Scotia offers smoking cessation programs through the province by trained Nicotine Addiction Treatment Specialists. Please visit [here](#) for more information.
- **Cannabis:** Talk to a pharmacist or addiction specialist if you know or suspect a patient is having polysubstance use withdrawal to discuss pharmacologic management options. Pharmacologic cannabis replacement with nabilone is an option, however limited evidence exists on its effectiveness. Please contact your facility/local pharmacist contact or addictions medicine physician for exploration of the options for this replacement therapy.



1

Section One: Continuum
of Care

2

Section Two:
Antepartum

3

Section Three:
Intrapartum

4

Section Four:
Postpartum

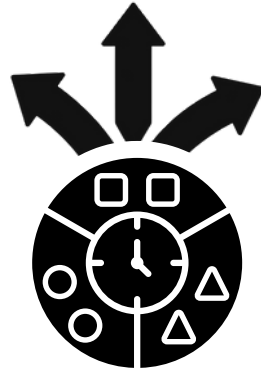
5

Section Five:
Newborn



Considerations for Buprenorphine with Naloxone (i.e. Suboxone):

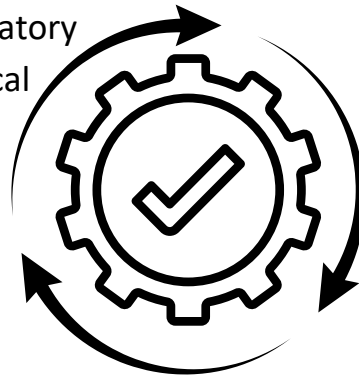
Split Dosing: It is important to be responsive to persons who are on split dosing for buprenorphine. Some persons may be on split doses of buprenorphine for pain when there is a co-existing indication for OAT and pain control, and it would be inappropriate to revert to once-daily dosing in these persons as we know, adequate pain control is not achieved on once-daily dosing of buprenorphine.



Routine Postpartum Monitoring

It is important to monitor for excess sedation related to OAT dosing and the potential need to adjust the dose during the postpartum period (109). Educating pregnant persons and their care providers antenatally on what to expect in the postpartum period, such as signs of excess sedation, is imperative to ensure the wellbeing of the birthparent prescribed OAT. This includes ensuring a communication plan is in place should a patient need to discuss urgent dosage changes with their care providers (40).

- **Routine postpartum management:** This includes routine postpartum care such as postpartum assessments (fundal height, lochia, perineum), vitals (blood pressure, pulse, temperature, respiratory rate) as clinically indicated, and psychological assessment.



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

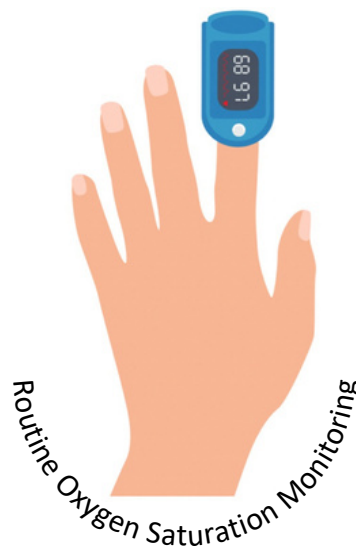
5

Section Five: Newborn





- **Unique considerations for postpartum persons prescribed OAT:** This population should be routinely evaluated for signs of sedation (as described in the table below). Furthermore, **routine oxygen monitoring** is encouraged as part of daily routine vital signs. We recommend monitoring pulse oximetry at regular intervals at minimum q12h and at minimum for the first 24h after any neuraxial opioid.



- Neuraxial (epidural or spinal) morphine can cause delayed respiratory depression up to 24 hours later. Pregnant persons can be hypoxic without appearing drowsy or short of breath, therefore, routine postpartum monitoring of pulse oximetry is recommended.

Demonstrating Considerations for Over Sedation Post Partum(110)	
Signs of Excess OAT Sedation	Actions to take for Over Sedation Postpartum
<ul style="list-style-type: none"> • Overly drowsy/sedated. • Unresponsive to verbal stimulation • Slowed, irregular, or shallow breathing. • Slowed or irregular heartbeat • Cold, clammy skin • Pupillary constriction • Weak muscle tone or movement 	<ul style="list-style-type: none"> • Hold OAT dose and contact prescriber for development of individualized care plan. • Continuously monitor patient including blood pressure, pulse and oxygen saturation.

1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn



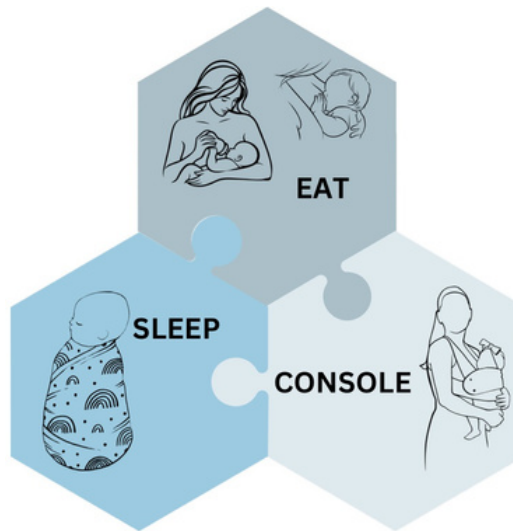
Eat, Sleep, Console Newborn Care and the Birthparent Role

The Eat, Sleep, Console model of care is a novel approach used to care for newborns diagnosed with NOWS. This care model puts the birthparent/parents at the center of treatment methods used to care for these newborns. The birthparent/parents are instrumental in the care for newborns diagnosed with NOWS and for this reason should be supported to be the primary care provider for their newborn. Supporting the birthparent/parents through education is an effective way of optimizing positive birthparent-newborn outcomes (50).

A qualitative study by Burduli and colleagues (2022) examined the perceptions of birthing parents prescribed OAT and their healthcare providers, specifically seeking insight to inform the direction of future education. The findings revealed a common overarching theme that **empowering birthparents** has the potential to improve health outcomes (50).

Key findings from this study are listed below. They reflect the perceptions of both birthparents and their healthcare providers on ways to ensure effective empowerment and education. The main goal is to support the birthparents' role in the care of their newborns diagnosed with NOWS (50).

Birthparents need to be supported to advocate for their needs, and healthcare providers can do this by effectively communicating expectations of birthparents in a way that is empowering, nonjudgmental, and supportive (50).



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn





- **Empower to Advocate:**

Empower and educate birthparents to advocate for themselves. The only way to ensure healthcare providers know what pregnant persons need, want, and understand is for them to share their voice.



- **Educate on Child and Family Well Being Involvement:** The ongoing over-surveillance of racialized parents by child welfare systems, along with the variety of emotions that birthparents and caregivers may experience, must be recognized. Transparent communication must occur with birthing parents when there is Child and Family Well Being involvement.

- **Nonjudgmental Approach:** Stigma is present in this population, both in society and within the healthcare system. Pregnant persons shared the impact of a nonjudgmental approach to care and described it as 'welcoming you back with open arms even when you relapsed'. This approach allowed pregnant persons to feel heard and safe in their care, which ultimately supports birthing parents to care for their newborns diagnosed with Nows.



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn





- **Educate how to care for their newborn diagnosed with NOWS:**

Birthparents expressed how important it was to know what to expect when their newborns were diagnosed with NOWS. This included discussing how the newborn would be assessed for withdrawal. Providers emphasized the importance of educating birthparents on the impact of their presence in caring for their newborn.

- Discussing responsive newborn care and non-pharmacologic management (further outlined in the **newborn section** p.159 of this document) is imperative in improving outcomes for these newborns.
- This would also include the importance of discussing that pharmacological treatment for newborns should not be considered a failure. Some babies will need pharmacologic management despite optimizing non-pharmacologic treatment measures.

- **Self-care & Care for the Birthparent:** Birthparents and healthcare providers both emphasized the importance of maintaining treatment of the birthparent throughout the perinatal period. The birthparent may often be the best individual to care for the newborn; therefore, healthcare providers need to support birthparents to be the best they can be. This also includes healthcare providers providing access to supportive resources and programs in the community.

1

Section One: Continuum
of Care

2

Section Two:
Antepartum

3

Section Three:
Intrapartum

4

Section Four:
Postpartum

5

Section Five:
Newborn



Post Partum Mood Considerations

The postpartum period, or fourth trimester is often an emotional and vulnerable time for birthparents prescribed OAT. They are witnessing their newborn withdraw from a substance they were prescribed or used during pregnancy. Birthparents often feel an immense amount of guilt and a range of emotions (111). While sleep deprivation, postpartum pain, changes in postpartum mood, and breast(chest)feeding challenges are normal, they can be especially triggering for birthparents prescribed OAT and can prompt relapse (112). Furthermore, surgical recovery and post-operative pain can further complicate the healing process, increasing the risk for relapse.

It is imperative that screening for postpartum depression and other comorbid mental health conditions in this population are considered as part of a routine assessment (56). There are a multitude of stressors in the postpartum period. These, along with other challenges such as a lack of understanding of parenting, Child and Family Well-Being involvement, and having a newborn treated for NOWS, may be associated with an increased risk of an opioid overdose (113). These findings highlight the importance of healthcare provider assessment and support during the immediate postpartum period to build foundational support for birthparents as they transition into their new role.

Martin and Colleagues (2022) explored the recovery process in the postpartum period, specifically exploring barriers and facilitators to the recovery process from a patient and provider perspective. **Page 144** explores birthparent reported barriers, while **page 145** explore provider reported barriers.



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum


4

Section Four: Postpartum

5

Section Five: Newborn



	Promoting Recovery	Opioid Use Disorder Treatment Specifically healthcare providers noted the value of peer-support within the OUD programs to help support recovery.	System of Support Having ready access to a system of supports (including community support providers to support recovery) was imperative to support recovery in the postpartum period.	Specific Parenting Support Having access to support to guide parenting and infant well being was helpful in reducing stressors of the 'fourth trimester'	Opioid Use Disorder Treatment Being part of a program that managed their opioid withdrawal enabled mothers/birthparents to focus on being a mother/birthparent and not cravings.	
	Barriers to Recovery	Infant Diagnosis of NOWS Patients highlighted experiencing guilt that was often triggered by watching their infant withdrawal. Patients identified an added stress of NOWS management (e.g. not having enough education on withdrawal symptoms or what to expect for NAS management).	Comorbid Mental Health Concerns Pre-existing and often worsening mental health conditions such as depression and anxiety contributed to triggering the urge to engage in substance use again.	Pain of labour/Birth Patient's often stressed how anxious about the labour and birthing process - specially in relation to pain management. The anticipation of this contributed to added stress in the postpartum period.	Negative Parenting Stress Mothers/birthparents often felt overwhelmed with the guilt and immense parenting responsibilities of caring for their child going through withdrawal.	Stigma Mothers/birthparents shared the detrimental effects of stigma on their recovery. Stigma was experienced both socially and institutionally.
	Dual: Both a facilitator and a barrier	Child Protection Services (Welfare) There was an added stress with the anticipation of involvement of child protection/welfare services. However, when rapport was built with caseworkers, involvement was seen as a facilitator.				

Summarizing findings from Martin et al. (2022) study of **birthparent** reported barriers and facilitators.



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn





Promoting Recovery

Examples of Factors Present

- **OID Treatment Plan**
 - How valuable the program is to support recovery
- **Adequate parenting support**
 - More specifically during the early days after discharge
- **Person-centered care**
 - positive rapport and supportive relationship
- **Peer support**
 - access to a peer support program

Examples of ways Healthcare Providers can support or address the facilitators or challenges

- Support patients by providing education on key topics such as:
 - NOWS & Expectations
 - Infant bonding and feeding
- Providing care and education in a non-judgmental way
- Develop a strong patient relationship
 - empowering confidence and engagement by patients



Barriers to Recovery

- **Lack of Education**
 - specifically on the topics of NOWS, normal and non-normal newborn transitions
 - Also a lack of understanding of the provider's responsibilities
- **Mental Health**
- **Misinformation**
 - Especially around pain during labour & birth
- **Mistrust of healthcare providers**
 - Patients often felt that healthcare providers were working against them
- **Parenting Stress**
- **Stigma**
 - e.g. some birth parents will self-taper their medication to "protect" their infant from NOWS

- **Need to assess Mental Health**
 - often underdiagnosed mental health conditions and this population is more at risk
- **Need to have open and honest communication**
 - especially when discussing pain during pregnancy and labour and birth
 - Also education on the healthcare provider's role and support early on in relationship building to help build trust
- **Education is key due to the vulnerable nature of the postpartum period**
 - Empower the birth-parent to care for their infant through education
 - Non-judgmental approach with evidence to support care decisions
 - Share that healthcare providers are here to SUPPORT



Dual: Both a facilitator and a barrier

- **Child Protection Services (Welfare)**
 - anticipation and fear regarding child welfare removing children from their birth parents can be a barrier to recovery
 - also can be considered a support if the case worker/birth parent develop a trusting relationship

- **Education is key**
 - One very important topic to address prenatally is what the goal of CPS is: "child safety"
 - Providing a clear understanding of the different provider roles will empower birth-parents to care for their infants

Summarizing findings from Martin et al. (2022) study of **provider** reported barriers and facilitators.



Section Five: Newborn

4 Section Four: Postpartum

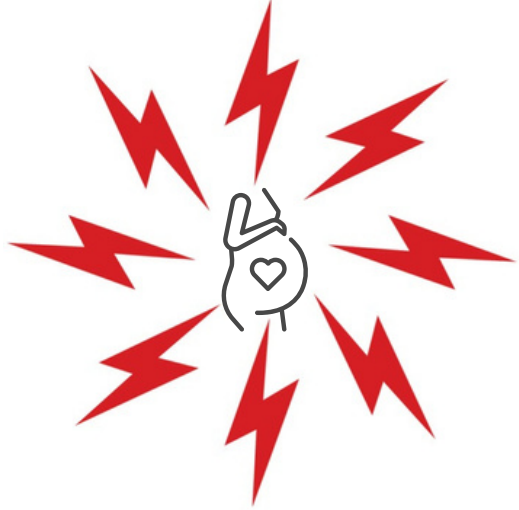
3 Section Three: Intrapartum

2 Section Two: Antepartum

1 Section One: Continuum of Care



Postpartum Pain Management



Pain management in the postpartum period is often a stress inducer for persons prescribed OAT. Pairing the fear of pain with the continued institutional and societal stigma leads to birthparents having a negative preconception of the postpartum pain management experience (113). This population is managed typically like any individual postpartum with a vaginal birth using a multimodal pharmacologic therapy of NSAIDs and

acetaminophen. In individual cases and/or with caesarean birth, opioids should be considered on a short-term basis if needed, in light of increased pain sensitivity and opioid tolerance, in order to manage acute postpartum pain and facilitate post-surgical recovery (31).

Anesthesia Considerations Postpartum

- **Epidural postpartum:** Special considerations should be taken before removing an epidural catheter postpartum. Leaving an epidural catheter in situ until adequate pain control would allow for ongoing postoperative analgesia by way of the epidural catheter if needed (105).
- **Acute Postpartum Pain:** There are no contraindications for non-opioid analgesics, such as acetaminophen or NSAIDs in the postpartum period while receiving OAT; however, individual considerations should be made, such as if an allergy or sensitivity is present (80). Non-opioid analgesics should be administered on a scheduled basis for persons following vaginal or caesarean birth until pain is managed with as needed (PRN) or non-pharmacological interventions (80). For a patient who had a vaginal birth, regularly scheduled doses of acetaminophen and naproxen are typically sufficient for pain management in the immediate postpartum period for this population (40).



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn





1

Section One: Continuum
of Care

2

Section Two:
Antepartum

3

Section Three:
Intrapartum

4

Section Four:
Postpartum

5

Section Five:
Newborn



- **Special Cases using a Patient-Controlled Analgesia:** In some hospitals, anesthesiologists may consider using post-operative patient-controlled analgesia (PCA). If the patient's acute pain is unable to be adequately managed with PO or IV medications given on a scheduled or PRN basis, a PCA could be considered. Morphine or hydromorphone could be used as analgesia, depending on the attending anesthesia provider's preference. These persons would require more frequent monitoring, including oximetry, due to the risk of respiratory depression (80).
- **Assessing postpartum pain:** Considering the assessment tools used to measure pain for persons prescribed OAT is essential. This may include using a functional pain assessment tool rather than a visual or numerical scale (80). Individualized considerations need to be made on the best way to assess pain in a particular individual.
- **Postpartum Pain Management with Opioids:** In some cases, such as following a caesarean birth, PRN opioids may be prescribed on a short-term basis. Most patients will not require a PRN prescription for discharge; however, in unique situations, if a PRN prescription of opioid pharmacological treatment is needed longer-term, consultation should occur with an OAT provider to minimize the potential for relapse.

Physical Activity and Physiotherapy Considerations Postpartum

Traditionally, persons are not recommended to resume intense activity until their 6-week postpartum checkup. A recent review of guidelines suggests that 6 weeks may be too long to wait before resuming or beginning a low intensity physical activity program, including walking, pelvic floor, and abdominal muscle exercises (114).

Before the 6-week checkup, most persons without complications may still perform their activities of daily living (except for lifting over 10lbs if they gave birth through a caesarean section), go for short walks if comfortable, and begin with pelvic floor muscle exercises and activation of the transverse abdominus muscle.





1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn

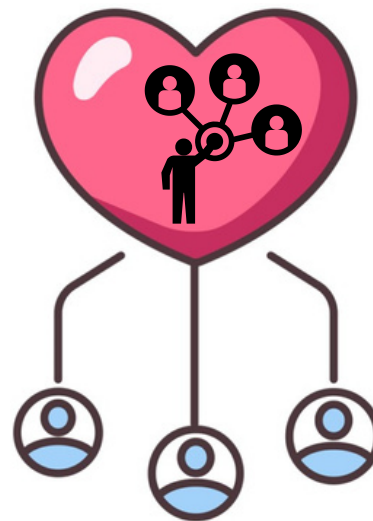


- If a pregnant person demonstrates complex pelvic floor symptoms and/or unresolved pelvic floor dysfunction (incontinence, prolapse, etc.)
 - Referral to an appropriate care provider, such as gynecology or urogynecology or physiotherapy trained in pelvic health as needed.
 - **Maritime Centre for Pelvic Floor Health at the IWK**
- If any unresolved musculoskeletal issues (pregnancy-related) or chronic musculoskeletal conditions
- For pregnant persons with physical limitations or challenges a referral to physiotherapy and/or occupational therapy would be helpful for guidance on equipment needs (including newborn), strategies for newborn care activities, pacing and energy conservation techniques.

Social Considerations

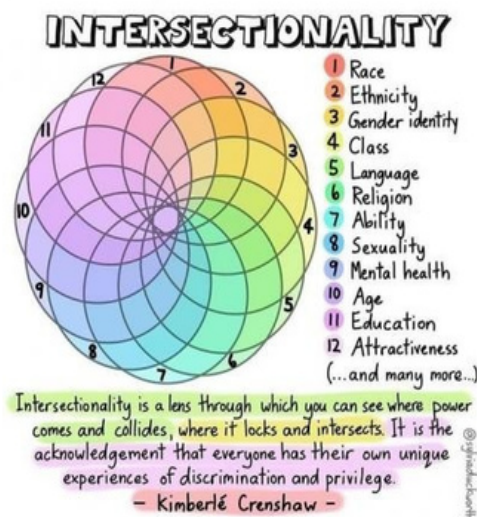
Healthcare providers must understand the social circumstances in which people are born, grow, live, work and play. The Social Determinants of Health (SDOH), such as access to safe housing, education, income, healthy food and healthcare directly related to an individual's overall health and wellbeing (115). At a minimum, an appreciation of the social factors that influence health-related behaviours and health status itself can help clinicians to develop more effective treatment plans (116). Healthcare

providers should keep in mind that the SDOH are rooted in historical, cultural, and political power relations such as colonization, systemic racism, ableism, and gender inequality (115). It is important for healthcare providers to critically reflect on their privilege and power when working with this population. As pregnant persons prescribed OAT may face multiple threats of discrimination as their identities overlap with class structures such as race, gender, age, ethnicity, health, and other characteristics (117). Using a trauma-informed approach to care and being curious about pregnant persons' lived experiences is the first step in being able to support and care for pregnant persons in a holistic way.



Social Work Supports

If the patient consents to see a medical social worker during their postpartum admission, a relational approach should be adopted to complete a psychosocial assessment. A psychosocial assessment is a systematic assessment of an individual's well-being, including the patient's mental and social well-being (118). This type of assessment is comprehensive and focused on how the individual functions daily, highlighting specific needs and challenges the individual faces to empower the person to achieve optimal health (118). The diagram below highlights important psychosocial assessment areas that should be considered when interviewing the postpartum birthparent. Interactions between different forms of oppression must be considered (such as racism, sexism, ableism, heterosexism, and classism), and how they intersect to influence an individual's lived experiences.



Organizations such as the Association of Black Social Workers is a great resource that can provide culturally appropriate services to the ANS and broader Black communities. For more details: <https://www.nsabsbw.ca/>



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

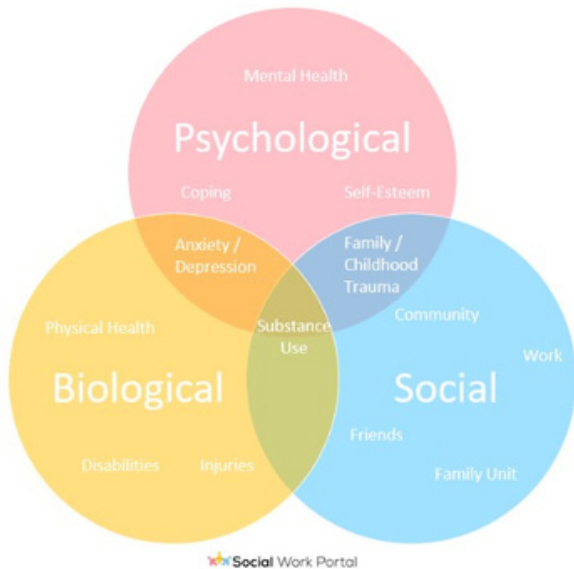
4

Section Four: Postpartum

5

Section Five: Newborn





Completing this assessment may take one meeting or may require several meetings during the postpartum hospital stay. Once the social worker and the patient have identified any psychosocial needs, the social worker can continue to provide the most appropriate interventions which may include, but is not limited to, the following:

- **Overall Emotional Support:** Providing therapeutic support to help pregnant persons and families find ways to cope with stress and worries.
- **Relational Support:** Addressing mental health needs and/or relational dynamics between the birthparent and newborn or birthparent and partner.
- **Resource Counselling:** Resource counselling is something that social workers provide for families during the postpartum period. Although it is recommended to ideally have conversations early in the antepartum period, the social worker can help families connect to practical resources to assist them in meeting their basic needs in the hospital and at home. Resources can include seeking out financial assistance available to support families during and following the perinatal period. Please see page xxx for additional information around socioeconomic considerations.



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum


4

Section Four: Postpartum

5

Section Five: Newborn



- **Macro Level Advocacy:** Social workers, in collaboration with the healthcare team, are in a unique position to advocate for fair and equitable access to public services and benefits. Social workers advocate for equal treatment and protection under the law and challenge injustices, especially injustices that affect equity-deserving populations (119).
- 
- **Screening for Intimate Partner Violence (IPV):** Screening for IPV should occur within a trusting relationship with a trauma-informed approach. Various healthcare team members may be able to identify risks or concerns about IPV. The social worker can consult and collaborate with the team about how to respond safely to the presence of family violence.
 - Evidence-based training around IPV and family violence is recommended for the healthcare team through the [Vega Project](#).
 - **Duty to Report Child Protection Concerns:** Social Workers can also assist the health care team when there are concerns about possible risks to the newborn. Healthcare providers in Canada **do not have a legal obligation to report prenatal substance use or other risks to the fetus during pregnancy.** Any prenatal referrals or reports about pregnancy-related substance use require the informed consent of the patient. **If there are concerns for other children in the home, there may be a duty to report under the law.**
 - Maternal substance use alone is not grounds for the apprehension of a newborn by **Child and Family Well Being**.



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn



- The health care team is legally obligated under Section 23 of the Child and Family Services Act (CFSA) to report child protection concerns to Child and Family Well Being.
 - Before making a report, clinicians should refer to **Section 22 of CFSA** for a comprehensive outline of circumstances under which notifying Child and Family Well Being is warranted. The decision to report should be made with the greatest care, on a case-by-case basis, in consultation with the full healthcare team (120). Healthcare providers must also recognize the variety of emotions that birthparents and caregivers may experience, especially the ongoing over-surveillance of racialized parents by child welfare systems. Child and Family Well Being involvement necessitates transparent communication and involvement of the birthing parents.

It should be noted that the apprehension of newborns is associated with a range of negative long-term social and health outcomes for the birthparent and child (121–123). If a child is temporarily apprehended during the immediate postpartum period, birthparents should be offered appropriate support to ensure that the outcomes they experience after the loss of their child does not become a barrier to reunification (122). Special attention should be made to advocate with Child and Family Well Being social workers about the importance of skin-to-skin care, breast(chest)feeding, spending time with their child to provide nonpharmacological supports and rooming-in, which research shows is best practice for newborns experiencing NOWS (124).



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn





Pregnant persons can be referred to the Public Health Early Years team at any time throughout the antenatal, postpartum, or early childhood period. The earlier in their pregnancy they are referred, however, the more options they have for services. The Early Years team consists of RNs and allied health professionals. A pregnant person will initially be connected with a Public

Health Nurse (PHN) who can offer ongoing assessment and support tailored to the needs of that family and meet them where they are most comfortable.

Public Health supports pregnant persons during both the antenatal and postpartum period through:

- Prenatal information and in-home support preparing for their newborn's arrival.
- Up to date information regarding caring for their newborn, healthy growth and development, and parenting.
- Guidance on positive parent-child interaction.
- Feeding, lactation, and nutritional support.
- Mental health support and connection to mental health resources.
- Connection and/or referral to community resources and programs (e.g., Family Resource Centres, housing supports, food banks, etc.)
- Information on pregnancy and childhood immunization.

If the pregnant person is interested, they can be referred to other Public Health programs. Referrals received before 28 weeks' gestation may be eligible to participate in the **Nurse-Family Partnership** as described here (p.114). All other pregnant persons could participate in the **Enhanced Home Visiting (EHV) Program**, which involves regular visits up to the child's third birthday with a trained Home Visitor, is described here (p.116).



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn





There are numerous support programs that are available in the community to support the transition from hospital to home and beyond. The social worker is a perfect clinician to help discuss the specific identified needs of the family. The collaborative relationship between birthparent and social worker will help to connect birthparents/persons to resources in the community.

The most helpful supports for young families include Family Resource Centres and the Parenting Journey Programs, public health nurses, Enhanced Home Visiting, and Nova Scotia Early Childhood Intervention Service. Other important community resources are Food Banks, Income Assistance and Employment Support, Community Mental Health and Addiction Services, Provincial Mental Health and Addictions Crisis Line, Shelters, and Regional Housing Authorities. NS 211 (online or by phone) has the most user-friendly, comprehensive list of available government and community support programs.

Families can be referred to a multitude of programs at the same time. For example, the Nurse-Family Partnership (Public Health) and the Baby Steps Program (NSCEDIS) are two programs that are offered during a similar period. Both programs offer unique and complimentary support.

- Case coordination is a key piece of Baby Steps services. Families can always be involved with as many or as few services as they wish when connected to the Baby Steps Program, as this program creates a personalized plan that meets the individualized needs of the families.
 - For example, a family may decide to put the Baby Steps Program on hold while the family focuses on another service (such as the NFP).

The following are examples of community support available across the province:

- **Home | nsecdis**
- **Healthy Beginnings - Enhanced Home Visiting | Nova Scotia Health (nshealth.ca)**

1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn



- **Community Mental Health and Addictions**
 - 1-855-922-1122
- **Provincial Mental Health and Addictions Crisis Line: 1-888-429-8167**

Discharge Planning

Comprehensive discharge planning is important to ensure seamless transition from hospital to home for birthparents diagnosed with OUD and their newborns diagnosed with NOWS.

Discharge planning is an individualized process that begins on admission and requires a collaborative approach between the family, and the inpatient and community care providers. The

following is **not an exhaustive** list of the discharge planning topics that should be considered:

- **Early Intervention:** It is important to ensure an Early Intervention **Baby Steps Program** referral, as introduced in **the Antepartum Section** (p.106), is completed antenatally however, confirming the referral postnatally is important. The program may schedule a visit to the hospital before discharge or will follow up at home.
- **Public Health:** Ideally, referral to Public Health antenatally with the birthparent's consent is beneficial. Public Health may visit the birthparent and newborn in the hospital before discharge. As discussed **here** (p.113), public health nurses can provide ongoing support for pregnant persons starting early in pregnancy. If pregnant persons have not been interested in Public Health support antenatally, they can still be followed in the postpartum period. PHNs visit everyone in the hospital (Monday-Friday) to ensure pregnant persons are comfortable with their follow-up. A detailed discharge summary is helpful for the PHN to provide consistent care after discharge.



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

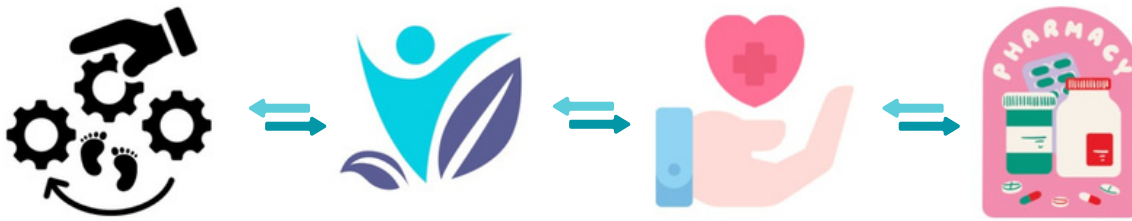
4

Section Four: Postpartum

5

Section Five: Newborn





- Follow up with the most responsible care provider (family physician, nurse practitioner, obstetrician, midwife):** During the first six weeks postpartum, the birthparent and newborn need to have a comprehensive follow-up visit with the appropriate care provider to address perinatal considerations.
 - It is also important for this population to have frequent and available support services during the early weeks following birth to address their individual needs, such as a communication plan with the community OAT provider for possible dosing changes in a patient's OAT medication.
 - Psychosocial support services should also be accessible to this population (56). Discuss the available resources, especially for relapse prevention due to the vulnerability during the postpartum period.
- Pharmacy Considerations:** Have a discharge plan for and access to OAT dosages to ensure the continuation of care in the community. This requires the involvement of members of the multidisciplinary team in careful medication planning and includes the following considerations:
 - The birthparent **should not be discharged** until an ambulatory supply of OAT has been established. This can take multiple days, so coordination with the community OAT provider should begin at least 48-72 hours before the expected discharge.
 - Consultation among all members of the multidisciplinary care team related to medication discharge planning should begin at the time of admission and include consideration of the following:



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn





1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn



- **Clinic or Medical Appointment in the Community:** The perinatal care team should coordinate an appointment for the patient with the community OAT provider before discharge to ensure continuity of care.
- **Community Pharmacist Notification:** The community pharmacist must be notified regarding the date and time of the last dose and any dosage changes to ensure a seamless transition to the community.
 - This may include faxing the medication record to the community pharmacy.
 - It is also essential to coordinate with the community pharmacists to ensure continuity of medication administration and notification of any changes to medication prescriptions.
- **Long-Term Contraception:** Discuss family planning and access to long-term reversible contraception.
 - It is suggested that offering an intrauterine device (IUD) or subdermal contraceptive implants are potential and practical solutions to address this concern (56,103).
- **Naloxone Nasal Take Home Kit:** The postpartum period is an opportunity to promote health through a harm reduction approach. Offering **Take Home Nasal Naloxone Kits**, as per your unit policy, during the postpartum period helps to promote health and wellbeing for populations who might be at risk of opioid poisoning. Birthparents may be prescribed “carries,” and with any children in their care, overdose from ingestion of opioids such as methadone or buprenorphine could be possible. Having access to a **Take Home Nasal Naloxone Kit** can support birthparents and families in a harm reduction approach. Furthermore, education regarding safe (locked) storage for carries is imperative for the prevention of accidental overdose and ingestion.





Nova Scotia Take Home Naloxone (THN) Program

The THN program provides free opioid poisoning prevention and naloxone administration training. The aim is to prevent opioid overdoses and related death from occurring in Nova Scotian communities.

Naloxone does not have any effect when a person has not taken opioids.

This makes it safe to give to a person even if they have no opioids in their system.

Even though naloxone only works on opioid poisonings, if you are unsure what a person has taken, you can still administer naloxone.



What is naloxone?

Naloxone is a fast-acting medication that is used to temporarily reverse the effects of an opioid poisoning.

Signs and symptoms of an opioid poisoning include slow/shallow breathing, discoloration in the skin, pin-point pupils, deep snoring/gurgling sounds and unresponsiveness.

Naloxone will start to work in approximately

1-5
minutes

Stays active in the body for about

30-90
minutes



Where can I get a kit?

Naloxone is available at more than **400** locations across Nova Scotia including:

Pharmacies, Health Care Clinics, Harm Reduction Organizations and mobile outreach at select locations.

Naloxone kits provided by registered sites

Please note: Nasal Naloxone is not available for free at pharmacies unless you fall under these categories: Veteran Affairs Canada or Non-Insured Health Benefits (NIHB) Program for First Nations individuals with a band number.



Having a THN program supports Harm Reduction strategies by reducing the risk of death from opioid poisonings and encouraging education and support.

Did you know?

Not only can naloxone save a life in the event of an opioid poisoning, by carrying a kit it can help reduce stigma and increase awareness around substance use.

ELIGIBILITY

Registered sites can provide **FREE** opioid poisoning prevention/ naloxone administration training and Naloxone kits to individuals who:

- are at risk of an opioid poisoning
- are likely to witness and respond to a poisoning
- and to anyone who is interested in a kit and training

Program Partners



For more information and a map of participating community locations, please visit:

www.MHAHelpNS.ca and click on 'Clients and Providers'



OR email:

NSnaloxone@nshealth.ca



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn



Becoming a distribution site: To establish training, education, and distribution please contact: nsnaloxone@nshealth.ca

- The **Nova Scotia Take Home Naloxone Program** will support education and training for staff.
 - Education can be in-person or virtual and adapted to meet the unit/site needs.
- Site leads will support sustainability of the distribution site with support from the **Nova Scotia Take Home Naloxone Program**.

5 NEWBORN CARE CONSIDERATIONS

Knowledge Translation Toolkit can be found [here](#) and includes:

- Chapter Summary
- Top Eight Newborn Care Considerations (p.160)



1. Introduction: NAS vs. Nows

- Increasing prevalence of opioid use in pregnancy has increased the rates of neonatal withdrawal.
- Neonatal Abstinence Syndrome is an overarching term for a newborn experiencing withdrawal.
 - Neonatal Opioid Withdrawal Syndrome (Nows) is more specific to withdrawal associated with opioid use.

2. Eat, Sleep, Console

- The Eat, Sleep, Console Model (ESC) of care is a function-based assessment model which evaluates the newborn's functional ability to eat, sleep and be consoled.
- The ESC tool supports care providers in evaluating, in collaboration with birthparents, whether the newborn is meeting functional needs.
 - Assessment is q3-4hours
 - Two "yes" = full care team huddle.
 - In some regional facilities, we recommend a full huddle after one "yes"
- Optimizing non-pharmacological interventions is foundational to this care approach.

3. Newborn Feeding & Weight

- Breast(chest)feeding has been shown to decrease the severity of Nows symptoms.
- Methadone is safe in breast(chest)feeding regardless of maternal dose.
 - Buprenorphine is also considered relatively safe in breastfeeding.
 - Encourage birthparents to take the dose after a feed or pumping session.
 - Cannabis is a common polysubstance; however, there is no known safe amount of cannabis for breast(chest)feeding.
- Optimal positioning and support can help newborns establish breast(chest)feeding.
- Informed choice for bottle feeding.
 - Encourage paced feeding.
- Weights should be monitored daily at the same collaboratively determined time.

4. Holistic Discharge Planning

- Continuity of care is important in this population.
 - Established feeding plan/support.
 - Established primary care provider visit, including supports through the Baby Steps Program.
- Meeting universal discharge milestones:
 - Transitioning well to extrauterine life.
 - Stable weight (plateau in losing or gaining).
 - Adequate hydration.
- Meeting unique Nows considerations:
 - Withdrawal symptoms stabilized (parents educated on signs to look for and continuation of non-pharmacological interventions).

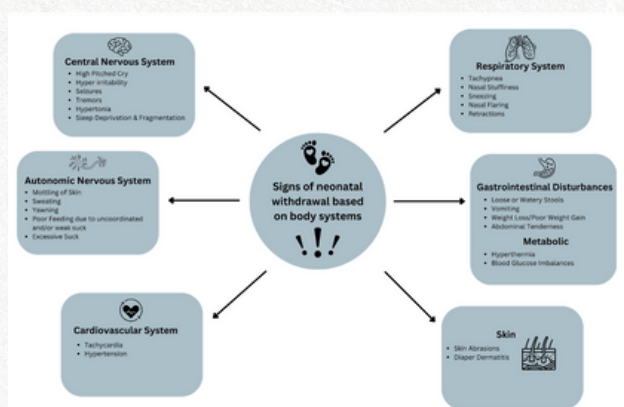
TOP 8

CARE CONSIDERATIONS FOR NEWBORNS DIAGNOSED WITH NOWS.



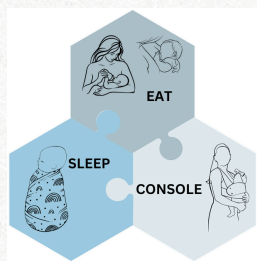
CLINICAL MANIFESTATIONS

- Presentation is non-specific and unpredictable; sometimes, there may be no signs.
- Environmental stimuli can exacerbate the severity of symptoms



EAT, SLEEP, CONSOLE

- Eat, Sleep, Console is a model of care that centers around birthparent involvement.
- Assessments are completed q3-4 hours, looking functionally if the newborn is eating, sleeping, and easily consoled.
- The ESC tool helps to support assessment and encourages a full care team huddle after the newborn experiences two categories with 'yes'.
- For regional sites, we recommend a full care team huddle after one 'yes' to determine the need for potential transfer

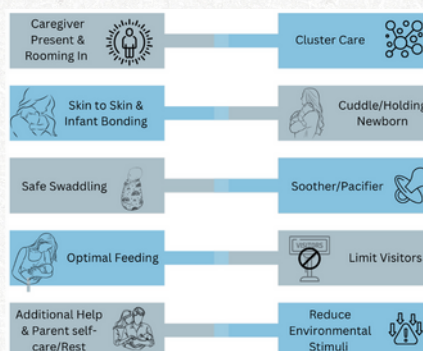


SCREENING & ASSESSMENT

- All newborns exposed to opioids in utero should undergo initial monitoring and screening.
- In Nova Scotia, the standard of care is to monitor newborns exposed to chronic opioid use in utero for **5-7 days** to monitor for signs and symptoms of withdrawal.
- It may be difficult to differentiate signs of NOWS from other neonatal conditions. Healthcare providers should consider other medical conditions that exhibit signs similar to those of NOWS.



NON-PHARMACOLOGICAL INTERVENTIONS



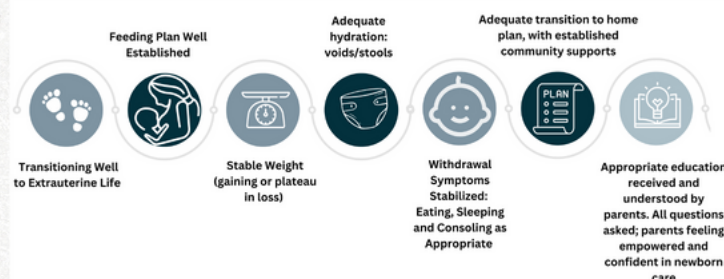
- Main goal of non-pharmacological interventions is to create an environment that helps the newborn to self-regulate.
- Non-pharmacological interventions can help to alleviate withdrawal symptoms, reduce the need for medical intervention and shorten hospital stays

NEWBORN FEEDING

- NOWS signs can greatly interfere with feeding ability
- Breast(chest)milk has been shown to decrease the severity of withdrawal symptoms and has been shown to decrease the length of hospital stay and pharmacological treatment (if needed)
- Poor feeding can be due to excessive sucking, hyper-irritability and vomiting (increasing risk for weight loss)
- Rooming-in can support the birthparent-newborn dyad and support breast(chest)feeding
- Small frequent feeds in optimal positioning and following cue-based feeding
- If parents make an informed choice to bottle/formula feed, it is important to discuss paced feeding to avoid overstimulation

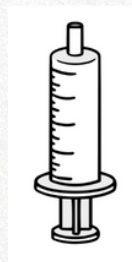


DISCHARGE



PHARMACOLOGICAL INTERVENTIONS

- When the implementation of non-pharmacological interventions is not successful, pharmacological therapy may be needed.
 - Non-pharmacological strategies should be adequately optimized before introducing pharmacological therapy.
- The introduction of morphine for pharmacological treatment should follow a treatment algorithm (Appendix A provides an example of such)
- Key to implementation includes
 - Establishment of a protocol
 - Education
 - Confidence and Competence in Administration
 - Monitoring (vitals q4hr or more frequent if needed)



NEWBORN WEIGHT

- Critical to assess due to the increase risk of weight loss from loose stool, vomiting, and poor feeding.
- Accurate Birth weight and daily pre-feeding weights starting at 24 hours is recommended
 - collaboratively determine the best time to weigh the newborn
 - remain consistent in timing each day





Introduction

This section will specifically address the considerations and care requirements for newborns who experience NOWS following birth. With the increasing prevalence of opioid use during pregnancy, it is of utmost importance for healthcare providers to have an accurate understanding of NOWS to ensure the provision of adequate screening, assessments, and care is provided to newborns and their families. Ideally, establishing connections with pregnant persons and their families should commence during the antenatal period to ensure the appropriate multidisciplinary development and implementation of an individualized plan of care. This planning is described in more detail in the antepartum section of this resource.



Neonatal Abstinence Syndrome (NAS)

Neonatal Abstinence Syndrome (NAS) occurs when a newborn experiences withdrawal symptoms due to the abrupt discontinuation of exposure to substances used or misused by the gestational parent during pregnancy. NAS involves a variety of symptoms that impact several bodily systems, with the central and autonomic nervous systems and the gastrointestinal tract, being primarily affected. When the birthparent has engaged in prolonged substance use during pregnancy, the withdrawal experienced by newborns can be exceptionally intense. NAS may involve withdrawal from opioids and/or other psychoactive substances (125). These other substances may include benzodiazepines, barbiturates, selective serotonin reuptake inhibitors (SSRI), serotonin noradrenaline reuptake inhibitors (SNRI), tricyclic antidepressants (TCA), alcohol and nicotine (14).

1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn



Non-Opioid Withdrawal in Neonates

Although this toolkit is designed to guide the care of newborns experiencing withdrawal from opioids exposed to them in pregnancy, this chapter includes valuable information for newborns who may be withdrawing from other substances. **If you suspect that a newborn is withdrawing from non-opioid substances, consider a consultation with a neonatologist or newborn care provider with experience caring for newborns experiencing neonatal withdrawal to create an individualized care plan with the family.** It is essential to consider that the literature exploring SSRIs / SNRIs and TCAs withdrawal is conflicting. **The Canadian Pediatric Society Position Statement from 2021** highlights the challenge in differentiating between neonatal withdrawal or drug toxicity. Given the onset of symptoms typically at or within hours of birth, and the duration of symptoms lasting days with a maximum duration of two weeks, it is more likely that this is a drug effect rather than a withdrawal effect. There is **some evidence** that supports exacerbated symptom presentation in newborns diagnosed with NOWS whose birthparents are prescribed anti-depressant medication such as SSRIs, SNRIs or TCAs; however, research is limited. **Regardless an individualized approach is needed in caring with this population.** The following sections are particularly relevant to consider for all newborns who may be experiencing withdrawal to other substances:

1. SCREENING	166
2. EAT, SLEEP, CONSOLE	169
a. How to use the ESC	172
b. Non-Pharmacological Management	182
c. Family Care Diary	191
3. BIRTHPARENT-NEWBORN TOGETHERNESS	193
4. FEEDING & WEIGHT	193
a. Breast(chest)feeding	194
b. Note on Bottle Feeding	203
c. Weight	207
5. BABY STEPS PROGRAM	212
6. DISCHARGE PLANNING	227



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn



Neonatal Opioid Withdrawal Syndrome (NOWS)

Neonatal Opioid Withdrawal Syndrome (NOWS) is a more specific term relating to the withdrawal of a newborn that occurs after chronic in-utero exposure to primarily opioids. Neonatal withdrawal from opioid exposure in-utero is more common than withdrawal from exposure to any other substances in-utero (126). While this clinical toolkit primarily addresses the specific requirements of newborns diagnosed with NOWS it is important to recognize that in the broader context, newborns diagnosed with NAS may also benefit from the care interventions recommended for newborns experiencing NOWS. Although both NOWS and NAS are rarely fatal, they can cause significant illness in newborns and require prolonged hospitalization; therefore, both require prompt recognition and treatment.

Physiology



NOWS is a condition that arises due to prenatal exposure to opioids, which causes alterations in neurotransmitter activity in the newborn's brain. Opioids have low molecular weight, water solubility, and lipophilicity that enable them to easily cross the placenta and bind to fetal biochemical receptors in the central nervous system, blocking the action of neurotransmitters in the brain (125).

Opioids cross the placental barrier, leading to chronic exposure in utero, and causes fetuses to develop physical dependence resulting from fetal biochemical adjustments. Following birth, the sudden cessation of opioids with cord ligation results in the newborn's metabolization and excretion of remaining opioid metabolites. This depletion leads to an alteration in neurotransmitter release and contributes to the onset of withdrawal symptoms in NOWS. **Despite ongoing research, the pathophysiology of NOWS is not fully understood.**



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

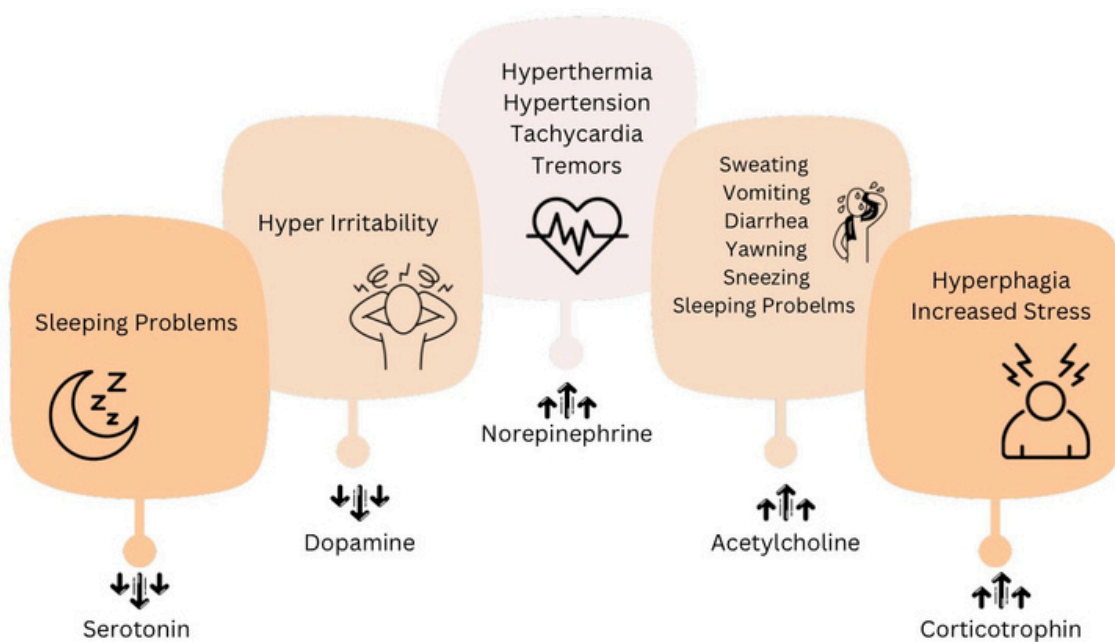
Section Five: Newborn



Clinical Manifestations

Factors influencing the severity and presentation of withdrawal symptoms in newborns diagnosed with NOWS, include the type of opioid used by the birthparent, timing of the last opioid exposure, maternal metabolism, maternal use of additional substances, and genetics. It was previously thought that premature babies were less likely to be affected by NOWS, however a recent systematic review of gestational age and diagnoses of NOWS demonstrated that a higher gestational age was unlikely to be associated with a higher rate of NOWS diagnosis. It is important to note, however, the poor study quality and heterogeneity of the studies included in the review do not support a rigorous recommendation. Future research is needed to explore gestational age and diagnosis of NOWS (14,127).

The onset of withdrawal symptoms in the newborn usually occurs 48-72 hours after birth, but it may vary, and a later presentation of 5-7 days is also possible. The half-life influences the onset of withdrawal signs of opioid elimination (12). The underlying pathophysiology of NOWS is not fully understood, but it is thought that the increased release of neurotransmitters, including dopamine, acetylcholine, norepinephrine, serotonin, and corticotrophin, contributes to the signs experienced by the newborn.



1

Section One: Continuum
of Care

2

Section Two:
Antepartum

3

Section Three:
Intrapartum

4

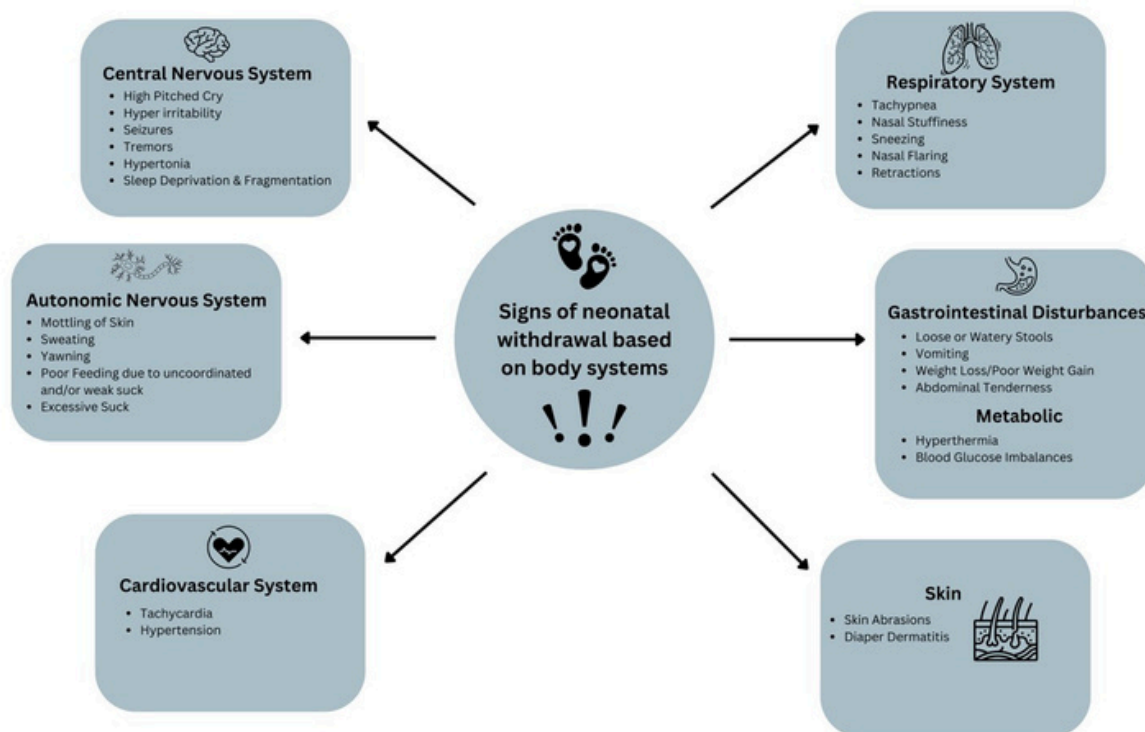
Section Four:
Postpartum

5

Section Five:
Newborn



The presentation of NOWS can be nonspecific and unpredictable in terms of intensity and duration, and in some cases, there may be no visible signs at all. Currently, there is no reliable method available to anticipate the presence or severity of withdrawal symptoms prenatally. Opioid receptors are concentrated in the central nervous system (CNS) as well as the gastrointestinal tract, and the symptoms of opioid withdrawal mainly manifest as CNS irritability, autonomic overactivity, and gastrointestinal tract dysfunction as shown below.



Environmental stimuli and hunger can further exacerbate the severity of withdrawal symptoms in newborns with NOWS; therefore, newborns should be cared for in a quiet, controlled environment to minimize the stimuli and ensure they receive adequate nutrition to alleviate the symptoms of withdrawal (128). **Eat, Sleep, and Console** as a treatment approach will be further described later (p.169) in this resource.



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn



Screening



All newborns with known exposure to opioids in-utero should undergo initial monitoring and management for withdrawal while in hospital. The American Academy of Pediatrics recommends that any newborn with chronic exposure to opioids in utero be monitored for withdrawal symptoms for a minimum of 72 hours following birth. They suggest that in-hospital monitoring should be at least 3 days for those newborns exposed

to immediate-release opioids, 4 to 7 days if exposed to buprenorphine and/or sustained released opioids, and 5 to 7 days for those exposed to methadone (56). In Nova Scotia it is recommended that newborns remain in hospital for **at least 5-7 days** for monitoring of signs and symptoms of withdrawal. This recommendation aligns with the Canadian Paediatric Societies Position Statement (January 2025) located **here**.

Initial Assessment

To assess a newborn presenting with suspected NOWS, the first step is to review the maternal and prenatal history, including the diagnosis of OUD, OAT, mental health disorders, sexually transmitted infections, and adequacy of prenatal care. A complete newborn examination should be performed to identify any differential diagnoses or concurrent illnesses that may be present and provide appropriate treatments or investigations for the same.



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn





While routine drug screening for newborns is not recommended due to the controversy surrounding the validity and reliability of toxicology testing, it may be necessary on an individualized basis if the results will inform clinical management (refer to your local hospital policy on drug screening for routine management). If drug screening is indicated, it must be done with the consent of the birthparent.

It may be difficult to differentiate signs of NOWS from other neonatal conditions. Health care providers should consider other medical conditions that a newborn may have that exhibit similar signs and symptoms to those of NOWS.

Signs of NOWS and Associated Potential Differential Diagnoses to Consider

Adapted from Neonatal abstinence syndrome differential diagnosis. Table 3: Jansson L, Patrick S. Neonatal abstinence syndrome. Pediatr Clin N Am. 2019;66(2):353-367.

NOWS Sign	Differential Diagnosis
Irritability	<ul style="list-style-type: none"> Gastroesophageal Reflux Pain/discomfort Sepsis Brain injury
Fever	<ul style="list-style-type: none"> Sepsis Hyperthyroidism
Feeding Problems	<ul style="list-style-type: none"> Oromotor dysfunction Anomalies (cleft palate, micrognathia, Pierre Robin sequence, genetic syndromes such as Prader Willi) Polycythemia Immaturity. Including late preterm birth Brain Injury Sepsis

1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn





Signs of NOWS and Associated Potential Differential Diagnoses to Consider

Adapted from Neonatal abstinence syndrome differential diagnosis. Table 3: Jansson L, Patrick S. Neonatal abstinence syndrome. Pediatr Clin N Am. 2019;66(2):353-367.

NOWS Sign	Differential Diagnosis
Jitteriness	<ul style="list-style-type: none"> • Hypocalcemia • Hypoglycemia • Pre-Immaturity • Injury of the nervous system
Myoclonic Jerking	<ul style="list-style-type: none"> • Not uncommon in opioid-exposed newborns and can be mistaken for seizure activity • Myoclonic jerks can be unilateral or bilateral, occur during sleep, and do not stop when the extremity or affected body part is held. • Electroencephalograms are not indicated in newborns with myoclonic jerks
Seizures (rare in newborns with NAS)	<ul style="list-style-type: none"> • Hypocalcemia • Hypoglycemia • Hypoxic-ischemic encephalopathy • Brain hemorrhage/stroke

1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

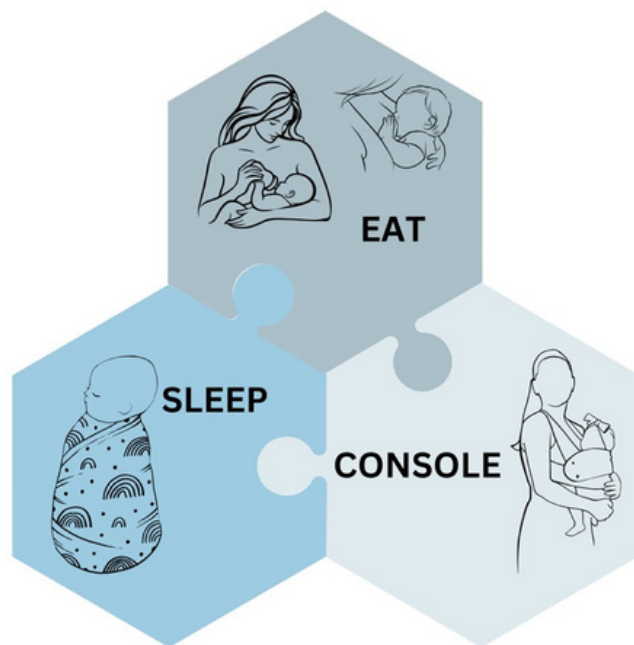
4

Section Four: Postpartum

5

Section Five: Newborn





Traditionally, the screening tool used to monitor NOWS symptoms and severity in a newborn diagnosed with NOWS was the Finnegan Neonatal Abstinence Scoring Tool (FNAST). The FNAST had many limitations including a lengthy assessment, monitoring, and scoring of 21 signs of withdrawal that was not fully validated. Additionally, the FNAST was subjective and the invasive and lengthy assessments were noted to further exacerbate newborns' withdrawal symptoms by unnecessarily disturbing the newborn. The use of the FNAST was not collaborative with the family and was shown to increase the use of early pharmacological management (129).

Eat, Sleep, Console (ESC) offers an alternative approach for monitoring NOWS. It emphasizes parental involvement and non-pharmacological management in the care of the newborn. Developed by Yale Haven Children's Hospital, the ESC model focuses primarily on three functional abilities of the newborn: the ability to eat well, sleep undisturbed for 1 hour after feeding, and to be consoled within 10 minutes (130).



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn



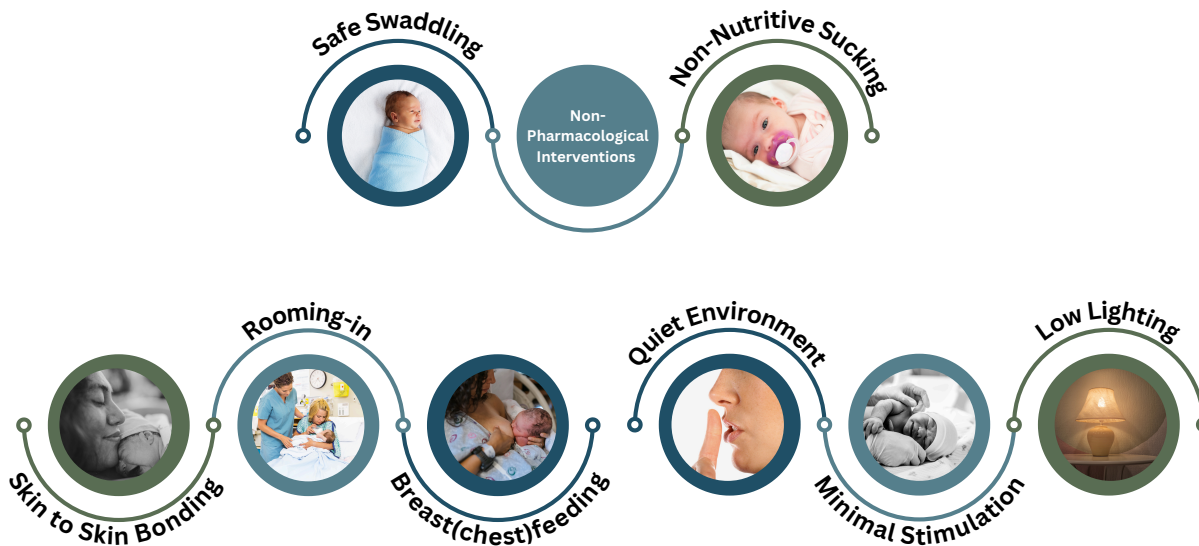


The ESC approach provides a philosophy for caring for newborns experiencing withdrawal symptoms. It is grounded in evidence-based care practices and aligns with trauma-informed, culturally safe, and responsive care principles. This approach prioritizes the importance of keeping the birthparent-newborn dyad together while using non-pharmacological strategies to support newborns experiencing symptoms of withdrawal.

- For optimal results, the tool should be initiated **within 4-6 hours** of birth and continued for the duration of in-hospital monitoring, which may vary depending on the specific opioid exposure. If pharmacologic treatment is required, ESC monitoring should continue for **at least 24 hours after administering the last dose of medication.**

Non-pharmacologic interventions are shown to effectively decrease the impacts of withdrawal. They should be implemented as soon as possible after birth, regardless of whether the newborn shows symptoms of withdrawal or not (12).

Non-pharmacological Interventions:



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn





In a recent (2023) cluster-randomized, controlled trial the ESC model was implemented in place of the FNAST in 26 hospitals in the US. This trial explored readiness for discharge as a primary outcome, along with including composite safety outcomes such as: in hospital safety, unscheduled healthcare visits and nonaccidental trauma or death (131). This study found the **ESC model to significantly decrease the newborn's readiness for discharge in length of days, with no reported adverse outcomes from transitioning to the ESC from usual care (FNAST model)**. Findings from this RCT demonstrate the important improvements in patient and health system outcomes by transitioning from the outdated FNAST model to the ESC model of care.

Young and colleagues (2023)'s article can be found [here](#):

Young LW, Ounpraseuth ST, Merhar SL, et al. Eat, Sleep, Console Approach or Usual Care for Neonatal Opioid Withdrawal. New England Journal of Medicine. 2023;388(25):2326-2337.
doi:10.1056/NEJMoa2214470

The NEW ENGLAND JOURNAL of MEDICINE

ORIGINAL ARTICLE

Eat, Sleep, Console Approach or Usual Care for Neonatal Opioid Withdrawal

L.W. Young, S.T. Ounpraseuth, S.L. Merhar, Z. Hu, A.E. Simon, A.A. Bremer, J.Y. Lee, A. Das, M.M. Crawford, R.G. Greenberg, P.B. Smith, B.B. Poindexter, R.D. Higgins, M.C. Walsh, W. Rice, D.A. Paul, J.R. Maxwell, S. Telang, C.M. Fung, T. Wright, A.M. Reynolds, D.W. Hahn, J. Ross, J.M. McAllister, M. Crowley

1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

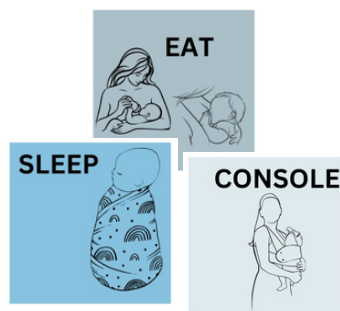
5

Section Five: Newborn



How to Use the Eat, Sleep, Console Tool

This section will highlight an example of a care tool from IWK Health to guide assessment, it is included below. A parallel form exists on the Nova Scotia Health Access E-Forms subsite. This care tool is meant to be a guide in assessing newborns experiencing neonatal opioid withdrawal. It is important to note that this tool does not provide a score, but rather a holistic assessment of neonatal functioning.



Care Tool Eating, Sleeping, Consoling

K07002307 Jun/7/2002 M
SCA,TEST Visit
ER0000145/12 HCN: 22222222
Van den Hof, TEST / TEST, Maureen
Dec/8/2012

- Initiate a new ESC Care Tool record every shift.
- Review ESC behaviors with parents/caregivers every 2 – 4 hours after feedings.
- If not clear whether the baby's poor eating, sleeping, or consoling is due to substance withdrawal, indicate Yes and continue to monitor closely while optimizing all non-pharmacological interventions.
- Numbers within this tool are NOT intended as a score but as a coding key
- Review definitions of items prior to performing assessment of ESC behavior (back page)

Date:	Birth weight (grams):	Daily weight (grams):
Gestational Age:	Age in days:	Weight loss % since birth:
Corrected Gestational Age:	Weight loss more than 10%:	Gain \uparrow / Loss \downarrow :
	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Time of assessment		
ESC ASSESSMENT		
EAT:		
Poor eating? (If Yes, answer next question; if No, go to Sleep)		
Poor eating due to substance withdrawal?		
SLEEP:		
Sleep less than one hour? (If Yes, answer next question, if No, go to Console)		
Sleep less than one hour due to substance withdrawal?		
CONSOLE:		
Unable to console within 10 minutes (or cannot stay consoled for longer than 10 minutes)?		
(If Yes, answer next question, if No, go to Consoling Support Needed)		
Unable to console within 10 minutes (or cannot stay consoled for longer than 10 minutes)		
due to substance withdrawal?		
Support needed to console: (Use # to code)		
1. Able to self-console		
2. Able to console (and stay consoled) with caregiver support within 10 minutes		
3. Unable to console (or cannot stay consoled) with caregiver support within 10 minutes		
PARENT/CAREGIVER		
PARENT/CAREGIVER PRESENT FOR:		
Use # to code		
1. More than three hours 3. One – two hours		
2. Two – three hours 4. Less than one hour 5. No parent/caregiver present		
WHO PROVIDED MOST OF INFANT CARE?		
1. Mother / Birth Parent 3. Family Member 5. Nurse		
2. Partner 4. Support Person 6. Other (define):		
PLAN OF CARE		
Y=Yes N=No		
Recommend Bedside Nurse and Parent/Caregiver Huddle?		
Recommend Full Care Team Huddle?		
Management Considerations (Use # to code)		
1. Continue/optimize non-pharm care 3. Continue medication		
2. Medication treatment pharm care 4. Plan documented in narrative notes		
NON-PHARMACOLOGICAL CARE INTERVENTIONS		
S = Start intervention I = Increase intervention R = Reinforce intervention		
Parent/caregiver presence		
Optimal feeding at early hunger cues		
Cue based newborn-centered 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/respite		
Other (Describe in Narrative Notes)		
Signature/Status	Print Name	Date (yyyy/MON/dd)



1

Section One: Continuum
of Care

2

Section Two:
Antepartum

3

Section Three:
Intrapartum

4

Section Four:
Postpartum

5

Section Five:
Newborn



How to Use the Eat, Sleep, Console Tool (Eating)

- **Date:** Indicates the date covered by the assessments on the page (Note: utilize a new care tool each shift).
- **Time:** Indicates the time the assessment was completed. Assessments should **take place every 3 to 4 hours and clustered with feeds.**
- **Daily Weight Loss:** Indicates the status of weight gain/loss. **Greater than 10% weight loss requires a full care team huddle.**
- **Eating:** Assess the newborn's eating behaviour.
 - **Poor eating** is defined as a newborn unable to coordinate feeding within 10 minutes of showing hunger cues **AND/OR** unable to sustain feeding for an age-appropriate duration at the breast **OR** cannot handle volumes by alternate feeding method that would be appropriate for weight and age.
 - **Optimal Feeding:** Feeding adlib and on-demand without restriction on volume or duration. Newborns should be offered feedings when showing early hunger cues and continue until the newborn is contented.



Populate on the ESC tool as follows:

- **Question One:**
 - **Poor eating?** If YES - “Y” answer next question, if NO - “N” go to next section (“Sleep”).
- **Question Two:**
 - **Poor eating due to substance withdrawal?** Answer YES - “Y” if due to substance withdrawal symptoms (e.g. fussiness, tremors, uncoordinated suck, excessive rooting)
 - Answer NO - “N” if poor eating is not due to substance withdrawal (e.g. prematurity, transitional sleepiness, excess mucus - first 24 hours- inability to latch due to maternal/infant anatomical factors)
 - Unsure? Answer YES - “Y” and continue to monitor

Practice Tip: Early consultation with a lactation consultant or dietitian can support development of individualized care plans to establish newborn feeding. Even if the documentation is “No” - thoughtful consideration and assessment of feeding must be completed to ensure the newborn is thriving.



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn





- **Sleeping:** Assess the newborn's sleeping behaviour.
 - **Poor Sleeping** is defined as a newborn unable to sleep for at least one hour after feeding.
 - **Optimal Sleeping:** newborn is able to sleep at least one hour after feeding.



Populate on the ESC tool as follows:

- **Question One:**
 - **Sleep less than one hour?** If YES - “Y” answer the next question, if NO - “N” go to next section (“Console”).
- **Question Two:**
 - **Sleep less than one hour due to substance withdrawal?** Answer YES - “Y” if due to substance withdrawal symptoms (e.g. fussiness, restlessness, increased startle, tremors).
 - Answer NO - “N” if poor sleeping is not due to substance withdrawal (e.g. physiologic cluster feeding in the first few days of life, interruptions in sleep due to external noise, light, and clinical care).
 - Unsure? Answer YES - “Y” and continue to monitor.

Practice Tip: These newborns are impacted by environmental noise including light, sound, and frequent clinical care interruptions. Clustering care around when the newborn is awake, encouraging a dimmed lit, quiet environment, and optimization of non-pharmacological interventions such as skin-to-skin can support development of an environment supportive of sleep. Collaboration and empowerment with birthparents are key to ensure best times for assessment (while the newborn is awake).

1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn





- **Consoling:** Assess the newborn's consoling behavior.
 - Ability to be **consoled** is determined by 10 minute increments. If the newborn can be consoled within 10 minutes then the newborn is assessed as consolable.
 - **Unconsoleable:** can be assessed as the newborn unable to be consoled within 10 minutes **OR** the infant unable to stay consoled for longer than 10 minutes.



Populate on the ESC tool as follows:

- **Question One:**
 - **Unable to console within 10 minutes (or cannot stay consoled for longer than 10 minutes)?** If YES - “Y” answer next question, if NO - “N” go to next section (“Support Needed to Console”).
- **Question Two:**
 - **Unable to console due to substance withdrawal?** Answer YES - “Y” if the newborn is unable to be consoled due to substance withdrawal symptoms.
 - Answer NO - “N” if unable to be consoled is not due to substance withdrawal (e.g. caregiver non-responsiveness, hunger cues, pain).
 - Unsure? Answer YES - “Y” and continue to monitor.

Subsection: Support Needed to Console

- Numbers are provided in this section to provide a code for the extent of consoling needed to support newborn withdrawal. **Please note this is not a score, but rather a tool to assess over time the newborn’s ability to console.**
- If the answer is “**NO**” - “**N**” to question one (e.g. the infant is **ABLE** to console, or stay consoled, within 10 minutes).
 - #1 (Able to self-console) **or** #2 (Able to console and stay consoled with caregiver support such as swaddling, skin to skin, etc.) can be used.
- If the answer is “**YES**” - “**Y**” to question one (e.g. the newborn is **UNABLE** to console, or stay consoled, within 10 minutes).
 - #3 (unable to console with caregiver support) is the only code appropriate for this scenario.

1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

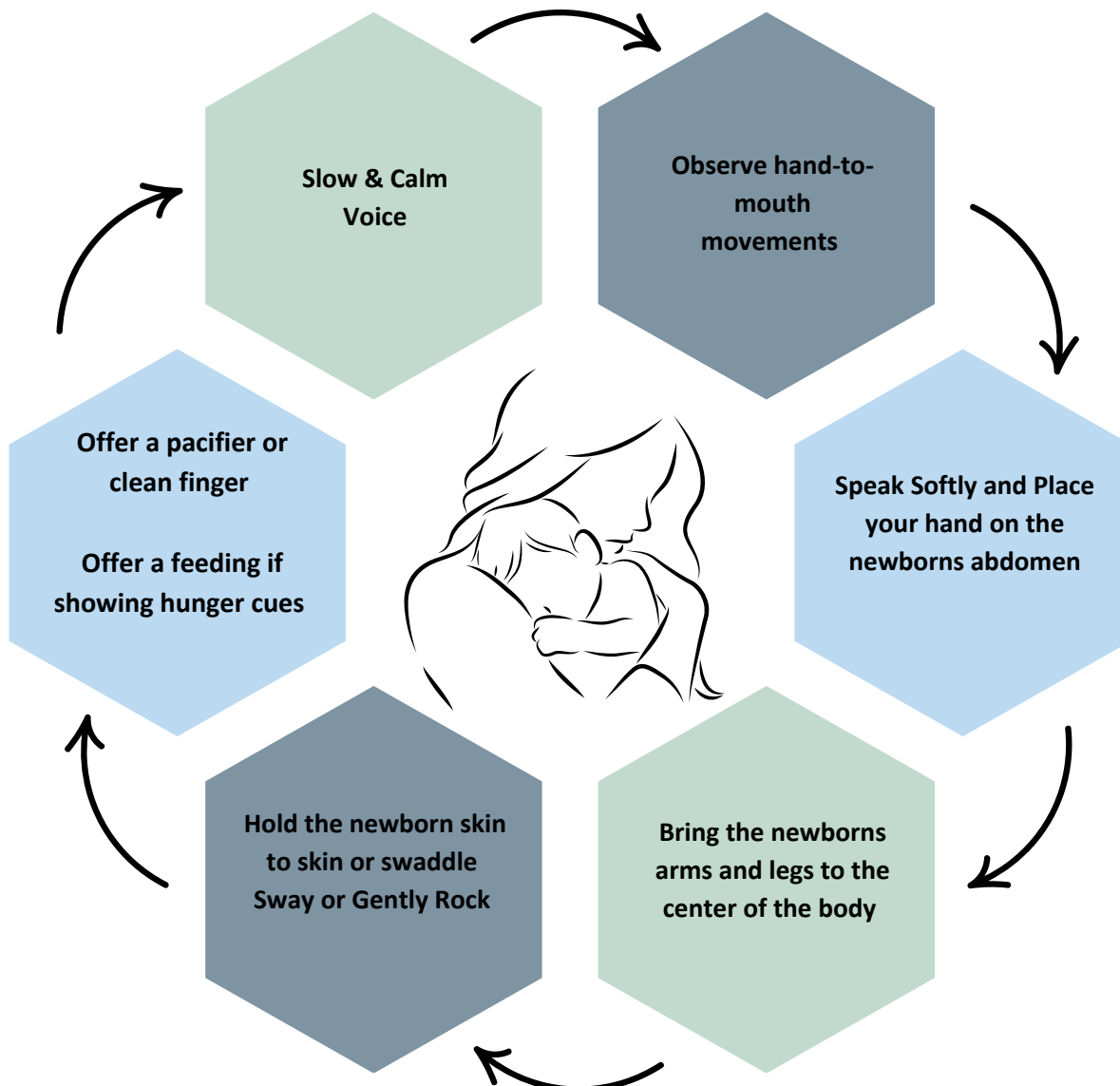
5

Section Five: Newborn



Consoling Support Interventions: These interventions should be offered in the order listed or what is deemed best (e.g. feeding when there are hunger cues or picking up a crying newborn).

- Speak slowly and softly in a calm voice to soothe the newborn.
- Observe for hand-to-mouth movements and facilitate by gently bringing the newborn's hand to mouth.
- While speaking softly to the newborn, place your hand firmly but gently on the newborn's abdomen.
- While speaking softly to the newborn, bring the newborn's arms and legs to the center of the body.
- Hold newborn skin-to-skin or swaddle in a blanket. Gently rock the newborn or sway gently with the newborn.
- Offer a pacifier or clean finger for the newborn to suck on. Offer feeding if the newborn shows hunger cues.



1

Section One: Continuum
of Care

2

Section Two:
Antepartum

3

Section Three:
Intrapartum

4

Section Four:
Postpartum

5

Section Five:
Newborn



How to Use the Eat, Sleep, Console Tool (Caregiver Presence)

Caregiver Presence:

As described within this resource, birthparent presence can support positive outcomes for newborns diagnosed with NOWS. Documenting caregiver presence can help to support understanding of the trends in newborn presentation, along with optimizing newborn care plans. Establishing a rapport with families and building their capacity through education and empowerment is important. By helping families to understand the importance and impact of caregiver presence, healthcare providers can support families in achieving this goal and addressing any barriers to increased caregiver presence.

- **Parental/Caregiver Presence:** Defined as the time since last assessment that the parent, or another caregiver spent with the baby. Caregiver can be any member of the care team that can deliver cue-based care in a timely manner (e.g. birthparent, designated visitor, volunteer, etc.)
- **Who provided infant care:** Distinguishing who is involved in care helps to support assessment and identification of trends within the care of newborns.

Populate on the ESC tool as follows:

- **Caregiver Present For:**
 1. More than three hours
 2. Two-Three hours
 3. One-Two Hours
 4. Less than one hour
 5. No parent/caregiver present
- **Who provided care:**
 1. Mother/birthparent
 2. Partner
 3. Family Member
 4. Support Person
 5. Nurse
 6. Other (define)



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn





Plan of Care

The plan of care should be collaboratively discussed with the parents and healthcare providers.

- **Bedside Nurse and Parent/Caregiver Huddle:** Bedside nurse and parent/caregiver huddle is recommended if the newborn scores “YES” to any of the functional dimensions (Eat, Sleep, Console). Discuss current and planned efforts to optimize non-pharmacological therapy.
- **Full Care Team Huddle:** Bedside nurse, parent/caregiver, newborn primary care provider and clinical nurse specialist (if available) meet if the infant has more than 10% weight loss and/or CONTINUED “YES” for any functional dimension. Moreover, any significant concerns warrant a full care team huddle.

Populate on the ESC tool as follows

- **Recommend Nurse and Parent/caregiver huddle?**
 - Indicate Y= Yes or N= No
- **Recommend Full Care Team Huddle?**
 - Indicate Y= Yes or N= No
- **Management Consideration:**
 1. Continue/Optimize Non-Pharmacological Care
 2. Medication Treatment Pharmacological Care
 3. Continue Medication
 4. Plan documented in narrative notes

Non-Pharmacological Care Interventions

- Document which non pharmacological care interventions were optimized and used during the time of assessment
 - Start = S
 - Increase = I
 - Reinforce = R
- See **page 182** for description of non-pharmacological interventions.

1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn



FUNCTIONAL ASSESSMENT AND DOCUMENTATION OF THE EAT, SLEEP, CONSOLE ASSESSMENT TOOL

Description: This is a knowledge translation tool that can be used to support frontline care providers in using the Eat, Sleep, Console model of care to assess newborns diagnosed with neonatal opioid withdrawal syndrome.

Content: This infographic summarizes key aspects of the Eat, Sleep, Console model of care along with the associated documentation suggested with its use.

Suggested Implementation: We recommend placing this infographic in documentation areas to support frontline care providers in effectively assessing and documenting their assessment of newborns diagnosed with NOWS.

Digital Copy available at the following link: **Clinical Toolkit**



Functional Assessments of Eat, Sleep, Console



- Assessing the newborn for withdrawal should begin **4–6 hours** following birth.
- Assessment should occur every **3–4 hours**, clustered with other care while the newborn is awake.
- The assessment is reflective of the time period since the last assessment.



- Neonatal withdrawal symptoms can have drastic impacts on the ability of the newborn to feed effectively.
- Breast(chest)milk, of any amount offered in any way, has been shown to improve withdrawal symptoms in newborns diagnosed with NOWS.
- Additional neonatal withdrawal symptoms such as vomiting or loose stools can contribute to ineffective weight gain.

Assessment:

- Assess the newborn's ability to eat. Poor eating is defined as the newborn being:
 - Unable to coordinate feeding within **10 minutes** of showing hunger cues **AND/OR**
 - Unable to sustain feeding for an age-appropriate duration at the breast(chest) **OR**
 - newborns cannot handle volumes by alternate feeding methods appropriate for weight and age.

- Assessing the newborn's sleeping pattern reflects the newborn's ability to settle for adequate periods of sleep and awake cycles.
- A newborn who consistently demonstrates poor sleep may need additional support (non-pharmacological or pharmacological) to support functional needs.



Assessment:

- Assess the newborn's functional ability to sleep. Poor sleep is defined as:
 - The newborn's inability to sleep at least one hour of duration after a feed



- Assessing the newborn's ability to console helps to understand the impacts of neonatal withdrawal.
- A newborn who is unable to be consoled within **10 minutes**, or is unable to remain consoled for longer than **10 minutes** is potentially demonstrating signs of inadequately managed withdrawal.

Assessment:

- Assess the newborn's functional ability to be consoled. Unconsoleable is defined as:
 - The newborn is unable to be consoled within **10 minutes** **OR**
 - The newborn is unable to stay consoled for longer than **10 minutes**.



Documenting Your Assessment:



- Question One:**
 - Poor eating? If yes, answer the next question. If no, go to the next section ("Sleep").
- Question Two:**
 - Poor eating due to substance withdrawal? Answer **"Y" YES** if due to substance withdrawal symptoms (e.g. fussiness, tremors, uncoordinated suck, excessive rooting)
 - Answer **"N" NO** if poor eating is not due to substance withdrawal (e.g. prematurity, transitional sleepiness, excess mucus – first 24 hours– inability to latch due to maternal/newborn anatomical factors)
 - Unsure? Answer **"Y" YES** and continue to monitor



- Question One:**
 - Sleep less than one hour? If yes, answer the next question; if no go to the next section ("Console").
- Question Two:**
 - Sleep less than one hour due to substance withdrawal? Answer **"Y" YES** if due to substance withdrawal symptoms (i.e. fussiness, restlessness, increased startle, tremors)
 - Answer **"N" NO** if poor sleeping is not due to substance withdrawal (e.g. physiologic cluster feeding in the first few days of life, interruptions in sleep due to external noise, light and clinical care)
 - Unsure? Answer **"Y" YES** and continue to monitor

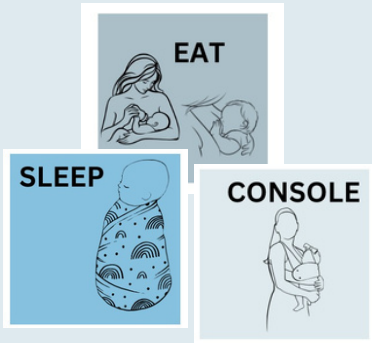


- Question One:**
 - Unable to console within 10 minutes (or cannot stay consoled for longer than 10 minutes)? If yes, answer the next question, if no, go to the next section ("Support Needed to Console").
- Question Two:**
 - Unable to console due to substance withdrawal? Answer **"Y" YES** if the newborn is unable to be consoled due to substance withdrawal symptoms
 - Answer **"N" NO** if the inability to be consoled is not due to substance withdrawal (e.g. caregiver non-responsiveness, hunger cues, pain)
 - Unsure? Answer **"Y" YES** and continue to monitor

Subsection Console Support:

- If the answer is "NO" to question one
 - #1 (Able to self-console) or #2 (Able to console and stay consoled with caregiver support such as swaddling, skin-to-skin, etc.) can be used.
- If the answer is "YES" to question one, #3 (unable to console with caregiver support) is the only code appropriate for this scenario

Functional Assessments of Eat, Sleep, Console



- Assessing the newborn for withdrawal should begin **4–6 hours** following birth.
- Assessment should occur every **3–4 hours**, clustered with other care while the newborn is awake.
- The assessment is reflective of the time period since the last assessment.



- Neonatal withdrawal symptoms can have drastic impacts on the ability of the newborn to feed effectively.
- Breast(chest)milk, of any amount offered in any way, has been shown to improve withdrawal symptoms in newborns diagnosed with Nows.
- Additional neonatal withdrawal symptoms such as vomiting or loose stools can contribute to ineffective weight gain.

Assessment:

- Assess the newborn's ability to eat. Poor eating is defined as the newborn being:
 - Unable to coordinate feeding within **10 minutes** of showing hunger cues **AND/OR**
 - Unable to sustain feeding for an age-appropriate duration at the breast(chest) **OR**
 - newborns cannot handle volumes by alternate feeding methods appropriate for weight and age.
- Assessing the newborn's sleeping pattern reflects the newborn's ability to settle for adequate periods of sleep and awake cycles.
- A newborn who consistently demonstrates poor sleep may need additional support (non-pharmacological or pharmacological) to support functional needs.



Assessment:

- Assess the newborn's functional ability to sleep. Poor sleep is defined as:
 - The newborn's inability to sleep at least one hour of duration after a feed



- Assessing the newborn's ability to console helps to understand the impacts of neonatal withdrawal.
- A newborn who is unable to be consoled within **10 minutes**, or is unable to remain consoled for longer than **10 minutes** is potentially demonstrating signs of inadequately managed withdrawal.

Assessment:

- Assess the newborn's functional ability to be consoled. Unconsoleable is defined as:
 - The newborn is unable to be consoled within **10 minutes** OR
 - The newborn is unable to stay consoled for longer than **10 minutes**.



- **Question One:**

- Poor eating? If yes, answer the next question. If no, go to the next section ("Sleep").

- **Question Two:**

- Poor eating due to substance withdrawal? Answer **"Y" YES** if due to substance withdrawal symptoms (e.g. fussiness, tremors, uncoordinated suck, excessive rooting)
- Answer **"N" NO** if poor eating is not due to substance withdrawal (e.g. prematurity, transitional sleepiness, excess mucus – first 24 hours– inability to latch due to maternal/newborn anatomical factors)
- Unsure? Answer **"Y" YES** and continue to monitor

- **Question One:**

- Sleep less than one hour? If yes, answer the next question; if no go to the next section ("Console").

- **Question Two:**

- Sleep less than one hour due to substance withdrawal? Answer **"Y" YES** if due to substance withdrawal symptoms (i.e. fussiness, restlessness, increased startle, tremors)
- **Answer "N" NO** if poor sleeping is not due to substance withdrawal (e.g. physiologic cluster feeding in the first few days of life, interruptions in sleep due to external noise, light and clinical care)
- Unsure? Answer **"Y" YES** and continue to monitor



CONSOLE



- **Question One:**

- Unable to console within 10 minutes (or cannot stay consoled for longer than 10 minutes)? If yes, answer the next question, if no, go to the next section ("Support Needed to Console").

- **Question Two:**

- Unable to console due to substance withdrawal? Answer **"Y" YES** if the newborn is unable to be consoled due to substance withdrawal symptoms
- Answer **"N" NO** if the inability to be consoled is not due to substance withdrawal (e.g. caregiver non-responsiveness, hunger cues, pain)
- Unsure? Answer **"Y" YES** and continue to monitor

Subsection Console Support:

- If the answer is "NO" to question one
 - #1 (Able to self-console) or #2 (Able to console and stay consoled with caregiver support such as swaddling, skin-to-skin, etc.) can be used.
- If the answer is "YES" to question one, #3 (unable to console with caregiver support) is the only code appropriate for this scenario

Non-Pharmacological Management

Newborns experiencing withdrawal symptoms are often initially able to be managed using non-pharmacologic interventions, which include care approaches that are easily implemented, less expensive and less controversial (128). The main goal of non-pharmacologic care interventions is to create an environment that helps the newborn to self-regulate. Although these strategies are frequently used to soothe and assist newborns, there is a lack of high-quality research to confirm their effectiveness. Despite research methodological shortcomings, evidence indicates that non-pharmacologic interventions can alleviate withdrawal symptoms, reduce the need for medical intervention, and shorten hospital stays (31). Recommended non-pharmacologic management is outlined on page 184. In addition, vertical rocking has been often prompted as a way to console infants diagnosed with NOWS. Please see a video [here](#) describing and demonstrating vertical rocking as a non-pharmacological strategy.

Environmental Suggestions

When a newborn is experiencing neonatal withdrawal, their capacity for self-regulation is altered, including sensory stimulation integration, state regulation, motor and tone control, and the autonomic nervous system. It is crucial to create an environment that promotes the newborn's ability to self-regulate effectively (168). Some strategies that may support an environment to promote a newborn's capacity to self-regulate include:

- **Quiet Environment:** Providing a quiet environment with low lighting, away from noisy or high-volume areas.
- **Limit Visitors:** Limit the number of visitors in the room and ensure quiet voices.
- **Cue-based Care:** Providing cue-based care to avoid disrupting the newborn unnecessarily.
- **Rooming in:** Rooming in is associated with healthy birthparent/parent newborn bonding, improved lactation rates, decreased need for pharmacologic treatment for NOWS, and earlier discharge.



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn

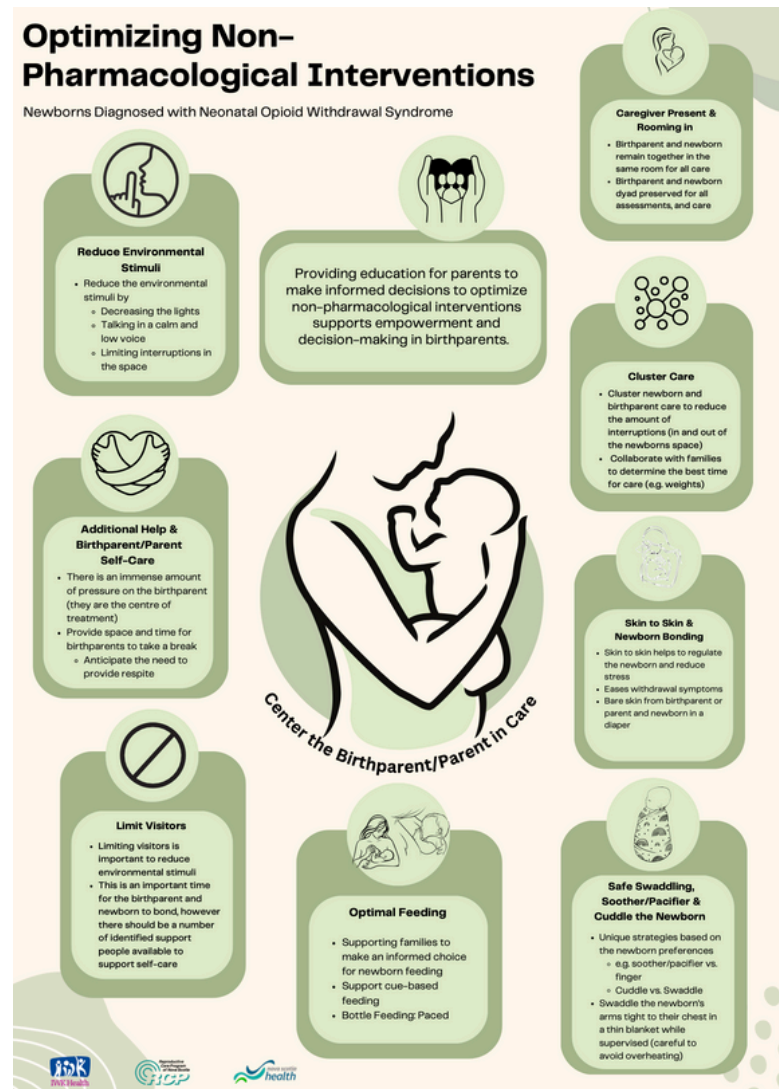


OPTIMIZING NON-PHARMACOLOGICAL THERAPY

Description: This is a knowledge translation tool that can be used to support frontline care providers in providing education and supporting birthparents to optimize non-pharmacological interventions.

Content: This infographic summarizes key considerations in optimizing non-pharmacological interventions. Each intervention highlights a description for engagement.

Suggested Implementation: We recommend placing this infographic in binders on the unit along with high traffic and document areas to support discussion and clinical reflection among staff.



Digital Copy available at the following link: **Clinical Toolkit**



Optimizing Non-Pharmacological Interventions

Newborns Diagnosed with Neonatal Opioid Withdrawal Syndrome



Reduce Environmental Stimuli

- Reduce the environmental stimuli by
 - Decreasing the lights
 - Talking in a calm and low voice
 - Limiting interruptions in the space



Additional Help & Birthparent/Parent Self-Care

- There is an immense amount of pressure on the birthparent (they are the centre of treatment)
- Provide space and time for birthparents to take a break
 - Anticipate the need to provide respite



Limit Visitors

- Limiting visitors is important to reduce environmental stimuli
- This is an important time for the birthparent and newborn to bond, however there should be a number of identified support people available to support self-care



Providing education for parents to make informed decisions to optimize non-pharmacological interventions supports empowerment and decision-making in birthparents.



Center the Birthparent/Parent in Care



Optimal Feeding

- Supporting families to make an informed choice for newborn feeding
- Support cue-based feeding
- Bottle Feeding: Paced



Caregiver Present & Rooming in

- Birthparent and newborn remain together in the same room for all care
- Birthparent and newborn dyad preserved for all assessments, and care



Cluster Care

- Cluster newborn and birthparent care to reduce the amount of interruptions (in and out of the newborns space)
- Collaborate with families to determine the best time for care (e.g. weights)



Skin to Skin & Newborn Bonding

- Skin to skin helps to regulate the newborn and reduce stress
- Eases withdrawal symptoms
- Bare skin from birthparent or parent and newborn in a diaper

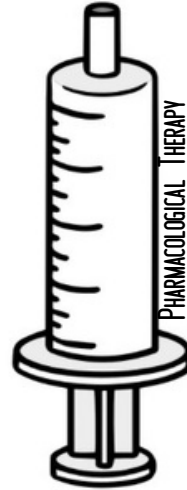


Safe Swaddling, Soother/Pacifier & Cuddle the Newborn

- Unique strategies based on the newborn preferences
 - e.g. soother/pacifier vs. finger
 - Cuddle vs. Swaddle
- Swaddle the newborn's arms tight to their chest in a thin blanket while supervised (careful to avoid overheating)

Pharmacological Management

When the implementation of non-pharmacologic strategies is unsuccessful alone to ensure the newborn is eating, sleeping, and able to be consoled appropriately, pharmacologic therapy may be needed to support the newborn's coping. It is important to ensure non-pharmacologic strategies continue to be implemented when pharmacologic therapy is provided. It is recommended that healthcare providers follow the **Management of Neonatal Abstinence Syndrome – Treatment Algorithm for Newborns Exposed to Substances(s) in Pregnancy** ([please see Appendix A](#)) to support and guide the use of pharmacologic treatment when required.



Introducing Morphine: When a newborn has met the criteria, as outlined in the Eat, Sleep, Console assessment tool, morphine is recommended as the first line of PRN pharmacologic treatment. [Appendix A](#) demonstrates the IWK pre-printed order set and pharmacologic algorithm. Below, we have outlined considerations for newborns diagnosed with NOWS for the pre-implementation of pharmacologic therapy as well as during the implementation and maintenance of pharmacologic therapy.

Pre-Implementation of Pharmacological Therapy

1. **Morphine availability:** Your unit should discuss with your in-house pharmacy regarding the availability of morphine for newborns diagnosed with NOWS. This should include a discussion of the following:
 - a. **Location:** where will the morphine be stored?
 - i. Who has access?
 - ii. Who will ensure it does not expire regularly?
 - b. **Composition:** How will the morphine be stored (e.g. in single doses vs. a bottle you will withdraw from)?



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

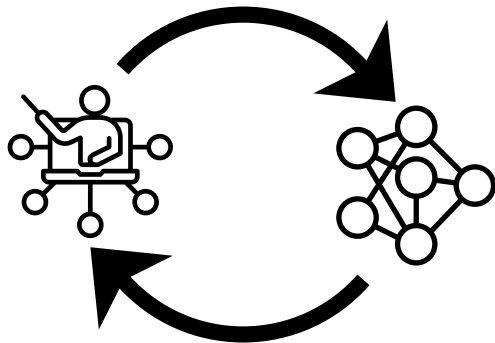
5

Section Five: Newborn



2. Practitioner Training:

- **Physician:** Establish education programming regarding pharmacologic training (including reviewing your facilities' orders on pharmacologic initiation in newborns diagnosed with NOWS; **please see Appendix A** for an example of a pre-printed order set to guide pharmacologic management for newborns).
- **Nursing:** establishing education and competency with preparing and administering pharmacologic therapy to newborns diagnosed with NOWS.
- **Pharmacy:** Establish education and competency in the preparation of morphine for administration. Establishing the pharmacist's role in pharmacologic management.
 - Are pharmacists involved in ensuring medication is on the unit and available when a newborn is born?



The pre-printed order set is designed to use morphine oral solution that is commercially available pre-mixed. Most, if not all, regional centres will place the morphine oral solution into (1 mL or 5 mL) pre-filled syringes and place them in the Omnicell/Pyxis. The nurse then uses the volume they need for the dose from the syringe and waste the rest.

3. Establish an order set and algorithm to follow: The IWK has created a pre-printed order set and algorithm.

- Practitioners should understand the pharmacologic protocol.



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn



- All facilities should adopt a locally appropriate pre-printed order set and algorithm to follow throughout the care of a newborn diagnosed with NOWS prescribed pharmacologic therapy. Please see [Appendix A](#) for a PPO and algorithm. **All non-pharmacologic management should be optimized and continued during pharmacologic treatment.**

Implementation of Pharmacological Therapy

1. Initiating Pharmacological Therapy:

a. Baseline vitals: Prior to initiating pharmacologic therapy, baseline vital signs (respiratory rate, heart rate, and temperature) should be assessed and repeated as often as clinically appropriate. We recommend taking vital signs at least every four hours or more frequently, depending on clinical presentation.



b. Morphine dose: The first PRN dose of morphine dose should be ordered at **0.04mg/kg/dose**. PRN doses can be given every four hours. After three PRN doses of Morphine **OR** at 24 hours (whichever comes first) the need for pharmacologic therapy should be re-evaluated (please see next section, “Maintaining Pharmacological Therapy” for further dose requirements).

i. Independent double-check: There must be an independent double check with two regulated practitioners for all morphine doses.

c. Administering the morphine: Administering morphine to a newborn can be done in a variety of ways. The nurse can administer the dose by (1) using a finger to encourage the baby to suck the dose from the syringe or (2) it could also be administered alongside a soother.

i. It is **not recommended to administer the morphine with a feed, especially with a bottle, as there is a chance the newborn will not receive the intended dose as newborns diagnosed with NOWS often have difficulty feeding with poor “suck, swallow, breathe” coordination.**



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn





2. Scheduled Pharmacological Therapy:

- Healthcare providers and the family will **collaboratively** determine the need to start scheduled oral morphine for the newborn.
- Dose and frequency** should be communicated and documented throughout the treatment process.
- A team huddle should be performed **at 24 hours** after initiation of scheduled pharmacologic therapy, reflecting on the newborn's condition and evaluating the current pharmacological orders.
 - If there was a need for **three or more** PRN doses, the morphine dose should be **INCREASED**.
 - New dosage calculations are recommended to be:
 - Scheduled dose:** Total mg of morphine (scheduled and PRN) given in the last 24 hours divided by 6, scheduled every 4 hours.
 - PRN dose:** This will be half of the new scheduled dose of PRN.
 - If PRN doses continue to be required, after **one** increase in the dose of morphine, additional pharmacologic therapy is needed to manage the newborn's withdrawal.



Additional Pharmacological Interventions:

In special circumstances where the administration of morphine is not adequately managing symptoms, newborn care providers **should consult with a neonatologist and newborn care provider with experience to determine an individualized care plan**. Depending on capacity, this may require a transfer to a tertiary facility or management of the newborn with additional pharmacologic interventions at the regional facility.

1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn



3. Weaning Pharmacological Therapy:

- If the newborn has had **no PRN doses** in the last 24 hours since beginning scheduled therapy:
 - Wean the scheduled and PRN by 10-20% every 24 hours.
 - Continue to wean as described above until the dose is at 0.04mg/dose. Once the dose is 0.04mg/dose, discontinue the scheduled dose and continue PRN morphine until pharmacologic therapy is discontinued.
- If the newborn **requires less than three PRN doses** in 24 hours to manage symptoms
 - Continue the same dosages for scheduled and PRN.
- If the newborn requires three or more PRN doses in 24 hours AND has NOT had a wean:
 - Increase morphine dose:
 - New oral scheduled dose is the total mg of morphine given in the last 24 hours (scheduled AND prn) divided by 6.
 - New oral PRN dose will be half of the scheduled dose every 4 hours PRN
- If the newborn requires three or more PRN doses in 24 hours AND has had a wean:
 - Return the newborn back to the previous effective dose.
- Continue to assess the pharmacologic therapy every 24 hours throughout the weaning process.



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn





Considerations for Morphine Administration in Newborns

Please note: the dosages administered to the newborn experiencing withdrawal are unlikely to cause side effects; however, diligent monitoring is recommended as described below.

Side Effects	Monitoring
<ul style="list-style-type: none"> Decreased Respiration Rate (below 30) Decreased heart rate below 100 during an awake state Drowsiness/over sedation Constipation Occasionally pruritus and rash <p>Contact the most responsible healthcare provider immediately if a newborn experiences:</p> <ul style="list-style-type: none"> Bradycardia (heart rate below 100 during an awake state) Decreased respirations or is not cueing for feeds or appears over sedated/inability to rouse. 	<p>Routine vital signs: (heartrate, respiratory rate and temperature) every 3-4 hours with assessment or as clinically indicated.</p>

1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn





IWK Health

Family Care Diary
Eat, Sleep, Console

K07002307 Jun/7/2002 M
 SCA, TEST Visit
 ER0000145/12 HCN: 22222222
 Van den Hof, TEST / TEST, Maureen
 Dec/8/2012

How to use this form:

- Hold your baby skin to skin as much as possible.
- Write the time you start feeding your baby (either breast or bottle) under Start Time.
- Write the length of time in minutes your baby feeds.
- If breastfeeding, offer both breasts at each feed to stimulate milk production. Write R for right breast and L for left breast.
- If you are giving your baby expressed breast milk (EBM), donor milk or formula write the amount in milliliters (mL).
- Place a ✓ mark when the baby seems to feed well. Feeding well means your baby latches on to the breast or bottle nipple, starts sucking and keeps actively sucking with short pauses. Your baby does not slide off nipple easily and swallowing may be heard.
- Place a ✓ mark when your baby tries to feed but does not seem to feed well.
- Place a ✓ mark under the wet/ dirty diaper column to track the number of wet and/or dirty diapers your baby has.
- Add up the feeding and diaper totals and start a new diary every 24 hours.

Date (yyyy/MON/dd): _____

Date (yy/mm/dd):

Time		Feeding Your Baby – Eat							Sleep	Console	
Skin to Skin ✓	Start Time		Breast	Bottle		Feeds Well ✓	Tries to feed ✓	Diaper		Did baby sleep for more than an hour after the last feed? Y/N	Does baby console in 10 minutes? Y/N
		Length of feed (min)	R/L Breast	EBM/ Donor Milk (mL)	Formula (mL)			Wet ✓	Dirty ✓		

The **Family Care Diary** was developed to improve care, collaboration and communication between the birthparent/parents/caregiver and the health care team. The Family Care Diary is a working document left at the newborn's bedside and completed by Parent(s)/caregivers. The information within the diary guides the newborn's care in conjunction with a nursing assessment (e.g. vital signs, weight, feeding assessment, etc.).

To ensure effective use of the 'Family Care Diary' by the newborn's caregivers, it is important that **education** is provided to support its appropriate use in practice. The following topics are important to consider in providing information to parents and families during the postpartum period:



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

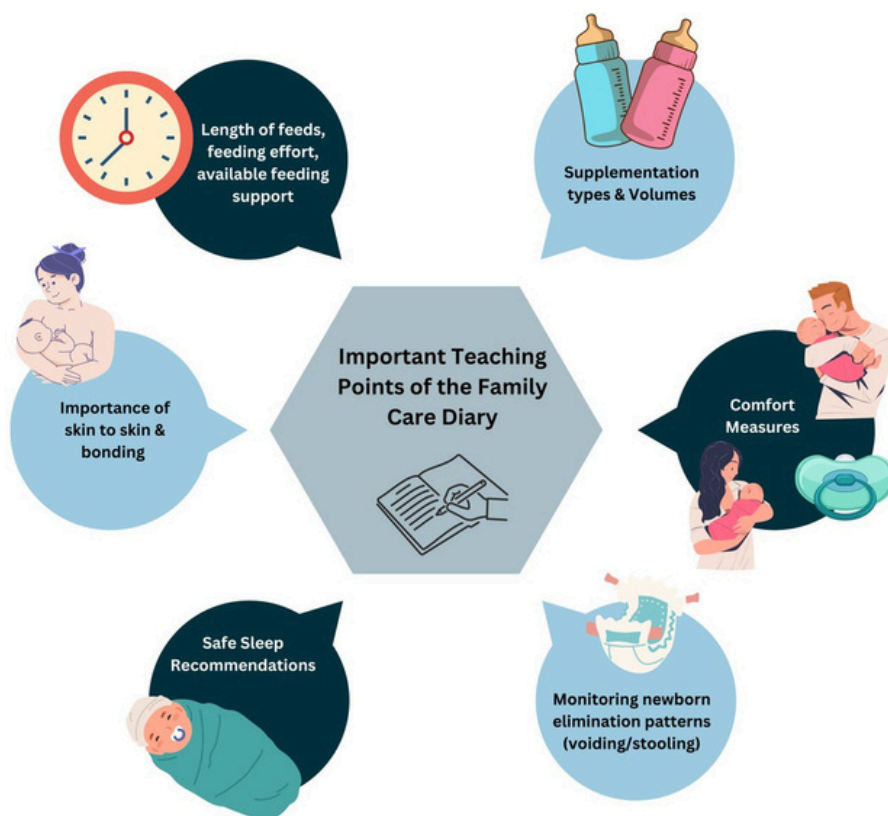
Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn

****Important to note that it is the caregiver's choice to use the Family Care Diary.***

The “Family Care Diary” is an optional tool for birthparents/caregivers to use. Should a birthparent/parent/caregiver find use of the tool to be overwhelming or challenging, or wish not to use it, healthcare providers can work with the family collaboratively to decide on an individualized plan that supports communication, documentation, and management of the newborns’ care. If a family does not wish to use the family care diary, the healthcare team and family would need to determine an alternative way to capture observations of the newborn when health care providers are not present. It is important to have this conversation with birthparents/parents/caregivers as there could be various barriers present (such as concerns with the birthparent’s substance use or withdrawal) (55).

1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn



Birthparent/Newborn Togetherness



Birthparent/newborn togetherness is critical in the management of newborns with NOWS. Parental presence with the newborn in-hospital leads to decreased withdrawal symptoms, decreased length of hospital stay and when required decreased length of pharmacologic therapy (132). Ensuring birthparent/newborn togetherness can be challenging in this population despite knowing that separation of the newborn from the birthparents/caregivers places the newborn at risk of developing insecure attachment. This absence is frequently linked to child protection involvement, stigma, and challenging social circumstances (132). Ideally, information and

education related to the importance of parental involvement in care of their newborn will be provided to the pregnant person and family during the antenatal period. Additionally, efforts should be made to address and overcome these barriers postpartum by providing appropriate support and assistance to support birthparent/newborn togetherness.

Newborn Feeding and Weight

Acknowledging the unique feeding requirements of newborns diagnosed with NOWS is important. When a newborn experiences symptoms of NOWS, such as irritability, tremors, poor coordination, and difficulty soothing, it can significantly impact their feeding ability. Healthcare providers play a vital role in supporting birthparents and families to recognize early feeding cues in newborns. Consideration should be given to establishing effective feeding techniques and feeding schedules or offering smaller, more frequent feedings to ensure adequate nutrition and prevent hunger-related distress.



1

Section One: Continuum
of Care

2

Section Two:
Antepartum

3

Section Three:
Intrapartum

4

Section Four:
Postpartum

5

Section Five:
Newborn



Breast(chest)feeding

Extensive evidence exists to support the provision of birthing parent's own milk on improving the symptoms of NOWS.

Breast(chest)milk has been shown to decrease the severity of symptoms and support a later onset of clinical signs of withdrawal. Furthermore, it has been shown to shorten the duration of pharmacologic therapy if necessary and decrease the length of hospital stay

as compared to formula feeding

(132–136). Any amount of the birthing parent's milk is associated with a decrease in hospital stay (132). Interestingly, one study noted that the method of feeding the birthing parent's milk to newborns (e.g., via direct breast(chest)feeding, bottle feeding or NG tube) made no significant difference in the effectiveness of decreasing symptoms and length of treatment if necessary for hospital stays; therefore; any amount of milk, in any way is deemed beneficial for the newborn (135). Occasionally, interventions are needed to support nutritional intake for newborns diagnosed with NOWS; however, given the importance and positive impacts of exclusive breast(chest)feeding for the dyad, parents should be supported to exclusively breast(chest) feed if it is their goal.

We know that breast(chest)feeding while prescribed methadone is safe, regardless of maternal dose (137). While there is limited human data on the safety of other opiate agonist treatments, the small amounts of these medications that are excreted in the birthing parent's milk is not believed to affect the health of the newborn (138). In certain cases, such as HIV-positive pregnant persons or those with non-prescription drug use or alcohol use, further discussion about breast(chest)feeding should be had with their care team to weigh the risks and benefits, supporting pregnant persons to make informed choices and decisions (128,139).



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn



Additional substance considerations:

- Buprenorphine:** Buprenorphine is becoming more commonly used as an opioid agonist therapy in pregnant persons diagnosed with OUD as it has been associated with a lower risk for adverse neonatal outcomes as compared to methadone (140). Research is limited regarding the safe use of buprenorphine and breast(chest)feeding however, to date, research indicates there is no evidence to suggest buprenorphine during breast(chest)feeding leads to adverse outcomes in the newborn (141). Moreover, buprenorphine has poor oral bioavailability in newborns and has been found in low levels in the breastmilk, thus supporting its acceptable use in breast(chest)feeding (142). Relative Infant Dose (RID) is a calculation done by dividing the newborn dose by calculating breastmilk volumes (mg/kg/day) and the maternal dose (mg/kg/day). You divide the newborn dose by the maternal dose. The RID approximates how much of the "maternal dose" the newborn receives. The RID for buprenorphine is estimated at 0.09%-2.52%. A RID <10% is considered relatively safe.
 - The time to max, or peak concentration of the drug in the maternal bloodstream, is 15-30 minutes for buprenorphine; **therefore, it would be advisable for the birthparent to postpone breast(chest)feeding until the drug's peak maternal plasma level has passed.** Taking the buprenorphine after a feed or pumped expression of milk could help to ensure the infant will not want to feed within a peak concentration time (141).



BUPRENORPHINE



1

Section One: Continuum
of Care

2

Section Two:
Antepartum

3

Section Three:
Intrapartum

4

Section Four:
Postpartum

5

Section Five:
Newborn





- **Cannabis:** Cannabis is becoming one of the most popular drugs used, potentially linked to the recent legalization of the drug (143). Research is limited on exploring the safety of cannabis usage with breast(chest)feeding parents. Much of the research that has been completed is not adequate to rule out any long-term harm on the newborn (144).

Often, birthparents receive mixed messages from healthcare providers about breast(chest)feeding and using cannabis; however, we recommend birthparents avoid the use of cannabis during breast(chest)feeding, along with avoiding exposure to cannabis in the newborn environment, as the infant could be exposed by inhaling the smoke (144).



There is no known safe amount of Cannabis for breast(chest)feeding (145). The Journal of Obstetrics and Gynecology Canada, highlights a literature review completed by Ordean and Kim (2020) which recommend the following:

“[birthparents] should be advised to abstain from cannabis use during lactation or reduce consumption if abstinence is not possible. Furthermore, [birthparents] should be advised to avoid breast(chest)feeding within 1 hour of inhaled use to reduce exposure to highest concentration of cannabis in breast milk (p. 1248).”(146)

1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn





Important information to share with parents regarding cannabis use

- **Safety first:** while using cannabis (or any drugs that can impair their ability to care for their infant), birthparents/parents should not bedshare or independently care for their newborn (147). There have been studies conducted that have associated cannabis use with sudden infant death syndrome (SIDS) (148).
 - Please refer to **RCP's Safe Sleep Guideline**
- **Multiple Factors Impact Absorption:** the age of the newborn, the dosage/usage amount by the birthparent and the newborn's health will affect how cannabis usage affects the newborn (147).
- **Acute Effects:** Cannabis exposure on a breast(chest)fed newborn can cause sedation, weakness, and poor feeding (147).
- **If abstinence is not possible:** It is recommended that birthparents attempt to decrease their cannabis use and wait one hour post inhalation of cannabis before breast(chest)feeding to reduce the exposure for their newborns (146).

Regardless of what substances are involved in polysubstance use, every birthparent should be offered a review of their medications prenatally if they are planning to breast(chest)feed to allow for anticipatory education and development of a responsive plan that will meet the birthparent's unique needs postpartum.



1

Section One: Continuum
of Care

2

Section Two:
Antepartum

3

Section Three:
Intrapartum

4

Section Four:
Postpartum

5

Section Five:
Newborn



Evidence supports that the provision of breast(chest)milk, in combination with other non-pharmacologic interventions, significantly improves outcomes for newborns diagnosed with NOWS; however, the rates of lactation are low (128). Understanding the challenges these newborns experience that impact feeding will enhance care and support provision of guidance to care providers. Ultimately, healthcare providers need to educate and support families to care holistically for their newborn in the early days of withdrawal. Three key points to consider in educating and supporting breast(chest)feeding for this dyad:

- **NOWS symptoms can impact the newborn's ability to effectively breast(chest) feed:** Healthcare providers must understand that opioid withdrawal in newborns is associated with not only signs of central and autonomic nervous system disturbances but also significant gastrointestinal disturbances (149). Many of these behaviours such as fussing, crying, sleeping or sedation negatively impact newborn feeding (150).
 - Fussiness in the newborn appears to be one of the symptoms that has the greatest impact on feeding.
 - Poor feeding can also be due to excessive sucking, hyperirritability, and vomiting, which in turn places the newborn at risk of poor weight gain (125).
 - Newborns diagnosed with NOWS often exhibit unclear feeding cues, such as no decrease in tension after the initiation of a feed, they do not display smooth and coordinated movement with feeds, they do not initiate contact with the caregiver's eyes and/or face, and they do not show signs of satiation at the end of feeding (151).
 - These behaviours, along with hyperirritability, excessive sucking, fussiness, rapid gut transit time, and increased caloric needs, may contribute to increased weight loss or slow weight gain in a newborn experiencing withdrawal (125).



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

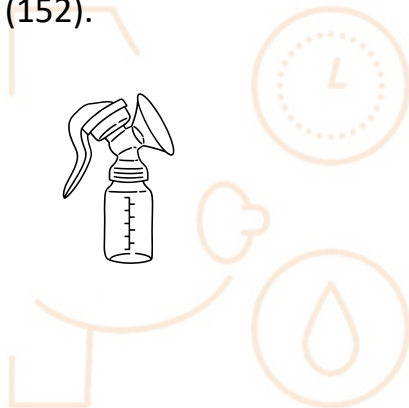
Section Four: Postpartum

5

Section Five: Newborn



- The impact that ineffective breast(chest)feeding has on the birthing parents milk supply and the importance of when and how to protect it. Lactation is maintained with consistent and regular removal of milk (152). Early consultation with a certified lactation consultant is recommended.
 - Early colostrum removal from the breast(chest) within the first hour of birth is recommended. Milk removal should continue to occur 8-12 times in a 24-hour period and does not have to be at regular intervals (153).
 - If the goal of the birthparent is to breast(chest)feed, the newborn should have free access to the breast(chest) of the birthparent as soon as possible after birth.
 - If the newborn is unable to effectively remove milk from the breast(chest) within the first hour of life, it is beneficial to encourage the birthparent to manually express colostrum and continue doing so for the first 24 hours after birth, as literature demonstrates that hand expression is comparable, if not superior to breast pump expression in adequately establishing milk supply after birth (154).
 - If the newborn can latch, and there is suspicion that the milk removal is ineffective at any time, breast(chest) compressions can help assist the newborn to remove as much milk as possible (154).
 - If the newborn cannot effectively remove milk from the breast(chest) **after 24 hours** of birth, manual expression and breast(chest) compression should continue. Consideration should also be given to integrating electric pumping 8-12 times in 24 hours to help support copious milk production, otherwise known as lactogenesis II (152).



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn





1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn



- **Lactation support should be considered if a newborn is unable to latch after 24 hours of age or if there are signs of ineffective milk removal.**
- Supplementation, preferably human milk, may be considered in collaboration with the primary care provider if there is increased weight loss or slow weight gain.
 - Supplementation may also include formula and/or fortification of feeds. This supplementation is often temporary and does not mean the birthparents cannot exclusively breast(chest)feed long term.
- If the goal of the birthparent is to bottle feed expressed breast milk (EBM), electric pumping may begin as soon as the birthparent desires after birth. If hand expression alone is effective at removing adequate milk for the baby and the birth parent is comfortable with this, pumping may be delayed to 48 hours or beyond.
- **Rooming in:** Keeping the birthparent and newborn dyad together is known to be the most effective intervention in promoting lactation among birthparents of newborns diagnosed with Nows (149).
 - For example, understanding that innate feeding behaviors can be triggered during light sleep may help the birthparent to initiate feedings while the newborn is in a light sleep. They can do this by placing their newborn on their chest, triggering these innate behaviors to latch before the newborn ever starts to fuss (155).



Breast(chest)feeding considerations: Poor weight gain in this population sometimes leads to a regiment of every three-hour feeding schedule and a volume-driven approach to feeding. These approaches can often disrupt a newborn's sleep (150). While no empirical evidence supports that cue-based/responsive feeding works better for this population, research suggests that this feeding approach may meet their increased caloric needs and that comfort feeding may improve caloric intake (156).

Key considerations for responsive cue-based feeding include:

- **Small & Frequent:** Small volumes and frequent feedings of colostrum are likely to be better tolerated and more calming. Small, frequent feeds are thought to help establish a circadian rhythm and are better tolerated by newborns experiencing gastrointestinal symptoms (157)
- **Swallow/Breathing:** Healthcare providers must recognize that newborns who are experiencing NOWS have comparable swallow-breath interactions to a preterm newborn (158) and that an effective latch, suck, and swallow is the cornerstone for successful lactation and nutrition for the newborn (154). Preterm newborns are at increased risk of aspiration, choking and imbalances of oxygen and carbon dioxide gas exchange due to their increased frequency of nonnutritive and nutritive sucking patterns that result in the newborn not being able to breathe properly between swallows (159). As such, healthcare providers must be vigilant in assessing newborns diagnosed with NOWS given their similar presentation.
 - Healthcare providers can read more on care for preterm newborns in **the Reproductive Care Program's Guidelines for Care of the Late Preterm Newborn.**



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

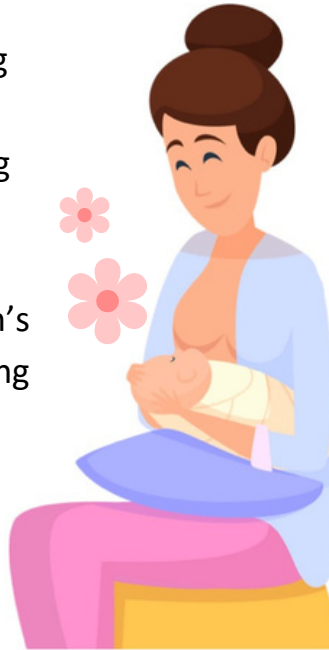
Section Five: Newborn





- **Newborn Positioning:** One study conducted focus groups with expert caregivers and looked at multiple techniques used to successfully feed newborns diagnosed with Nows (160). This study also identified that following newborn cues was critical to their success because each newborn responds differently to the techniques, and what works changes over time with changes in their withdrawal pattern (160). It offers many suggestions that have been successful in practice, including:

- Calming newborns with a bath or burping before feeds.
- Using a pacifier to calm a newborn during burping.
- Using cheek or chin support
- Finding the “sweet spot” on the newborn’s palate to encourage sucking whether using a bottle or nipple shield.
- Vertical rocking
- Feeding the newborn in a seated or side-lying hold, supported on the caregiver’s lap and/or
- Trying different bottles and nipples.



- **Cue-Based Feeding:** Lastly, while there is still more research to be done in this area, Davidson and colleagues (161) study show a greater weight gain velocity in preterm newborns with cue-based feeding rather than volume-driven feeding schedules.
 - Knowing that the sucking patterns seen in Nows babies are like preterm newborns, it would be reasonable to continue to promote responsive feeding or cue-based feeding with this population until further empirical evidence is available.

1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn



A Note on: Bottle feeding

As previously noted, ideally discussions related to newborn feeding choice will occur during the antenatal period. It is important that birthparents are fully informed of the benefits and risks of both methods of newborn feeding and are supported in making an informed choice. Newborns diagnosed with NOWS may face challenges with sucking, swallowing, or coordination, and healthcare providers can assist birthparents in implementing **paced bottle feeding techniques** to minimize overstimulation. By addressing these feeding considerations, healthcare providers can enhance the feeding experience and overall well-being of newborns diagnosed with NOWS.

The appropriate volumes a newborn requires are individualized; it is important that the newborn is receiving adequate nutrition based on their individual needs that will be determined by their health care providers.

Paced Bottle Feeding Techniques:

Paced bottle feeding is a responsive, cue-based method where the birthparent/caregiver engages with the newborn throughout the feeding. Using a slow-flow nipple (ideally a wide-based nipple), the newborn is held upright in the birthparent/caregiver's arms. The bottle is held parallel so the birthparent/caregiver can gently adjust milk flow based on the newborn's feeding cues. If the newborn is actively sucking, the birthparent/caregiver can continue to hold the bottle horizontally to allow the newborn to draw in milk at their own pace. When the newborn pauses, gently tilt the bottle downward so there is no milk flowing into their mouth. If the newborn is overwhelmed by the milk flow or milk is leaking from the newborn's mouth, the bottle can be gently tipped downward to slow the milk flow. A visual representation of this can be found [here](#).



1

Section One: Continuum of Care

2

Section Two: Antenatal

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn



FEEDING CONSIDERATIONS

Description: This is a knowledge translation tool that can be used to support various disciplines as they support birthparents in establishing feeding plans with their newborns.

Content: This infographic summarizes the key points regarding breast(chest)feeding and bottle feeding in a newborn diagnosed with neonatal opioid withdrawal syndrome.

Suggested Implementation: We recommend placing this infographic in areas where staff can discuss with colleagues strategies and plans to support feeding in the newborn. This could include collaborating with dietitians or lactation consultants in establishing a feeding plan. All collaborations should also include the families to ensure plans are meeting the unique needs of birthparents and their newborns.

Digital Copy available at the following link: **Clinical Toolkit**



Feeding

Considerations for newborns diagnosed with NOWS

Optimal Feeding

- Informed decision-making on feeding methods is centered around evidence-based information and non-judgmental support of the birthparent/parent.
 - Breast(chest)milk has been shown to decrease the severity of symptoms and support a later onset of clinical signs of withdrawal.
 - Any amount of the birthparent's milk is associated with a decreased hospital stay.

Breast(chest)feeding

- Breast(chest)feeding while prescribed methadone is safe, regardless of maternal dose
 - Buprenorphine is considered safe
 - There is no known safe amount of cannabis while breast(chest)feeding
 - recommended to abstain

Key Considerations & Challenges

- NOWS symptoms can affect breast(chest)feeding:
 - Poor feeding can be due to excessive sucking, hyper-irritability and vomiting
 - Newborns with NOWS often exhibit unclear feeding cues, such as an absence of decreased tension after feeding initiation.
- Ineffective breast(chest)feeding impacts milk supply:
 - Lactation is maintained with consistent and regular removal of milk, along with stimulation of the nipple.
 - We recommend early colostrum removal
 - 8-12 times in 24 hours
 - Does not have to be in regular intervals
 - newborn at breast(chest) or manual expression
- Rooming-in is the most effective intervention in promoting lactation among birthparents.
 - Skin-to-skin and closeness supports identifying early cues

Responsive cue-based feeding

- Weight loss can lead to a regiment of an every three-hour feeding schedule, this interrupts sleep.

We recommend:

- Cue-based feeding
- Small & frequent feeds
- Swallow and breathing (effective latch)
- Feeding and being responsive to the cues of the newborn

Positioning & Techniques

- Following newborn cues is critical to successful feeding because each newborn responds differently to the techniques and what works changes over time with changes in the newborn's pattern of withdrawal

Optimal Position

- The asymmetric latch with the newborn skin to skin, tummy to tummy with birthparent
- Nose to the nipple and the newborn with a slight head tilt so that the chin touches the breast(chest) first.

Chin & Cheek Support

- Placing the thumb on one cheek and the third finger on the other, gently squeezing cheeks together while balancing the bottle between thumb and first finger.
- Chin support is placing one of your fingers under the newborn's chin while feeding with gentle upward pressure. This can be done at the breast(chest) or with a bottle.

Finding the "sweet spot"

- Found on the newborn's palate to encourage sucking, whether using a bottle or nipple shield.

Calm before a feed

- Rocking the newborn vertically to support comfort.
- Adding in a soother while burping
- Create a calm environment

Bottle Feeding

We recommend:

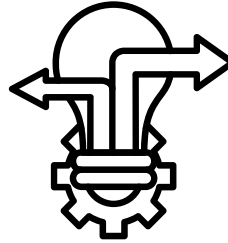
- Paced bottle feeding
- Feeding the newborn in a seated or side-lying hold, supported on the caregiver's lap
- Trying different bottles/nipples as needed

Feeding

Considerations for newborns diagnosed with NOWS

Breast(chest)feeding

- Breast(chest)feeding while prescribed methadone is safe, regardless of maternal dose
 - **Buprenorphine** is considered safe
 - There is no known safe amount of **cannabis** while breast(chest)feeding
 - recommended to abstain
 - Lactmed is an additional resource that can support exploration of medication use and breast(chest)feeding



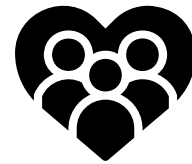
Optimal Feeding

- Informed decision-making on feeding methods is centered around evidence-based information and non-judgmental support of the birthparent/parent.
 - Breast(chest)milk has been shown to decrease the severity of symptoms and support a later onset of clinical signs of withdrawal.
 - Any amount of the birthparent's milk is associated with a decreased hospital stay.

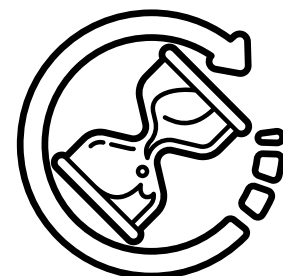


Key Considerations & Challenges

- NOWS symptoms can affect breast(chest)feeding:
 - Poor feeding can be due to excessive sucking, hyper-irritability and vomiting.
 - Newborns with NOWS often exhibit unclear feeding cues, such as an absence of decreased tension after feeding initiation.
- Ineffective breast(chest)feeding impacts milk supply:
 - Lactation is maintained with consistent and regular removal of milk, along with stimulation of the nipple.
 - We recommend early colostrum removal
 - 8-12 times in 24 hours
 - Does not have to be in regular intervals
 - Newborn at breast(chest) or manual expression



- Rooming-in is the most effective intervention in promoting lactation among birthparents.
 - Skin-to-skin and closeness supports identifying early cues



Feeding

Considerations

for newborns diagnosed with Nows

Responsive cue-based feeding

- Weight loss can lead to a regiment of an every three-hour feeding schedule, this interrupts sleep.



We recommend:

- Cue-based feeding
- Small & frequent feeds
- Swallow and breathing (effective latch)
- Feeding and being responsive to the cues of the newborn

Positioning & Techniques

- Following newborn cues is critical to successful feeding because each newborn responds differently to the techniques and what works or changes over time with changes in the newborn's pattern of withdrawal.

Optimal Position

- The asymmetric latch with the importance of the newborn skin to skin, tummy to tummy with birthparent.
- Nose to the nipple and the newborn with a slight head tilt so that the chin touches the breast(chest) first.

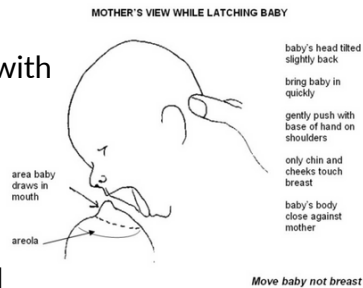
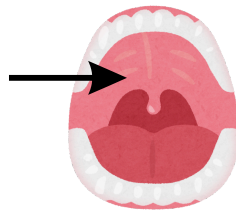


Image Retrieve from: <https://www.lactation-911.com/how-to-asymmetrical-latch/>

Finding the "sweet spot"

- Found on the newborn's palate to encourage sucking, whether using a bottle or nipple shield.



Calm before a feed

- Rocking the newborn vertically to support comfort.
- Adding in a soother while burping
- Create a calm environment



Chin & Cheek Support

- Placing the thumb on one **cheek** and the third finger on the other, gently squeezing cheeks together while balancing the bottle between thumb and first finger.
- **Chin support** is placing one of your fingers under the newborn's chin while feeding with gentle upward pressure. This can be done at the breast(chest) or with a bottle.



Bottle Feeding

We recommend:

- Paced bottle feeding
- Feeding the newborn in a seated or side-lying hold, supported on the caregiver's lap
- Trying different bottles/ nipples as needed

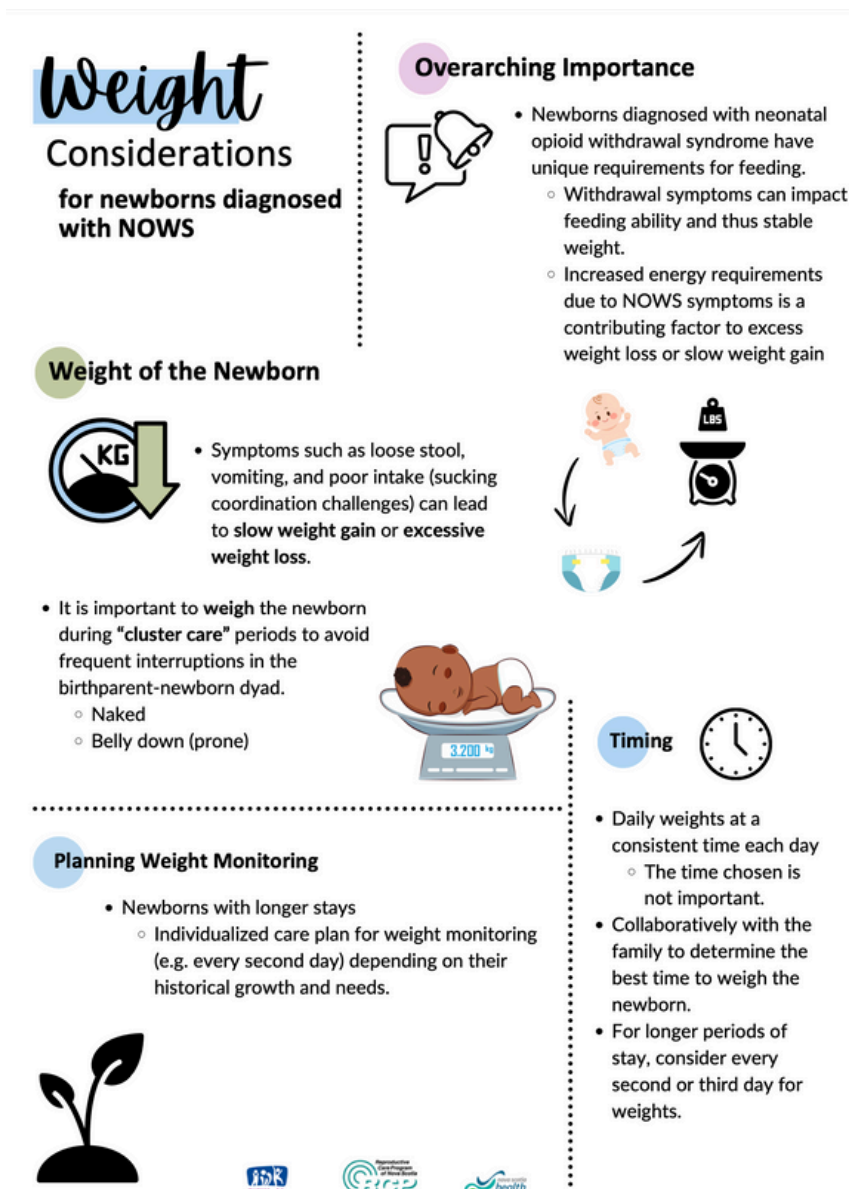
WEIGHT CONSIDERATIONS

Description: This is a knowledge translation tool that can be used to support care providers in establishing a consistent weighing schedule and management.

Content: This infographic summarizes the key points regarding the importance of consistent and careful monitoring of a newborn's weight during their hospital stay and beyond.

Suggested Implementation: We recommend placing this infographic by scales and within care binders to support thoughtful reflection and assessment of the newborn's weight.

Digital Copy available at the following link: **Clinical Toolkit**



Weight Considerations

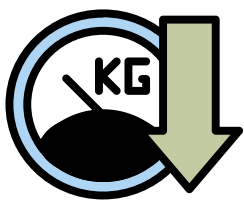
for newborns diagnosed with NOWS

Overarching Importance

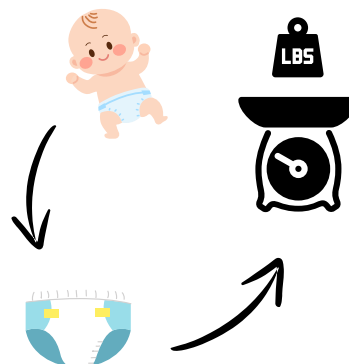


- Newborns diagnosed with neonatal opioid withdrawal syndrome have unique requirements for feeding.
 - Withdrawal symptoms can impact feeding ability and thus stable weight.
 - Increased energy requirements due to NOWS symptoms is a contributing factor to excess weight loss or slow weight gain

Weight of the Newborn



- Symptoms such as loose stool, vomiting, and poor intake (sucking coordination challenges) can lead to **slow weight gain** or **excessive weight loss**.



- It is important to **weigh** the newborn during “**cluster care**” periods to avoid frequent interruptions in the birthparent-newborn dyad.

- Naked
- Belly down (prone)



Timing



- Daily weights at a consistent time each day
 - The time chosen is not important.
- Collaboratively with the family to determine the best time to weigh the newborn.
- For longer periods of stay, consider every second or third day for weights.

Planning Weight Monitoring

- Newborns with longer stays
 - Individualized care plan for weight monitoring (e.g. every second day) depending on their historical growth and needs.



Measuring Weight in the Newborn

Accurate birth weights and daily pre-feed weight assessments starting 24 hours after birth are recommended until the newborn has demonstrated weight stabilization (162). We recommend weighing the newborn daily at a consistent time that works for the family.

Collaboratively determining the best time for weights with the family and care providers is essential to ensure holistic family-centered care. It is important to weigh the newborn during periods of “cluster care” to avoid frequent interruptions in the birthparent-newborn dyad. The time of day is not important, rather the collaborative determination of timing that best meets the family’s needs is imperative.

Newborns who have longer stays, and established growth, will likely be ordered an individualized care plan for weight monitor (e.g. every second day) depending on their historical growth and needs. It is important to make this decision collaboratively with the care team and family.

Neurodevelopment | Baby Steps Program (EI)

Newborns affected by NOWS are at increased risk for various adverse neurodevelopmental outcomes. This could include (163):

- Low birth weight
- Poor attachment
- Lower Bayley scores on cognitive, language and motor subscales
- Behavioral issues (tantrums, hyperactivity, sensory issues)
- Difficulty with sleep (falling/staying asleep)
- Higher percentage of vision issues (e.g., strabismus, nystagmus)



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn





Newborns are at risk for a developmental delay based on documented biological risk factors such as a history of antenatal, perinatal and/or early developmental events which may have affected the central nervous system. Given that, potential negative outcomes exist in correlation with a diagnosis of NOWS, these newborns are eligible to receive Nova Scotia Early Childhood Development Intervention Services (NSECDIS).

Despite the availability of these services, many barriers exist which can impact families' ability to access timely services:

- Lack of awareness of community-based services.
- Stigma of specialized services.
- Long wait times to access community-based services.
- Maternal and paternal factors associated with poverty, culture, language, mental health, and substance use.

In addition to barriers to accessing resources, there are substantial challenges in coordinating services across multiple providers, care systems, and government departments. Research has demonstrated two important factors in improving developmental outcomes (164-166):

- Newborns who have stronger bonds with their parents have improved developmental outcomes.
- Intervening as early as possible makes a difference in child growth and development.
 - Intervening early in a newborn is imperative as the brain will likely adapt and learn.

Parents who are supported at this critical time through relationship-based interventions such as the Newborn Behaviour Observation (NBO) system, are reported to feel less stress and maternal depressive symptoms, which in turn helps them build stronger relationships with their children (167).



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn





BABY STEPS

A PROGRAM TO HELP ALONG THE WAY

The Baby Steps Program (p.106) aims to connect with families earlier, such as antenatally or before hospital discharge, to increase the chances of engaging with such services described above. After hospital discharge, home visits are offered on a flexible schedule that best meets each family's needs. Using a family-centered practice approach, the program offers support in:

- Building positive connections between newborns and parents/caregivers.
- Child development.
- Connections to other support and services as needed.

1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn





1

Section One: Continuum of Care

2

Section Two: Antepartum

3

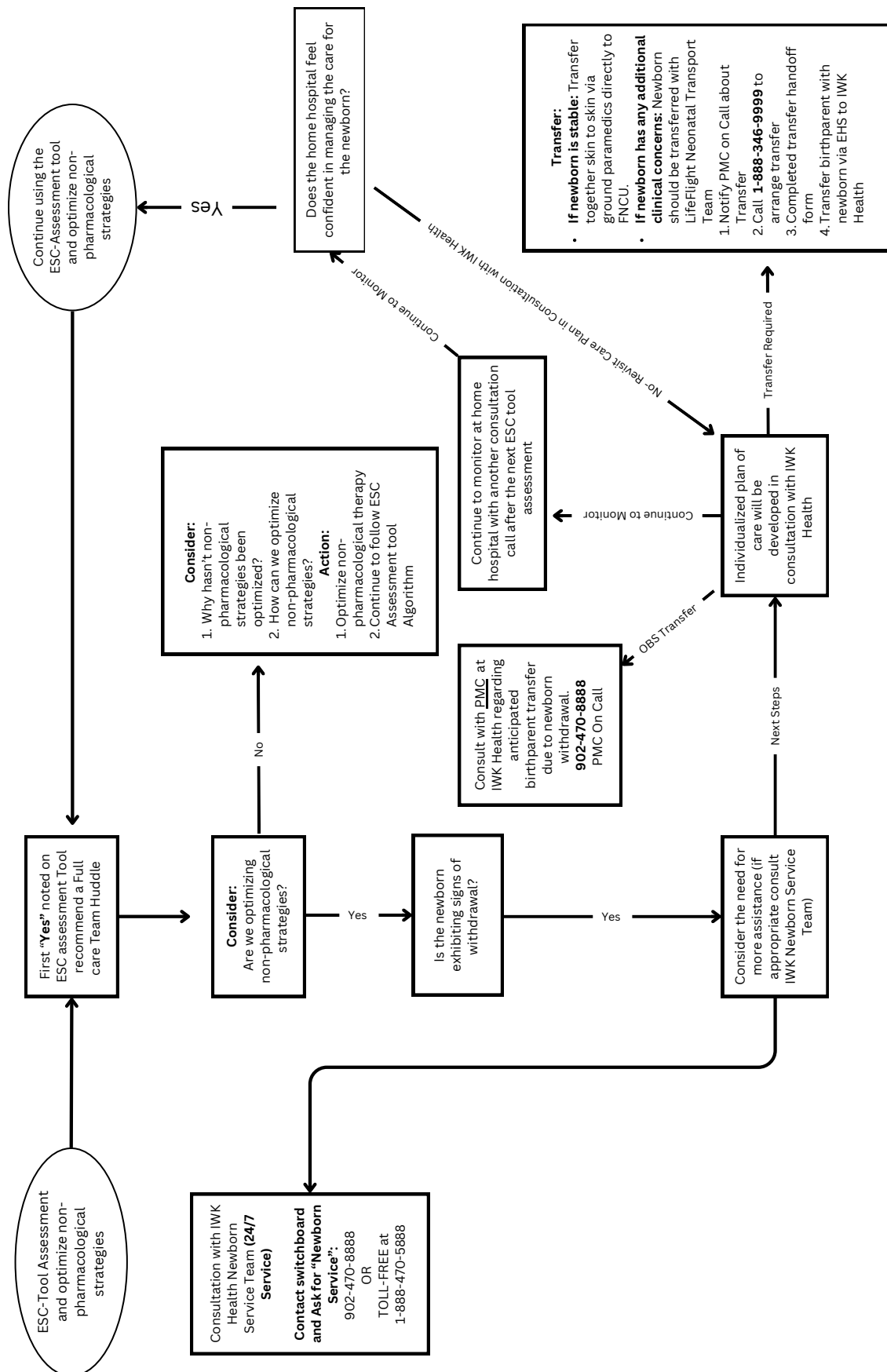
Section Three: Intrapartum

4

Section Four: Postpartum



Regional Transfer Algorithm



TRANSFER

This transfer algorithm has been developed in collaboration with IWK Health, Regional site perspectives across Nova Scotia and the Emergency Health Services team of Nova Scotia. The purpose of introducing this transfer algorithm is to create a systematic support system that is in place as needed to support regional facilities as they transition and build capacity to care for newborns diagnosed with NOWS and their birthparents diagnosed with OUD.

Key points to consider:

- **Optimize Non-Pharmacologic Interventions:** Non-pharmacologic care should be optimized from the beginning of caring for this population.
- **Full Huddle at First Yes:** Rather than waiting until the second “YES” to have a full care team huddle, we recommend having a full care team huddle (physician included) at the first yes to begin the reflection process and anticipatory planning of the needs of the newborn (remain in their home hospital or transfer to a tertiary care facility).
- **Significant Withdrawal:** If the newborn is experiencing significant withdrawal that is impeding the newborn’s ability to eat, sleep, or be consoled. We recommend reflecting on the need for additional assistance.
 - The IWK Health Newborn Service team is available 24/7 to provide expert consultation and support for teams in regional facilities as they navigate the care for newborns diagnosed with NOWS. This consultation will serve as an avenue to ask questions and create an individualized care plan for the newborn.
- **Individualized Care Plan:** If the care plan addresses the concerns initially discussed, the regional care facility will continue caring for the newborn in their home hospital, resource and capacity permitting.



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn





- **Notify PMC about the anticipated transfer of Birthparent:**

Birthparents must be consulted with a primary care provider at IWK Health and accepted for admission before transfer with their newborn. Early consultations with anticipatory collaboration can ensure proactive planning and seamless transfer of newborn and birthparent from regional facility to IWK Health.

- **Transfer Needed:** If transfer is indicated after consultation with IWK Health and the regional facility. It is essential to consider the following:
 - **What is the transfer reason?** If the transfer reason is solely due to NOWS withdrawal and management needed beyond the capacity of the regional facility, the newborn should be transferred skin to skin (using the KangooFix Neonatal Restraint System (KangooFix) supplied by Emergency Health Services) with the birthparent via EHS ground operations directly to the Family Newborn Care Unit at IWK Health.
 - **Additional Clinical Conditions:** If the newborn has additional clinical concerns, the newborn should be transferred via EHS LifeFlight with a neonatal team directly to the NICU.



1

Section One: Continuum
of Care

2

Section Two:
Antepartum

3

Section Three:
Intrapartum

4

Section Four:
Postpartum

5

Section Five:
Newborn



KNOWLEDGE TRANSLATION TOOL

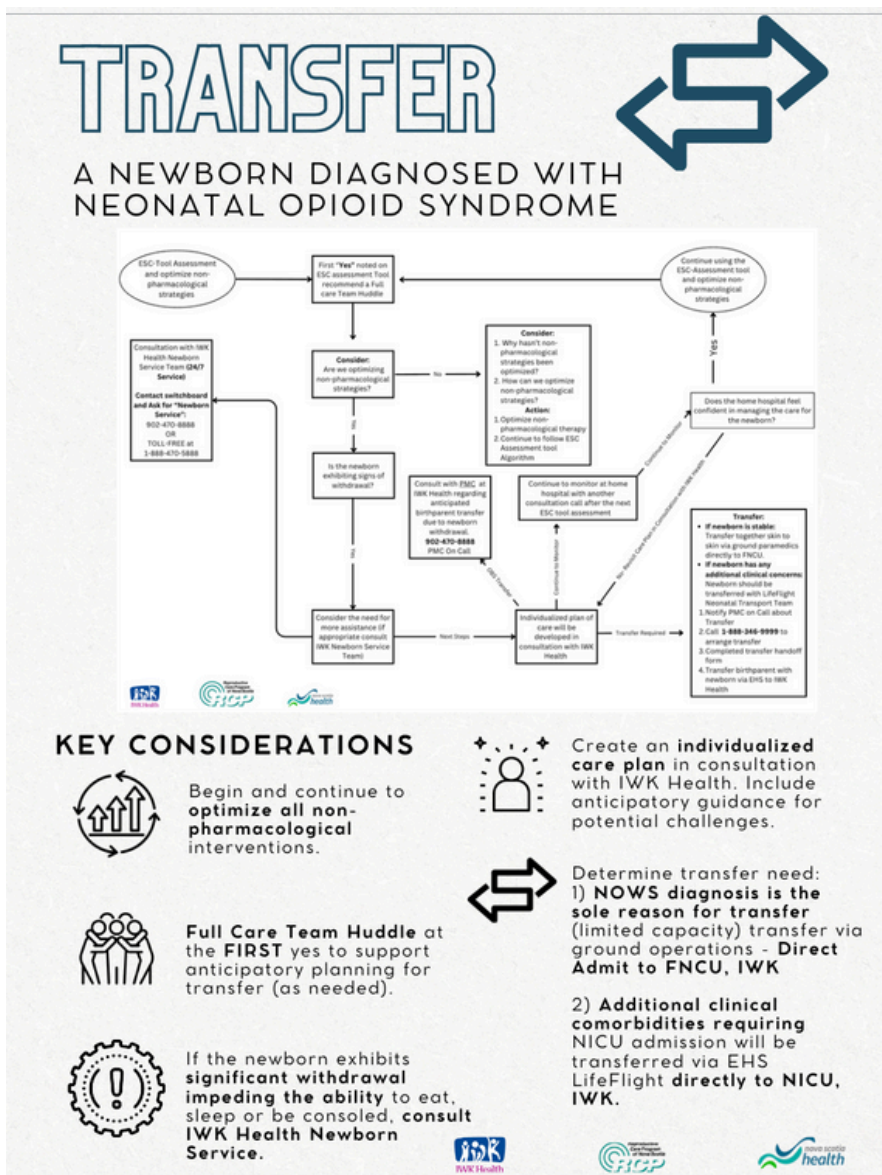
TRANSFER ALGORITHM

Description: This is a knowledge translation tool that can be used to support transfer of the newborn from regional to central facilities in cases where NOWS is a primary diagnosis.

Content: This infographic summarizes the key considerations when using the transfer algorithm and the importance of optimizing non-pharmacological interventions throughout the entire process.

Suggested Implementation: We recommend placing this infographic in a communication binder to support transparent and collaborative communication between both the regional and central facility.

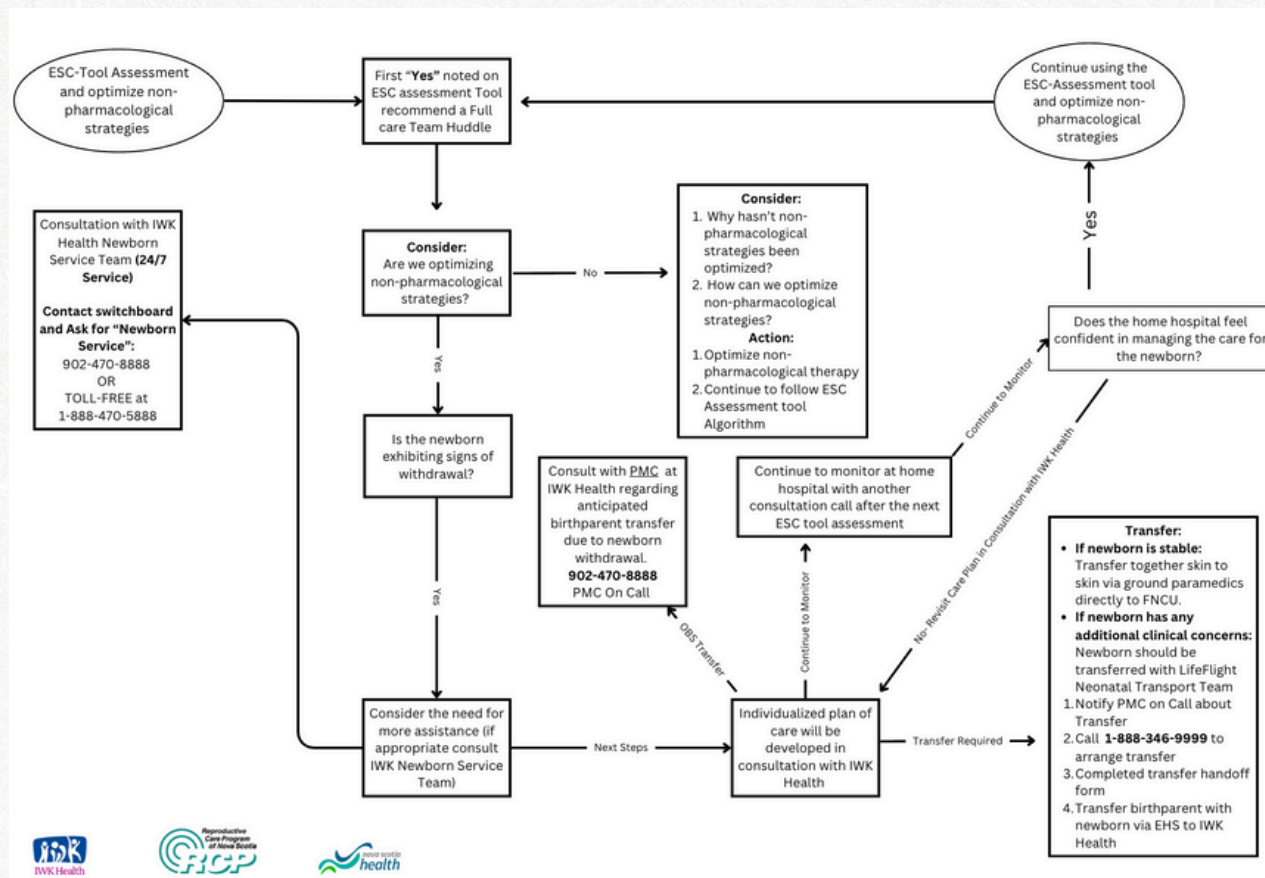
Digital Copy available at the following link: **Clinical Toolkit**



TRANSFER



A NEWBORN DIAGNOSED WITH NEONATAL OPIOID WITHDRAWAL SYNDROME



KEY CONSIDERATIONS



Begin and continue to **optimize all non-pharmacological** interventions.



Create an **individualized care plan** in consultation with IWK Health. Include anticipatory guidance for potential challenges.



Full Care Team Huddle at the **FIRST** yes to support anticipatory planning for transfer (as needed).



Determine transfer need:
1) **NOWS diagnosis is the sole reason for transfer** (limited capacity) transfer via ground operations - **Direct Admit to FNCU, IWK**

2) **Additional clinical comorbidities requiring NICU admission** will be transferred via EHS LifeFlight **directly to NICU, IWK.**



If the newborn exhibits **significant withdrawal impeding the ability to eat, sleep or be consoled, consult IWK Health Newborn Service.**



A collaborative **three-step** Transfer Process has been created to be used to guide non-urgent transfers (e.g. no additional comorbidities – transfer is only due to diagnosis of NOWS).

Non-Urgent Direct Transfer to Family Newborn Care Unit (FNCU)

Anticipatory Step: After consultations with IWK Health, at the first “Yes” consider calling EHS and identify that OAT transfer is being considered and that you would like to **place a transfer ‘On Hold’** to allow for coordination of transfer resources.

- If calling to put the transfer ‘On Hold’, proceed to step two (providing patient information and identifying this is a booking for an OAT transfer) while awaiting confirmation.

TRANSFER REQUIRED

Step One: Ensure birthparent and newborn are accepted to the IWK **FNCU** following the algorithm in the OAT transfer resource.

Step Two: Phone the Emergency Health Services (EHS) non-emergency line at **1-888-346-9999** (if the transfer is ‘On Hold’, call to have it activated).

- Identify the booking is for an OAT Transfer and requires Advanced Care Paramedic (ACP) transport of mother and baby with KangooFix*.
- Provide all patient information as requested by EHS – Birthparent and baby will be booked in the system as separate patients.
 - Patient names, birth dates, Health card numbers (when available)
 - Will the patient require medication monitoring or administration?
 - Is the patient using or in need of any medical equipment for transport?
 - What is the patient’s weight?
 - When would you like the transfer scheduled?
 - Will anyone be accompanying the patient?
 - Are there any infection control issues?
 - Will the patient be returning to the originating facility?
 - Can the patient safely sit upright in a wheelchair during transport?
 - Is the patient ambulatory?

1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn



Step Three: Pick-up time will be provided, or you will receive a callback from the EHS Patient Flow team to confirm pick-up time.

- If the transfer was initially booked 'On Hold', once the decision to transport is made, phone EHS to confirm patients have been accepted, and the transfer will be taken off 'Hold' status and a pick-up time will be provided.
- If patient transport is no longer required, please call EHS to cancel the 'On Hold' transfer. Transfers with a 'Hold' status will not be assigned a resource until confirmation is received from the sending facility.

* The **KangooFix** is the only approved method of transporting baby (3.5-11.1 lbs) with birthparent/parent/caregiver, by EHS ground operations. The baby may be secured face up or face down depending on monitoring needs.

- Please ensure the family is aware before EHS arrival that the newborn will not be skin-to-skin for the duration of the transfer; however, the KangooFix is the only available option for Transport Canada-approved transfer that is as close to skin to skin as possible. The final decision surrounding using the KangooFix for transport is at the discretion of the attending EHS Clinician.



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn



KNOWLEDGE TRANSLATION TOOL

EMERGENCY HEALTH SERVICES (EHS) TRANSFER DIRECT ADMIT FAMILY NEWBORN CARE UNIT


Description: This is a knowledge translation tool that can be used to support successful transfer of the newborn and birthparent from a regional facility to a central facility.

Content: This infographic summarizes and highlights the key steps in transferring (including the information that is needed when calling for a transfer with EHS).

Suggested Implementation: We recommend placing this infographic in areas that would support frontline care providers in preparing for transport.

Digital Copy available at the following link: **Clinical Toolkit**





TRANSFER

A NEWBORN DIAGNOSED WITH NEONATAL OPIOID WITHDRAWAL SYNDROME

TRANSFER STEPS: DIRECT FNCU ADMIT

Anticipatory Step: After consultations with IWK Health, at the first "Yes" consider calling EHS and identify that **OAT transfer** is being considered and that you would like to **place a transfer On Hold** to allow for coordination of transfer resources.



- If calling to put the transfer on hold, you will proceed to **step two** (providing patient information and identifying this is a booking for an OAT transfer) while awaiting confirmation for the transfer.

TRANSFER REQUIRED

Step One: Ensure pregnant person and newborn are accepted to FNCU following the algorithm in the OAT transfer resource.

Step Two: Phone the Emergency Health Services (EHS) non-emergency line at 1-888-346-9999 (if the transfer is on Hold, call to have it activated)




- Identify the booking is for an **OAT Transfer** and requires Advanced Care Paramedic (ACP) transport of a birthparent and newborn with **KangooFix**.





- Provide all patient information as requested by EHS – Birthparent and newborn will be booked in the system as separate patients.
 - See the reverse of this infographic for key patient information.

Step Three: Pick-up time will be provided, or you will receive a callback from the EHS Patient Flow team to confirm the pick-up time.

If patient transport is no longer required, please call EHS to cancel the transfer on hold. Transfers on hold will not be assigned a resource until confirmation is received from the sending facility.



TRANSFER

A NEWBORN DIAGNOSED WITH NEONATAL OPIOID WITHDRAWAL SYNDROME

PATIENT INFORMATION AS REQUESTED:

☐ Patient names, birth dates, Health card numbers

☐ Will the patient require medication monitoring or administration

☐ Is the patient using or in need of any medical equipment for transport?

☐ What is the patient's weight?

☐ When would you like the transfer scheduled?




☐ Will anyone be accompanying the patient?

☐ Are there any infection control issues?

☐ Will the patient be returning to the originating facility?

☐ Can the patient safely sit upright in a wheelchair during transport?

☐ Is the patient ambulatory?

TRANSFER

A NEWBORN DIAGNOSED WITH NEONATAL OPIOID WITHDRAWAL SYNDROME

TRANSFER STEPS: DIRECT FNCU ADMIT

Anticipatory Step: After consultations with IWK Health, at the first “Yes” consider calling EHS and identify that **OAT transfer** is being considered and that you would like to place a transfer ‘On Hold’ to allow for coordination of transfer resources.

- If calling to put the transfer on hold, proceed to **step two** (providing patient information and identifying this is a booking for an OAT transfer) while awaiting confirmation for the transfer.

TRANSFER REQUIRED

Step One: Ensure pregnant person and newborn are accepted to FNCU following the algorithm in the OAT transfer resource.

Step Two: Phone the Emergency Health Services (EHS) non-emergency line at **1-888-346-9999** (if the transfer is ‘On Hold’, call to have it activated).

- Identify the booking is for **an OAT Transfer** and requires Advanced Care Paramedic (ACP) transport of a birthparent and newborn with **KangooFix**.



- Provide all patient information as requested by EHS – Birthparent and newborn will be booked in the system as separate patients.
 - See the reverse of this infographic for key patient information.

Step Three: Pick-up time will be provided, or you will receive a callback from the EHS Patient Flow team to confirm the pick-up time.

If patient transport is no longer required, please call EHS to cancel the ‘On Hold’ transfer. Transfers with a ‘Hold’ status will not be assigned a resource until confirmation is received from the sending facility.

TRANSFER



A NEWBORN DIAGNOSED WITH NEONATAL OPIOID WITHDRAWAL SYNDROME

PATIENT INFORMATION AS REQUESTED:

☐

Patient names, birth dates, Health card numbers

☐

Will the patient require medication monitoring or administration

☐

Is the patient using or in need of any medical equipment for transport?

☐

What is the patient's weight?

☐

When would you like the transfer scheduled?

☐

Will anyone be accompanying the patient?

☐

Are there any infection control issues?

☐

Will the patient be returning to the originating facility?

☐

Can the patient safely sit upright in a wheelchair during transport?

☐

Is the patient ambulatory?

Transfer via EHS Lifeflight

When it is determined the acuity of an OAT patient requires EHS LifeFlight resources, the request should be made once the patients are **accepted to the IWK (second “Yes”)**, as the transfer will be triaged by the LifeFlight Medical Oversight Physician (Neonatal) at the time the request is made. This process will differ from the usual process of accepting the patient to the IWK through the LifeFlight Oversight Physician.

TRANSFER REQUIRED

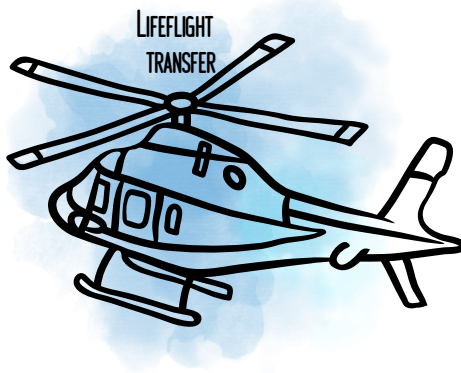
Step One: Phone the Emergency Health Services LifeFlight Request Line **1-800-743-1334**

- Advise newborn and birthparent have been accepted to IWK and require OAT transport with possible need for Critical Care team resources.

Step Two: LifeFlight Dispatcher will process the request, and a conference will be required between the sending facility physician and the LifeFlight Medical Oversight Physician (Neonatal).

Step Three: Once transport for the newborn has been accepted, the EHS dispatcher will assist in planning transport for the birthparent.

- Please note that due to the acuity and needs of the newborn, it will travel in an incubator, and the birthparent may be unable to travel with the baby in the LifeFlight Resource. In these cases, ground transport for the birthparent will be arranged as soon as possible. The local hospital will need to arrange the Birthparent transfer in consultation with Maternal Fetal Medicine at IWK Health.



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn



KNOWLEDGE TRANSLATION TOOL

EMERGENCY HEALTH SERVICES (EHS) TRANSFER DIRECT ADMIT TO NEONATAL INTENSIVE CARE UNIT


Description: This is a knowledge translation tool that can be used to support successful transfer of the newborn and birthparent from a regional facility to a central facility.

Content: This infographic summarizes and highlights the key steps in transferring (including the information that is needed when calling for a transfer with EHS).

Suggested Implementation: We recommend placing this infographic in areas that would support frontline care providers in preparing for transport.

Digital Copy available at the following link: **Clinical Toolkit**





TRANSFER

A NEWBORN DIAGNOSED WITH NEONATAL OPIOID WITHDRAWAL SYNDROME

TRANSFER STEPS: DIRECT NICU ADMIT

When it is determined the acuity of an OAT patient may require EHS LifeFlight resources, the request should be made once the patients are accepted to the IWK (second "Yes") as the transfer will be triaged by the LifeFlight Medical Oversight Physician (Neonatal) at the time the request is made. This process will differ from the usual process of accepting the patient to the IWK through the LifeFlight Oversight Physician.

TRANSFER REQUIRED


Step One: Phone the Emergency Health Services LifeFlight Request Line 1-800-743-1334




- Advise newborn and birthparent have been accepted to IWK and require OAT transport with possible need for Critical Care team resources.


Step Two: LifeFlight Dispatcher will process the request, and a conference will be required between the sending facility physician and the LifeFlight Medical Oversight Physician (Neonatal).

Step Three: Once transport for the newborn has been accepted, the EHS dispatcher will assist in planning transport for the birthparent.

- Please note the newborn will travel in an incubator and the birthparent may not be able to travel with the newborn in the LifeFlight Resource.
- In these cases ground transport for the birthparent will be arranged as soon as possible.








TRANSFER

A NEWBORN DIAGNOSED WITH NEONATAL OPIOID WITHDRAWAL SYNDROME

PATIENT INFORMATION AS REQUESTED:

- ☐ Patient names, birth dates, Health card numbers
- ☐ Will the patient require medication monitoring or administration
- ☐ Is the patient using or in need of any medical equipment for transport?
- ☐ What is the patient's weight?
- ☐ When would you like the transfer scheduled?
- ☐ Will anyone be accompanying the patient?
- ☐ Are there any infection control issues?
- ☐ Will the patient be returning to the originating facility?
- ☐ Can the patient safely sit upright in a wheelchair during transport?
- ☐ Is the patient ambulatory?

TRANSFER

A NEWBORN DIAGNOSED WITH NEONATAL OPIOID WITHDRAWAL SYNDROME

TRANSFER STEPS: DIRECT NICU ADMIT

When it is determined the acuity of an OAT patient may require EHS LifeFlight resources, the request should be made once the patients are accepted to the IWK (second "Yes") as the transfer will be triaged by the LifeFlight Medical Oversight Physician (Neonatal) at the time the request is made. This process will differ from the usual process of accepting the patient to the IWK through the LifeFlight Oversight Physician.

TRANSFER REQUIRED

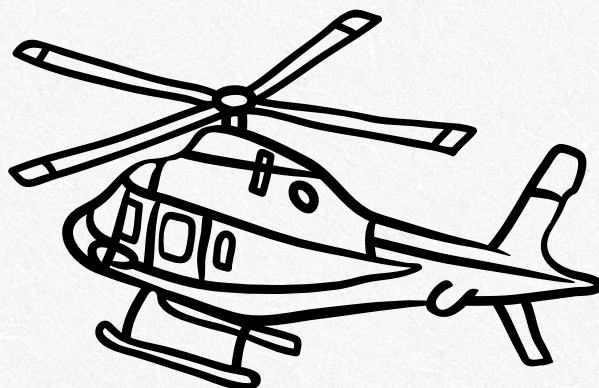
Step One: Phone the Emergency Health Services LifeFlight Request Line 1-800-743-1334

- Advise newborn and birthparent have been accepted to IWK and require **OAT transport with possible need for Critical Care team resources.**

Step Two: LifeFlight Dispatcher will process the request, and a conference will be required between the sending facility physician and the LifeFlight Medical Oversight Physician (Neonatal).

Step Three: Once transport for the newborn has been accepted, the EHS dispatcher will assist in planning transport for the birthparent.

- Please note the newborn will travel in an incubator and the birthparent may not be able to travel with the newborn in the LifeFlight Resource.
 - In these cases **ground transport for the birthparent will be arranged as soon as possible.**



TRANSFER

A NEWBORN DIAGNOSED WITH NEONATAL OPIOID WITHDRAWAL SYNDROME

PATIENT INFORMATION AS REQUESTED:

☐

Patient names, birth dates, Health card numbers

☐

Will the patient require medication monitoring or administration?

☐

Is the patient using or in need of any medical equipment for transport?

☐

What is the patient's weight?

☐

When would you like the transfer scheduled?

☐

Will anyone be accompanying the patient?

☐

Are there any infection control issues?

☐

Will the patient be returning to the originating facility?

☐

Can the patient safely sit upright in a wheelchair during transport?

☐

Is the patient ambulatory?



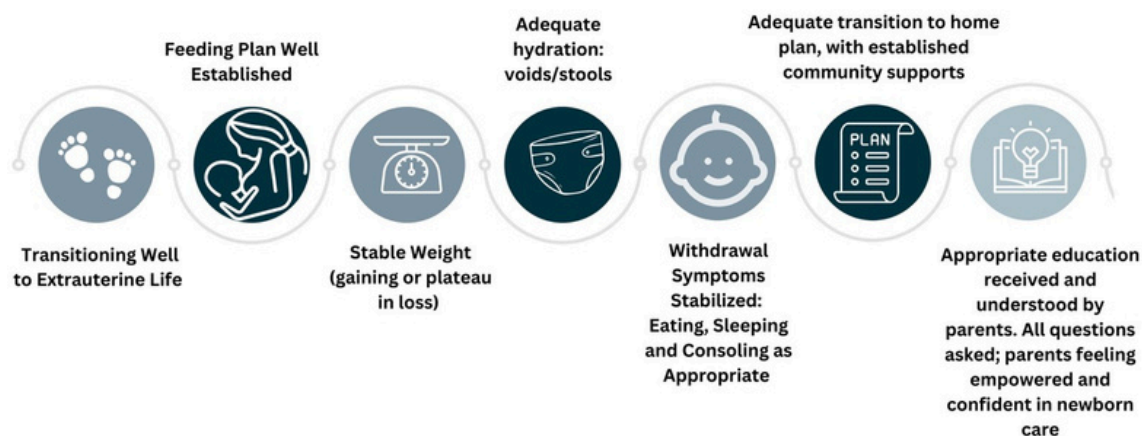
Discharge

The required length of hospital stay for a newborn being screened or treated for NOWS will depend on numerous factors, including what substance(s) the newborn was exposed to in utero, the severity of withdrawal, the required treatment, and potential social issues that may impact appropriate care being provided post-discharge. Discharge planning should be individualized for each newborn and their family, ensuring that appropriate referrals to community care providers are made. Collaboration between the interprofessional healthcare team is essential and ensures a smoother transition from the hospital to the community, as well as a continuity of care for the newborn, their birthparent/caregiver and family (12).

We recommend monitoring the newborn for 24-48 hours after all pharmacologic therapy has ceased to ensure withdrawal symptoms have been stabilized.

Key Discharge Considerations

The discharge criteria for newborns diagnosed with NOWS will be individualized based on each newborn's needs. General considerations health care providers may consider when a newborn is being discharged is to ensure:



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn





- **Transitioning Well to Extrauterine Life:** All newborns should be clinically stable and adjusting well to extrauterine life. This includes demonstrating clinical signs of readiness such as normal respiratory status and, stable cardiovascular system, no intravenous therapy, normal color, cap refill, pulses palpable, and normal blood glucose (if appropriate). The newborn should have normal vital signs, a normal gestational assessment and have achieved a “pass” on the CCHD test.
- **Feeding Plan Well Established:** Newborn is feeding on demand and showing appropriate feeding cues, as recognized by the birthparent and family. Birthparents and family respond to newborn feeding engagement and disengagement cues. We encourage communication with local public health offices to ensure birthparents have feeding support in place after discharge.
- **Stable Weight:** This population is at risk for variable weight fluctuations due to the demands of withdrawal paired often with difficulties in establishing feeding.
- **Adequate Hydration:** This population should be monitored closely for adequate hydration through examination of appropriate voiding and stooling for newborn age. It is key to monitor output as it is the best predictor of breast(chest)feeding effectiveness. Moreover, newborns diagnosed with NOWS can often have GI disturbances; therefore, prior to discharge, stooling should be adequately managed without having loss of fluid from frequent loose stools.



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn



- **Withdrawal Symptoms Stabilized:** In addition to having adequate feeding, as per the well-established feeding plan discussed above, the newborn should also be consolable. The newborn must be able to be consoled by a caregiver/parent within 10 minutes.
 - The newborn must also be able to sleep for an appropriate stretch of time for age.
 - Also be pharmacologically stable, meaning that the newborn is no longer receiving pharmacologic treatment.
- **Adequate Transition to Home Plan:** Follow-up plan should be established with NSECDIS/Baby Steps Program. Follow-up with primary care physician, perinatal clinic, or referral for unattached newborn. Newborns diagnosed with NOWS must have a direct follow-up plan, including a care provider who will follow the newborn until a permanent care provider can be established. This transition to community must be established, given the high-risk nature of the newborn.
 - **Explore Socioeconomic barriers:** Identifying and addressing socioeconomic barriers is imperative before discharge. This could include referring families to social assistance and/or other financial resources, referring the birthparent to perinatal mental health support or ensuring access to a primary care provider in the postpartum period. Ideally, these conversations will occur prenatally; however, support should be confirmed before the discharge of the newborn.
- **Appropriate Education:** A collaborative and engaged approach is needed when completing postpartum education with birth parents and families.
 - Birthparents recommend that healthcare providers use a paced approach, incorporating periods of reflection, given the overwhelming amount of information provided during a short but vulnerable hospital stay.
 - All universal newborn education points should be covered with families, including car seat safety, feeding cues, safe sleep, PURPLE crying, etc.



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn



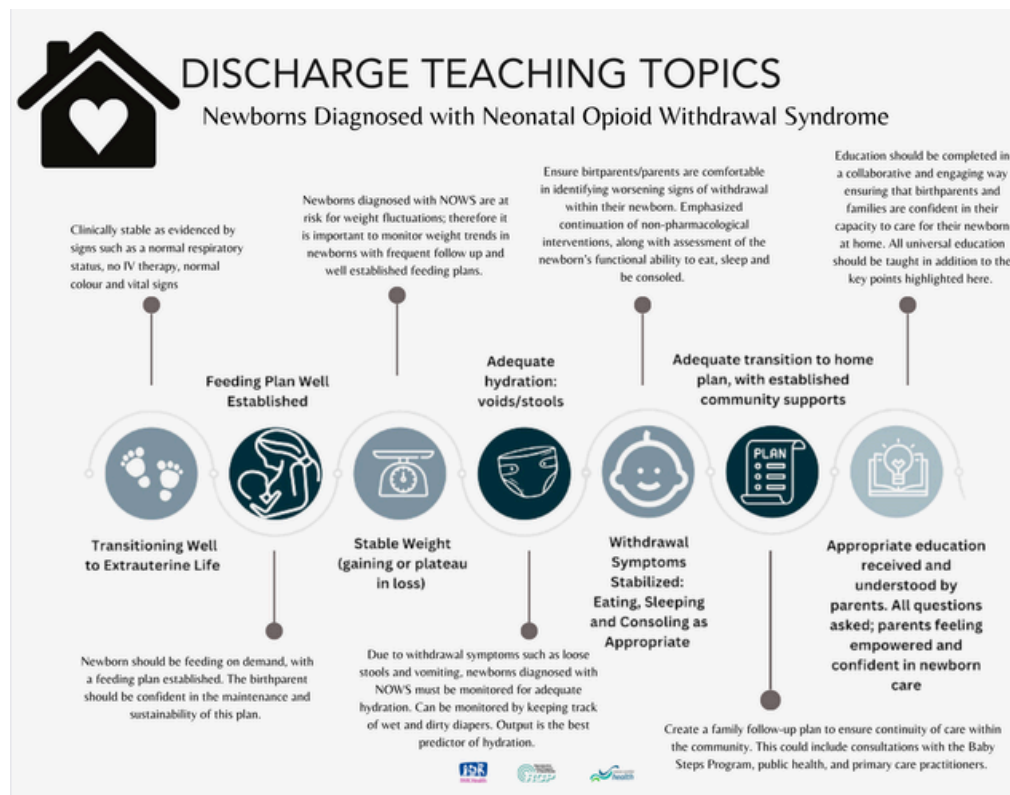
KNOWLEDGE TRANSLATION TOOL

DISCHARGE TEACHING TOPICS

Description: This is a knowledge translation tool that can be used to support comprehensive discharge teaching for families and their newborns.

Content: This infographic includes key discharge teaching topics and summaries.

Suggested Implementation: We recommend placing this infographic in care binders and using it for orientation to support continuity of care and education for families.



Digital Copy available at the following link: **Clinical Toolkit**





DISCHARGE TEACHING TOPICS

Newborns Diagnosed with Neonatal Opioid Withdrawal Syndrome

Clinically stable as evidenced by signs such as a normal respiratory status, no IV therapy, normal colour and vital signs

Newborns diagnosed with NOWS are at risk for weight fluctuations; therefore it is important to monitor weight trends in newborns with frequent follow up and well established feeding plans.

Ensure birthparents/parents are comfortable in identifying worsening signs of withdrawal within their newborn. Emphasized continuation of non-pharmacological interventions, along with assessment of the newborn's functional ability to eat, sleep and be consoled.

Education should be completed in a collaborative and engaging way ensuring that birthparents and families are confident in their capacity to care for their newborn at home. All universal education should be taught in addition to the key points highlighted here.

Feeding Plan Well Established

Adequate hydration: voids/stools

Adequate transition to home plan, with established community supports



SECTION SIX: LIMITATIONS

This comprehensive summary has been carefully developed using an interprofessional lens, with patient engagement throughout the entire writing process. Given the current population needs and the unique considerations for pregnant persons diagnosed with opioid use disorder, this resource has focused solely on the experience of persons diagnosed with OUD; therefore potentially, limiting our resource's applicability to pregnant persons with other substance use disorders (such as alcohol, or cannabis), along with newborns withdrawing from other substances such as SSRIs. Additional efforts are needed to explore these unique subpopulations, and care considerations will be added in the future as an addendum to this resource.

Inevitably, this comprehensive summary has the potential to have missed unique considerations, despite all efforts that have been made to include all considerations of the pregnant person diagnosed with OUD and their newborn diagnosed with NOWS. As such, our collaborative committee will meet yearly to discuss any updates or revisions that need to be completed and the comprehensive summary and toolkit will be revisited and revised every three years by the Reproductive Care Program of Nova Scotia.



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn



REFERENCES

- 1- **Klaman SL, Isaacs K, Leopold A, Perpich J, Hayashi S, Vender J, et al.** Treating Women Who Are Pregnant and Parenting for Opioid Use Disorder and the Concurrent Care of Their Infants and Children: Literature Review to Support National Guidance. *Journal of Addiction Medicine* [Internet]. 2017;11(3). Available from: https://journals.lww.com/journaladdictionmedicine/Fulltext/2017/06000/Treating_Women_Who_Are_Pregnant_and_Parenting_for.4.aspx
- 2- **Forray A.** Substance use during pregnancy. *F1000 research*. 2016;5:887.
- 3- **Stone R.** Pregnant women and substance use: fear, stigma, and barriers to care. *Health & Justice*. 2015 Feb 12;3(1):2.
- 4- **Etowa JB, Beagan BL, Eghan F, Bernard WT.** “You feel you have to be made of steel”: The strong Black woman, health, and well-being in Nova Scotia. *Health Care for Women International*. 2017 Apr 3;38(4):379–93.
- 5- **Ontario Human rights Commission.** Interrupted Childhoods: Over-representation of Indigenous and Black Children in Ontario Child Welfare [Internet]. 2018. Available from: https://www3.ohrc.on.ca/sites/default/files/Interrupted%20childhoods_Over-representation%20of%20Indigenous%20and%20Black%20children%20in%20Ontario%20child%20welfare_accessible.pdf
- 6- **Bland L, Wellness Within.** The Black Doula Toolkit [Internet]. 2023. Available from: <https://static1.squarespace.com/static/5a17715d8dd04195b6708c76/t/6490cd92eac a19540f71b165/1687211419011/Black+Doula+Toolkit+-+High+Quality.pdf>
- 7- **Whitfield HA.** Black Slavery in the Maritimes: A History in Documents [Internet]. Peterborough, Ontario, Canada: Broadview Press; 2018 [cited 2024 May 20]. 168 p. (The Broadview Sources Series). Available from: <https://broadviewpress.com/product/black-slavery-in-the-maritimes/>
- 8- **James CE.** Seeing Ourselves: Exploring Race, Ethnicity and Culture. Fourth. Toronto, Ontario: Thompson Educational Publishing Inc.; 2010. 286 p.
- 9- **Filteau J, Coe H, Dow K.** Trends in incidence of neonatal abstinence syndrome in Canada and associated healthcare resource utilization. *Drug and alcohol dependence*. 2018;185:313–21.
- 10- **Jilani SM, Jones HE, Davis JM.** Implementation of a standardized clinical definition of opioid withdrawal in the neonate: Challenges and opportunities. *JAMA*. 2022;327(17):1643–4.



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn





11- Nova Scotia Atlee Perinatal Database, Reproductive Care Program of Nova Scotia.

Request # JK10236 - Ms. M. Gallant. NAS and OAT Incidence and Resource Utilization.

Nova Scotia Atlee Perinatal Database; 2023.

12- **Lacaze-Masmonteil T, O’Flaherty P.** Managing infants born to mothers who have used opioids during pregnancy. *Paediatrics & child health.* 2018;23(3):220–6.

13- **Government of Canada.** Government of Canada. 2019 [cited 2022 Aug 10]. Canada’s Opioid Crisis. Available from: <https://www.canada.ca/en/health-canada/services/publications/healthy-living/canada-opioid-crisis-fact-sheet.html>

14- **Patrick SW, Barfield WD, Poindexter BB, COMMITTEE ON FETUS AND NEWBORN COSUAP, Cummings J, Hand I, et al.** Neonatal Opioid Withdrawal Syndrome. *Pediatrics.* 2020 Nov 1;146(5):e2020029074.

15- **Patrick SW, Schiff DM, COMMITTEE ON SUBSTANCE USE AND PREVENTION, Ryan SA, Quigley J, Gonzalez PK, et al.** A Public Health Response to Opioid Use in Pregnancy. *Pediatrics.* 2017 Mar 1;139(3):e20164070.

16- **Weber A, Miskle B, Lynch A, Arndt S, Acion L.** Substance Use in Pregnancy: Identifying Stigma and Improving Care. *Substance abuse and rehabilitation.* 2021;12:105–21.

17- **Nova Scotia Department of Health and Wellness.** Nova Scotia Adolescent Withdrawal Management Guidelines [Internet]. 2013. Available from: <https://novascotia.ca/dhw/addictions/documents/adolescent-withdrawal-management-guidelines.pdf>

18- **Rutman D, Hubberstey C, Poole N, Schmidt RA, Van Bibber M.** Multi-service prevention programs for pregnant and parenting women with substance use and multiple vulnerabilities: Program structure and clients’ perspectives on wraparound programming. *BMC Pregnancy and Childbirth.* 2020 Aug 3;20(1):441.

19- **Public Health agency of Canada.** Family-centred Maternity and Newborn Care: National Guidelines [Internet]. Government of Canada; 2022. Available from: <https://www.canada.ca/en/public-health/services/maternity-newborn-care-guidelines.html>

20- **Blackstock C, Trocmé N.** Community-Based Child Welfare for Aboriginal Children: Supporting Resilience through Structural Change. *Social Policy Journal of New Zealand/Te Puna Whakaaro.* 2005 Jan 1;24.

1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn





11- Nova Scotia Atlee Perinatal Database, Reproductive Care Program of Nova Scotia.

Request # JK10236 - Ms. M. Gallant. NAS and OAT Incidence and Resource Utilization.

Nova Scotia Atlee Perinatal Database; 2023.

12- **Lacaze-Masmonteil T, O'Flaherty P.** Managing infants born to mothers who have used opioids during pregnancy. *Paediatrics & child health.* 2018;23(3):220–6.

13- **Government of Canada.** Government of Canada. 2019 [cited 2022 Aug 10]. Canada's Opioid Crisis. Available from: <https://www.canada.ca/en/health-canada/services/publications/healthy-living/canada-opioid-crisis-fact-sheet.html>

14- **Patrick SW, Barfield WD, Poindexter BB, COMMITTEE ON FETUS AND NEWBORN COSUAP, Cummings J, Hand I, et al.** Neonatal Opioid Withdrawal Syndrome. *Pediatrics.* 2020 Nov 1;146(5):e2020029074.

15- **Patrick SW, Schiff DM, COMMITTEE ON SUBSTANCE USE AND PREVENTION, Ryan SA, Quigley J, Gonzalez PK, et al.** A Public Health Response to Opioid Use in Pregnancy. *Pediatrics.* 2017 Mar 1;139(3):e20164070.

16- **Weber A, Miskle B, Lynch A, Arndt S, Acion L.** Substance Use in Pregnancy: Identifying Stigma and Improving Care. *Substance abuse and rehabilitation.* 2021;12:105–21.

17- **Nova Scotia Department of Health and Wellness.** Nova Scotia Adolescent Withdrawal Management Guidelines [Internet]. 2013. Available from: <https://novascotia.ca/dhw/addictions/documents/adolescent-withdrawal-management-guidelines.pdf>

18- **Rutman D, Hubberstey C, Poole N, Schmidt RA, Van Bibber M.** Multi-service prevention programs for pregnant and parenting women with substance use and multiple vulnerabilities: Program structure and clients' perspectives on wraparound programming. *BMC Pregnancy and Childbirth.* 2020 Aug 3;20(1):441.

19- **Public Health agency of Canada.** Family-centred Maternity and Newborn Care: National Guidelines [Internet]. Government of Canada; 2022. Available from: <https://www.canada.ca/en/public-health/services/maternity-newborn-care-guidelines.html>

20- **Blackstock C, Trocmé N.** Community-Based Child Welfare for Aboriginal Children: Supporting Resilience through Structural Change. *Social Policy Journal of New Zealand/Te Puna Whakaaro.* 2005 Jan 1;24.

1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn





21 - **Allen L, Wodtke L, Hayward A, Read C, Cyr M, Cidro J.** Pregnant and early parenting Indigenous women who use substances in Canada: A scoping review of health and social issues, supports, and strategies. *J Ethn Subst Abuse*. 2022;3(1):31.

22- **Shahram SZ, Bottorff JL, Oelke ND, Kurtz DLM, Thomas V, Spittal PM, et al.** Mapping the social determinants of substance use for pregnant-involved young Aboriginal women. *International Journal of Qualitative Studies on Health and Well-being*. 2017 Jan 1;12(1):1275155.

23- **Nathoo T, Poole N, Bryans M, Dechief L, Hardeman S, Marcellus L, et al.** Voices from the community: Developing effective community programs to support pregnant and early parenting women who use alcohol and other substances. *fpcfr*. 2013;8(1):93–106.

24- **Rowan M, Poole N, Shea B, Gone JP, Mykota D, Farag M, et al.** Cultural interventions to treat addictions in Indigenous populations: findings from a scoping study. *Substance Abuse Treatment, Prevention, and Policy*. 2014 Sep 1;9(1):34.

25- **Browne AJ, Varcoe C, Lavoie J, Smye V, Wong ST, Krause M, et al.** Enhancing health care equity with Indigenous populations: evidence-based strategies from an ethnographic study. *BMC Health Serv Res*. 2016 Oct 4;16(1):544.

26- **Hubberstey C, Rutman D, Schmidt R, van Bibber M, Poole N.** Multi-Service Programs for Pregnant and Parenting Women with Substance Use Concerns: Women's Perspectives on Why They Seek Help and Their Significant Changes. *International Journal of Environmental Research and Public Health*. 2019 Sep 8;16:3299.

27- **Hubberstey C, Rutman D, Van Bibber M, Poole N.** Wraparound programmes for pregnant and parenting women with substance use concerns in Canada: Partnerships are essential. *Health & Social Care in the Community*. 2022 Sep 1;30(5):e2264–76.

28- **Renbarger KM, Shieh C, Moorman M, Latham-Mintus K, Draucker C.** Health Care Encounters of Pregnant and Postpartum Women with Substance Use Disorders. *West J Nurs Res*. 2020 Aug 1;42(8):612–28.

29- **Marcellus L.** Supporting Women with Substance Use Issues: Trauma-Informed Care as a Foundation for Practice in the NICU. *Neonatal network*. 2014;33(6):307–14.

30- **IWK Health, Nova Scotia Health Authority.** Your Experiences Matter. What is Trauma Informed Care? Available from: <https://yourexperiencesmatter.com/learning/trauma-informed-care/what-is-trauma-informed-care/>

1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn





31- **British Columbia Centre on Substance Use, B.C. Ministry of Health, B.C. Ministry of Mental Health and Addictions, Perinatal Services BC.** A Guideline for the Clinical Management of Opioid Use Disorder—Pregnancy Supplement. [Internet]. 2018. Available from: <https://www.bccsu.ca/wp-content/uploads/2018/06/OD-Pregnancy.pdf>

32- **Substance Abuse and Mental Health Services Administration.** Tips for Survivors of a Disaster or Other Traumatic Event: COPING WITH RETRAUMATIZATION [Internet]. HHS Publication No. SMA-17-5047; 2017. Available from: <https://store.samhsa.gov/sites/default/files/d7/priv/sma17-5047.pdf>

33- **Substance Abuse and Mental Health Services Administration.** SAMHSA's Concept of Trauma and Guidance for a Trauma-Informed Approach [Internet]. 2014. Available from: <https://store.samhsa.gov/sites/default/files/d7/priv/sma14-4884.pdf>

34- **Nair L, Adetayo OA.** Cultural Competence and Ethnic Diversity in Healthcare. Plastic and Reconstructive Surgery – Global Open. 2019 May;7(5):e2219.

35- **American College of Obstetricians and Gynecologists, Sufrin C, Davidson A, Markenson G.** Importance of social determinants of health and cultural awareness in the delivery of reproductive health care. [Internet]. American College of Obstetricians and Gynecologists; 2018. Available from: https://www.acog.org/clinical/clinical-guidance/committee-opinion/articles/2018/01/importance-of-social-determinants-of-health-and-cultural-awareness-in-the-delivery-of-reproductive-health-care?utm_source=redirect&utm_medium=web&utm_campaign=otn

36- **Urbanoski K, Bernadette P, Inglis D, Cameron F, Haddad T, Phillips J, et al.** Defining culturally safe primary care for people who use substances: a participatory concept mapping study [Internet]. BMC Health Services Research; 2020. Available from: <https://doi.org/10.1186/s12913-020-05915-x>

37- **Purnell LD, Fenkl EA.** The Purnell Model for Cultural Competence. In: Handbook for Culturally Competent Care [Internet]. Springer; 2019. Available from: https://doi.org/10.1007/978-3-030-21946-8_2

38- **Nova Scotia Health Authority.** Library Services, Nova Scotia Health. 2023. Diversity and Inclusion Working together to make a difference! Available from: <https://library.nshealth.ca/DiversityandInclusion/Cultural>

39- **Chalmers B, Mangiaterra V, Porter R.** WHO Principles of Perinatal Care: The Essential Antenatal, Perinatal, and Postpartum Care Course. Birth. 2001 Sep 1;28(3):202–7.

1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn





40- **The College of Physicians & Surgeons of Manitoba Opioid Agonist Therapy Recommended Practice Working Group.** Manitoba Opioid Agonist Therapy Recommended Practice Manual [Internet]. 2023 [cited 2023 Jul 22]. Available from: <https://cpsm.mb.ca/assets/PrescribingPracticesProgram/OATManual/Manitoba%20OAT%20Recommended%20Practice%20Manual.pdf>

41- **Hawk M, Coulter RWS, Egan JE, Fisk S, Reuel Friedman M, Tula M, et al.** Harm reduction principles for healthcare settings. Harm Reduction Journal. 2017 Oct 24;14(1):70.

42- **Nathoo T, Marcellus L, Bryans M, Clifford D, Louie S, Penaloza D, et al.** Harm Reduction and Pregnancy: Community-based Approaches to Prenatal Substance Use in Western Canada. [Internet]. Victoria and Vancouver, BC: University of Victoria School of Nursing and British Columbia Centre of Excellence for Women's Health; 2015. Available from: https://cewh.ca/wp-content/uploads/2015/02/HReduction-and-Preg-Booklet.2015_web.pdf

43- **Institute for Patient- and Family-Centered Care.** Advancing the practice of patient- and family centered care in hospitals and other ambulatory settings. How to Get Started... [Internet]. Institute for Patient- and Family-Centered Care; 2017. Available from: https://www.ipfcc.org/resources/getting_started.pdf

44- **Institute for Patient- and Family-Centered Care.** Advancing the practice of patient- and family centered care in primary care and other ambulatory settings. How to Get Started... [Internet]. Institute for Patient- and Family-Centered Care; 2016. Available from: <https://www.ipfcc.org/resources/GettingStarted-AmbulatoryCare.pdf>

45- **World Health Organization.** Framework for action on interprofessional education and collaborative practice [Internet]. World Health Organization; 2010. Available from: <https://www.who.int/publications/i/item/framework-for-action-on-interprofessional-education-collaborative-practice>

46- **World Health Professions Alliance.** World Health Professions Alliance Teaming up for BETTER HEALTH. 2019. Interprofessional Collaborative Practice. Available from: https://www.whpa.org/activities/interprofessional-collaborative-practice#_ftn1

47- **Klode K, Ringer A, Hølge-Hazelton B.** Interprofessional and intersectoral collaboration in the care of vulnerable pregnant women: An interpretive study. Journal of interprofessional care. 2020;ahead-of-print(ahead-of-print):1–10.

48- **Johnson & Johnson Services, Inc.** The Importance of Interprofessional Collaboration in Healthcare [Internet]. 2016. Available from: <https://nursing.jnj.com/getting-real-nursing-today/the-importance-of-interprofessional-collaboration-in-healthcare>



1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn



49- **Saia KA, Schiff D, Wachman EM, Mehta P, Vilkins A, Sia M, et al.** Caring for Pregnant Women with Opioid Use Disorder in the USA: Expanding and Improving Treatment. *Current Obstetrics and Gynecology Reports*. 2016 Sep 1;5(3):257–63.

50- **Burduli E, Winquist A, Smith CL, Brooks O, Chiou M, Balsiger D, et al.** Supporting perinatal individuals with opioid use disorder and their newborns experiencing neonatal abstinence syndrome: impressions from patients and healthcare providers. *The American journal of drug and alcohol abuse*. 2022;48(5):596–605.

51- **Brown J, Lent B, Brett-MacLean P, Sas G, Pederson L.** Development of the Woman Abuse Screening Tool for use in family practice. *Family medicine*. 1996 Jul 1;28:422–8.

52- **Weiss M.** Chart of the Day: An Online Education Platform Reduced Pregnancy-Related Anxiety [Internet]. *Health Care Access & Coverage*. 2023 [cited 2023 Jul 30]. Available from: <https://ldi.upenn.edu/our-work/research-updates/chart-of-the-day-an-online-education-platform-reduced-pregnancy-related-anxiety/#:~:text=They%20specifically%20focused%20on%20vulnerable,scores%20during%20their%20third%20trimester>.

53- **Hassanzadeh R, Abbas-Alizadeh F, Meedya S, Mohammad-Alizadeh-Charandabi S, Mirghafourvand M.** Fear of childbirth, anxiety and depression in three groups of primiparous pregnant women not attending, irregularly attending and regularly attending childbirth preparation classes. *BMC Women's Health*. 2020 Aug 14;20(1):180.

54- **McRae K, Sebastian T, Grossman M, Loyal J.** Parent Perspectives on the Eat, Sleep, Console Approach for the Care of Opioid-Exposed Infants. *Hospital Pediatrics*. 2021 Apr 1;11(4):358–65.

55- **Perinatal Services BC.** Care of the Newborn Exposed to Substances During Pregnancy: Practice Resource for Health Care Providers. Vancouver, BC; 2020.

56- **American College of Obstetricians and Gynecologists, Mascola M, Borders A, Terplan M.** Opioid Use and Opioid Use Disorder in Pregnancy [Internet]. 2017. Available from: <https://www.acog.org/clinical/clinical-guidance/committee-opinion/articles/2017/08/opioid-use-and-opioid-use-disorder-in-pregnancy>

57- **Ordean A, Wong S, Graves L.** No. 349-Substance Use in Pregnancy. *Journal of Obstetrics and Gynaecology Canada*. 2017 Oct 1;39(10):922-937.e2.

58- **Garstang J, Sidebotham P.** Qualitative analysis of serious case reviews into unexpected infant deaths. *Archives of Disease in Childhood*. 2018 May 25;104:archdischild-2018.

1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn





59- **Wolfson L, Schmidt RA, Stinson J, Poole N.** Examining barriers to harm reduction and child welfare services for pregnant women and mothers who use substances using a stigma action framework. *Health & social care in the community.* 2021;29(3):589–601.

60- **Lund IO, Fitzsimons H, Tuten M, Chisolm MS, O’Grady KE, Jones HE.** Comparing methadone and buprenorphine maintenance with methadone-assisted withdrawal for the treatment of opioid dependence during pregnancy: maternal and neonatal outcomes. *Substance Abuse and Rehabilitation.* 2012;3(Suppl 1):17–25.

61- **Maeda A, Bateman BT, Clancy CR, Creanga AA, Leffert LR.** Opioid Abuse and Dependence during Pregnancy: Temporal Trends and Obstetrical Outcomes. *Anesthesiology (Philadelphia).* 2014;121(6):1158–65.

62- **McCarthy JJ MD, Leamon MH MD, Finnegan LP MD, Fassbender C PhD.** Opioid dependence and pregnancy: minimizing stress on the fetal brain. *American journal of obstetrics and gynecology.* 2017;216(3):226–31.

63- **American Society of Addiction Medicine.** Public Policy Statement on Substance Use, Misuse, and Use Disorders During and Following Pregnancy, with an Emphasis on Opioids [Internet]. 2017. Available from: <https://www.ncdhhs.gov/asam-substance-use-misuse-and-use-disorders-during-and/open>

64- **Canadian Institutes of Health Research,** Canadian Research Initiative in Substance Misuse. CRISM National Guideline for the Clinical Management of Opioid Use Disorder [Internet]. 2018. Available from: https://crism.ca/wp-content/uploads/2018/03/CRISM_NationalGuideline_OUD-ENG.pdf

65- **Sokol RJ, Martier SS, Ager JW.** The T-ACE questions: Practical prenatal detection of risk-drinking. *American Journal of Obstetrics & Gynecology.* 1989 Apr 1;160(4):863–70.

66- **Reid AJ, Biringer A, Carroll J, Midmer D, Wilson LM, Chalmers B, et al.** Using the ALPHA form in practice to assess antenatal psychosocial health. *Antenatal Psychosocial Health Assessment. CMAJ : Canadian Medical Association journal = journal de l’Association medicale canadienne.* 1998;159 6:677–84.

67- **Arunogiri S, Foo L, Frei M, Lubman DI.** Managing opioid dependence in pregnancy: a general practice perspective. *Australian family physician.* 2013;42(10):713–6.

68- **United Way Halifax, Boyer T, Hutchinson P, Johnson M, Wilcox J.** Building poverty solutions: Ideas for Action HALIFAX REGIONAL MUNICIPALITY – 2018 A community Report [Internet]. Halifax, Nova Scotia; 2020 [cited 2023 Dec 18] p. 1–61. Available from: <https://www.unitedwayhalifax.ca/wp-content/uploads/2020/07/Poverty-Solutions-Community-Report-Apr-20-1.pdf>

1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn





69- **Turner S, Allen VM, Carson G, Graves L, Tanguay R, Green CR, et al.** Guideline No. 443b: Opioid Use Throughout Women's Lifespan: Opioid Use in Pregnancy and Breastfeeding. *Journal of Obstetrics and Gynaecology Canada* [Internet]. 2023 Nov 1 [cited 2023 Dec 18];45(11). Available from: [https://www.jogc.com/article/S1701-2163\(23\)00381-X/fulltext](https://www.jogc.com/article/S1701-2163(23)00381-X/fulltext)

70- **Panagiotakopoulos L.** CDC Recommendations for Hepatitis C Testing Among Perinatally Exposed Infants and Children — United States, 2023. *MMWR Recomm Rep* [Internet]. 2023 [cited 2024 May 22];72. Available from: <https://www.cdc.gov/mmwr/volumes/72/rr/rr7204a1.htm>

71- **Bitnun A, Canadian Pediatric Society, Infectious Diseases and Immunization Committee.** The management of infants, children, and youth at risk for hepatitis C virus (HCV) infection [Internet]. 2021. Available from: <https://cps.ca/documents/position/the-management-of-hepatitis-c-virus>

72- **Keenan-Lindsay L, Yudin MH.** No. 185-HIV Screening in Pregnancy. *Journal of Obstetrics and Gynaecology Canada*. 2017 Jul 1;39(7):e54–8.

73- **Miele K, Gosdin L, Smid M, Shakib J, Louis J, Wright T, et al.** Syphilis Screening During Pregnancy Among People with Opioid Use Disorder. *American Journal of Obstetrics & Gynecology*. 2024 Feb 1;230(2):S646–7.

74- **Government of Canada.** Syphilis Guide: Screening and Diagnostic Testing [Internet]. 2024. Available from: https://www.canada.ca/en/public-health/services/infectious-diseases/sexual-health-sexually-transmitted-infections/canadian-guidelines/syphilis/screening-diagnostic-testing.html#a1_3

75- **Mendlowitz AB, Feld JJ, Biondi MJ.** Hepatitis B and C in Pregnancy and Children: A Canadian Perspective. *Viruses*. 2023;15(1).

76- **Government of Canada.** Hepatitis B Vaccines: Canadian Immunization Guide [Internet]. 2023. Available from: <https://www.canada.ca/en/public-health/services/publications/healthy-living/canadian-immunization-guide-part-4-active-vaccines/page-7-hepatitis-b-vaccine.html#a53>

77- **Deichen Hansen M.** Reinvigorating Social Work's Focus on Perinatal Health. *International Journal of Social Work Values and Ethics*. 2022;19(1):102–20.

78 - **Samuel N, Einarson A.** Medication management during pregnancy: role of the pharmacist. *Int J Clin Pharm*. 2011;33(6):882–5.

1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn





79- **Wesson DR, Ling W.** The Clinical Opiate Withdrawal Scale (COWS). Journal of Psychoactive Drugs. 2003 Jun 1;35(2):253–9.

80- **Shah JR, Ramseyer A, Coker J.** Peripartum management for women with opioid dependence. Current opinion in anaesthesiology. 2021;34(3):226–32.

81- **Soens MA, He J, Bateman BT.** Anesthesia considerations and post-operative pain management in pregnant women with chronic opioid use. Seminars in perinatology. 2019;43(3):149–61.

82- **Ring LE, Landau R.** Anesthetic management of the parturient with opioid addiction. International anesthesiology clinics. 2021;59(3):28–39.

83- **O'Connor AB, Smith J, O'Brien LM, Lamarche K, Byers N, Nichols SD.** Peripartum and Postpartum Analgesia and Pain in Women Prescribed Buprenorphine for Opioid Use Disorder Who Deliver by caesarean Section. Substance abuse : research and treatment. 2022;16:117822182211079–11782218221107936.

84- **Sen S, Arulkumar S, Cornett EM, Gayle JA, Flower RR, Fox CJ, et al.** New Pain Management Options for the Surgical Patient on Methadone and Buprenorphine. Current Pain and Headache Reports. 2016 Feb 15;20(3):16.

85- **Washington State Hospital Association.** Care of the Exposed Newborn (Eat, Sleep, Console) [Internet]. 2018. Available from: <http://www.wsha.org/wp-content/uploads/Eat-Sleep-and-Console.pdf>

86- **McManus BM, Blanchard Y, Murphy NJ, Nugent JK.** The effects of the Newborn Behavioral Observations (NBO) system in early intervention: A multisite randomized controlled trial. Infant Mental Health Journal. 2020 Nov 1;41(6):757–69.

87- **Kristensen IH, Vinter M, Nickell IK, Kronborg H.** Health visitors' competences before and after implementing the newborn behavioral observations (NBO) system in a community setting: A cluster randomised study. Public Health Nursing. 2019 Nov 1;36(6):856–62.

88- **The Global Resource for Nutrition Practice.** Mental Health: Summary of Recommendations and Evidence [Internet]. 2023 [cited 2023 Jan 1]. Available from: <https://www.pennutrition.com/KnowledgePathway.aspx?kpid=24522&trid=27723&trcatid=42>

1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn





- 89- **Davison K, Ng E, Chandrasekera U, Seely C, Cairns J, Mailhot-Hall L, et al.** Promoting Mental Health Through Healthy Eating and Nutritional Care [Internet]. 2012. Available from: <https://www.dietitians.ca/DietitiansOfCanada/media/Documents/Resources/Nutrition-and-Mental-Health-complete-2012.pdf?ext=.pdf>
- 90- **Nutrition Care Manual**, Academy of Nutrition and Dietetics. Opioid: Nutrition Intervention [Internet]. 2023 [cited 2022 Dec 15]. Available from: https://www.nutritioncaremanual.org/topic.cfm?ncm_toc_id=273048
- 91- **Dennett C.** Diet's Role in Opioid Recovery. *Today's Dietitian*. 2021;23(1):42.
- 92- **Li Z, Pergolizzi JV, Huttner RP, Zampogna G, Breve F, Raffa RB.** Management of opioid-induced constipation in pregnancy: a concise review with emphasis on the PAMORAs. *Journal of Clinical Pharmacy and Therapeutics*. 2015 Dec 1;40(6):615–9.
- 93.- **Shreffler J, Genova G, Huecker M.** Physical activity and exercise interventions for individuals with opioid use disorder: a scoping review. *Journal of addictive diseases*. 2022;40(4):452–62.
- 94- **Kinjo M, Setoguchi S, Schneeweiss S, Solomon DH.** Bone mineral density in subjects using central nervous system-active medications. *The American Journal of Medicine*. 2005 Dec 1;118(12):1414.e7-1414.e12.
- 95- **Ding Z, Ma Z, Yang X, Sun Y.** Effect of Eight-Month Exercise Intervention on Bone Outcomes of Young Opioid-Dependent Women. *International Journal of Environmental Research and Public Health*. 2021;18(21).
- 96- **Coluzzi F, Scerpa MS, Centanni M.** The Effect of Opiates on Bone Formation and Bone Healing. *Current Osteoporosis Reports*. 2020 Jun 1;18(3):325–35.
- 97- **Dunning K, LeMasters G, Bhattacharya A.** A Major Public Health Issue: The High Incidence of Falls During Pregnancy. *Maternal and Child Health Journal*. 2010 Sep 1;14(5):720–5.
- 98- **Olds DL, Robinson J, O'Brien R, Luckey DW, Pettitt LM, Henderson CR Jr, et al.** Home Visiting by Paraprofessionals and by Nurses: A Randomized, Controlled Trial. *Pediatrics*. 2002;110(3):486–96.
- 99- **Olds DL, Henderson CR, Tatelbaum R, Chamberlin R.** Improving the life-course development of socially disadvantaged mothers: a randomized trial of nurse home visitation. *Am J Public Health*. 1988;78(11):1436–45.

1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn





100- **Olds DL, Kitzman H, Hanks C, Cole R, Anson E, Sidora-Arcoleo K, et al.** Effects of Nurse Home Visiting on Maternal and Child Functioning: Age-9 Follow-up of a Randomized Trial. *Pediatrics*. 2007;120(4):e832–45.

101- **Catherine NLA, Boyle M, Zheng Y, McCandless L, Xie H, Lever R, et al.** Nurse home visiting and prenatal substance use in a socioeconomically disadvantaged population in British Columbia: analysis of prenatal secondary outcomes in an ongoing randomized controlled trial. *Canadian Medical Association Open Access Journal*. 2020 Oct 1;8(4):E667–75.

102- **Catherine NLA, MacMillan H, Cullen A, Zheng Y, Xie H, Boyle M, et al.** Effectiveness of nurse-home visiting in improving child and maternal outcomes prenatally to age two years: a randomised controlled trial (British Columbia Healthy Connections Project). *Journal of Child Psychology and Psychiatry*. 2023;65(5):644–55.

103- **Terplan M, Hand DJ, Hutchinson M, Salisbury-Afshar E, Heil SH.** Contraceptive use and method choice among women with opioid and other substance use disorders: A systematic review. *Preventive medicine*. 2015;80:23–31.

104- **B.C. Ministry of Health, Perinatal Services BC, British Columbia Centre on Substance Use.** Treatment of Opioid Use Disorder During Pregnancy Guideline Supplement [Internet]. 2018. Available from: <https://www.bccsu.ca/wp-content/uploads/2018/06/OD-Pregnancy.pdf>

105- **PAN A, ZAKOWSKI M.** Peripartum Anesthetic Management of the Opioid-tolerant or Buprenorphine/Suboxone-dependent Patient. *Clinical obstetrics and gynecology*. 2017;60(2):447–58.

106- **Gibbs J, Newson T, Williams J, Davidson DC.** Naloxone hazard in infant of opioid abuser. *The Lancet (British edition)*. 1989;2(8655):159.

107- **Moe-Byrne T, Brown J, McGuire W.** Naloxone for opioid-exposed newborn infants. *Cochrane Database of Systematic Reviews* [Internet]. 2018;(10). Available from: <https://doi.org/10.1002/14651858.CD003483.pub3>

108- **Canadian Paediatric Society.** Clinical and Educational FAQs [Internet]. 2023. Available from: <https://cps.ca/en/nrp-prn/faqs>

109- **Ward C, Christensen C.** Methadone for Opioid Use Treatment during Pregnancy: Trends in Postpartum Dose Adjustments. *AJP Rep*. 2020 Aug 4;10(03):e202–9.

1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn





110- **Haas DA.** 38 - Management of Fear and Anxiety. In: Dowd FJ, Johnson BS, Mariotti AJ, editors. Pharmacology and Therapeutics for Dentistry (Seventh Edition) [Internet]. Mosby; 2017. p. 575–83. Available from: <https://www.sciencedirect.com/science/article/pii/B9780323393072000382>

111- **Public Health Agency of Canada.** Chapter 5: Postpartum Care [Internet]. 2020. Available from: <https://www.canada.ca/en/public-health/services/publications/healthy-living/maternity-newborn-care-guidelines-chapter-5.html#a5.6>

112- **Indian Health Service.** Delivery and Postpartum Care [Internet]. Available from: <https://www.ihs.gov/opioids/maternalchild/deliverypostpartumcare/>

113- **Martin CE, Almeida T, Thakkar B, Kimbrough T.** Postpartum and addiction recovery of women in opioid use disorder treatment: A qualitative study. Substance abuse. 2022;43(1):389–96.

114- **Evenson KR, Mottola MF, Owe KM, Rousham EK, Brown WJ.** Summary of International Guidelines for Physical Activity Following Pregnancy. Obstetrical & gynecological survey. 2014;69(7):407–14.

115- **World Health Organization.** Closing the gap in a generation: health equity through action on the social determinants of health - Final report of the commission on social determinants of health [Internet]. 2008. Available from: https://iris.who.int/bitstream/handle/10665/69832/WHO_IER_CSDH_08.1_eng.pdf?sequence=1

116- **Braveman P, Gottlieb L.** The Social Determinants of Health: It's Time to Consider the Causes of the Causes. Public Health Rep. 2014 Jan 1;129(1_suppl2):19–31.

117- **Crenshaw K.** On Intersectionality: Essential Writings. The New Press; 2019. 320 p.

118- **Lengel R, Tortorice J.** CEUfast. 2022. Psychosocial Assessment: A Nursing Perspective. Available from: [https://ceufast.com/course/psychosocial-assessment-a-nursing-perspective#:~:text=%2DBC%2C%20CPHQ\)-,Introduction,to%20function%20in%20the%20community.](https://ceufast.com/course/psychosocial-assessment-a-nursing-perspective#:~:text=%2DBC%2C%20CPHQ)-,Introduction,to%20function%20in%20the%20community.)

119- **Canadian Association of Social Workers.** Code of Ethics [Internet]. 2005. Available from: https://www.casw-acts.ca/files/attachements/casw_code_of_ethics_0.pdf

120 - **Children and Family Services Act** [Internet]. Sect. Chapter Five 2022. Available from: <https://nslegislature.ca/sites/default/files/legc/statutes/children%20and%20family%20services.pdf>

1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn





121- **Wall-Wieler E, Roos LL, Bolton J, Brownell M, Nickel NC, Chateau D.** Maternal health and social outcomes after having a child taken into care: population-based longitudinal cohort study using linkable administrative data. *J Epidemiol Community Health*. 2017 Dec 1;71(12):1145–51.

122- **Turney K, Wildeman C.** Mental and Physical Health of Children in Foster Care. *Pediatrics*. 2016 Nov 1;138(5):e20161118.

123- **Vinnerljung B, Hjern A, Lindblad F.** Suicide attempts and severe psychiatric morbidity among former child welfare clients – a national cohort study. *Journal of Child Psychology and Psychiatry*. 2006 Jul 1;47(7):723–33.

124- **Abrahams RR, Kelly SA, Payne S, Thiessen PN, Mackintosh J, Janssen PA.** Rooming-in compared with standard care for newborns of mothers using methadone or heroin. *Can Fam Physician*. 2007 Oct;53(10):1722–30.

125- **Kocherlakota P.** Neonatal Abstinence Syndrome. *Pediatrics*. 2014 Aug 1;134(2):e547–61.

126- **Kelly LE, Shan F, MacVicar S, Czaplinksi E, Moulds W, Simpson S, et al.** A Core Outcome Set for Neonatal Opioid Withdrawal Syndrome. *Pediatrics*. 2020 Jul 1;146(1):e20200018.

127- **Brothers S, Allen V, Woolcott C.** The association between gestational age at delivery and neonatal abstinence syndrome: A systematic review and meta-analysis. *DALHOUSIE MEDICAL JOURNAL* [Internet]. 2023 [cited 2024 Apr 11];49(2). Available from: <https://ojs.library.dal.ca/DMJ/article/view/12008>

128- **Hudak ML, Tan RC, THE COMMITTEE ON DRUGS, THE COMMITTEE ON FETUS AND NEWBORN, Frattarelli DAC, Galinkin JL, et al.** Neonatal Drug Withdrawal. *Pediatrics*. 2012 Feb 1;129(2):e540–60.

129- **Schiff DM, Grossman MR.** Beyond the Finnegan scoring system: Novel assessment and diagnostic techniques for the opioid-exposed infant. *Seminars in fetal & neonatal medicine*. 2019;24(2):115–20.

130- **Curran M, Holt C, Arciero M, Quinlan J, Cox D, Craig A.** Proxy Finnegan Component Scores for Eat, Sleep, Console in a Cohort of Opioid-Exposed Neonates. *Hospital Pediatrics*. 2020 Dec 1;10(12):1053–8.

1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn





131- **Young LW, Ounpraseuth ST, Merhar SL, Hu Z, Simon AE, Bremer AA, et al.** Eat, Sleep, Console Approach or Usual Care for Neonatal Opioid Withdrawal. *New England Journal of Medicine*. 2023;388(25):2326–37.

132- **Howard MB, Schiff DM, Penwill N, Si W, Rai A, Wolfgang T, et al.** Impact of Parental Presence at Infants' Bedside on Neonatal Abstinence Syndrome. *Hosp Pediatr*. 2017 Feb;7(2):63–9.

133- **Yonke N, Maston R, Weitzen S, Leeman L.** Breastfeeding Intention Compared With Breastfeeding Postpartum Among Women Receiving Medication-Assisted Treatment. *J Hum Lact*. 2019 Feb 1;35(1):71–9.

134- **McQueen KA, Murphy-Oikonen J, Gerlach K, Montelpare W.** The Impact of Infant Feeding Method on Neonatal Abstinence Scores of Methadone-Exposed Infants. *Advances in Neonatal Care* [Internet]. 2011;11(4). Available from: https://journals.lww.com/advancesinneonatalcare/fulltext/2011/08000/the_impact_of_infant_feeding_method_on_neonatal.12.aspx

135- **Abdel-Latif M, Pinner J, Clews S, Cooke F, Lui K, Oei JL.** Effects of Breast Milk on the Severity and Outcome of Neonatal Abstinence Syndrome Among Infants of Drug-Dependent Mothers. *Pediatrics*. 2006 Jun 1;117:e1163-9.

136- **Grossman MR, Berkwitz AK, Osborn RR, Xu Y, Esserman DA, Shapiro ED, et al.** An Initiative to Improve the Quality of Care of Infants With Neonatal Abstinence Syndrome. *Pediatrics*. 2017 Jun 1;139(6):e20163360.

137- **Jansson LM, Choo R, Velez ML, Harrow C, Schroeder JR, Shakleya DM, et al.** Methadone Maintenance and Breastfeeding in the Neonatal Period. *Pediatrics*. 2008 Jan 1;121(1):106–14.

138- **Lindemalm S, Nydert P, Svensson JO, Ståhle L, Sarman I.** Transfer of Buprenorphine Into Breast Milk and Calculation of Infant Drug Dose. *Journal of human lactation : official journal of International Lactation Consultant Association*. 2009 Feb 1;25:199–205.

139- **Groer M, Maguire D, Taylor K.** Supporting breastfeeding for infants born to opioid dependent mothers June 18, 2018. *Nursing Outlook*. 2018 Sep 1;66(5):496–8.

140- **Suarez Elizabeth A., Huybrechts Krista F., Straub Loreen, Hernández-Díaz Sonia, Jones Hendrée E., Connery Hilary S., et al.** Buprenorphine versus Methadone for Opioid Use Disorder in Pregnancy. *New England Journal of Medicine*. 2022 Nov 30;387(22):2033–44.

1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn





141- **Hale T, Krutsch K.** Hale's Medications & Mother's Milk: A Manual of Lactational Pharmacology. Twentieth. Springer Publishing; 2023. 752 p.

142- **Bathesda, National Institute of Child Health and Human Development.**

Buprenorphine. In: Drugs and Lactation Database (LactMed) [Internet] [Internet]. 2024. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK501202/>

143- **Navarrete F, García-Gutiérrez MS, Gasparyan A, Austrich-Olivares A, Femenía T, Manzanares J.** Cannabis Use in Pregnant and Breastfeeding Women: Behavioral and Neurobiological Consequences. *Frontiers in Psychiatry* [Internet]. 2020;11. Available from: <https://www.frontiersin.org/journals/psychiatry/articles/10.3389/fpsyt.2020.586447>

144- **Bethesda, National Institute of Child Health and Human Development.** Cannabis. In: Drugs and Lactation Database (LactMed®). Internet: National Library of Medicine; 2024.

145- **Sharif A, Bombay K, Murphy MSQ, Murray RK, Sikora L, Cobey KD, et al.** Canadian Resources on Cannabis Use and Fertility, Pregnancy, and Lactation: Scoping Review. *JMIR Pediatr Parent.* 2022 Oct 19;5(4):e37448.

146- **Ordean A, Kim G.** Cannabis Use During Lactation: Literature Review and Clinical Recommendations. *Journal of Obstetrics and Gynaecology Canada.* 2020 Oct 1;42(10):1248–53.

147- **La Leche League Canada.** La Leche League Canada. 2024. Cannabis and Breastfeeding. Available from: <https://www.lllc.ca/cannabis>

148- **Bandoli G, Delker E, Schumacher BT, Baer RJ, Kelly AE, Chambers CD.** Prenatal cannabis use disorder and infant hospitalization and death in the first year of life. *Drug and Alcohol Dependence.* 2023 Jan 1;242:109728.

149- **Tsai LC, Doan TJ.** Breastfeeding among Mothers on Opioid Maintenance Treatment: A Literature Review. *J Hum Lact.* 2016 Aug 1;32(3):521–9.

150- **Maguire DJ, Rowe MA, Spring H, Elliott AF.** Patterns of Disruptive Feeding Behaviors in Infants With Neonatal Abstinence Syndrome. *Advances in Neonatal Care* [Internet]. 2015;15(6). Available from: https://journals.lww.com/advancesinneonatalcare/fulltext/2015/12000/patterns_of_disruptive_feeding_behaviors_in.10.aspx

151- **Maguire DJ, Taylor S, Armstrong K, Shaffer-Hudkins E, DeBate R, Germain AM, et al.** Characteristics of Maternal–Infant Interaction During Treatment for Opioid Withdrawal. *Neonatal Network.* 2016;(5):297–304.

1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn





152- **Pillay J, Davis TJ.** Physiology, Lactation. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2023 [cited 2024 May 20]. Available from: <http://www.ncbi.nlm.nih.gov/books/NBK499981/>

153- **Zimmerman D, Bartick M, Feldman-Winter L, Ball HL.** ABM Clinical Protocol #37: Physiological Infant Care—Managing Nighttime Breastfeeding in Young Infants. Breastfeeding Medicine. 2023 Mar;18(3):159–68.

154- **Boies EG, Vaucher YE, the Academy of Breastfeeding Medicine.** ABM Clinical Protocol #10: Breastfeeding the Late Preterm (34–36 6/7 Weeks of Gestation) and Early Term Infants (37–38 6/7 Weeks of Gestation), Second Revision 2016. Breastfeeding Medicine. 2016 Dec;11(10):494–500.

155- **Colson S.** Biological Nurturing: Instinctual Breastfeeding. 2nd. Amarillo, TX: Praeclarus Press; 2019.

156- **Bogen D, Whalen BL.** Breastmilk feeding for mothers and infants with opioid exposure: What is best? Semin Fetal Neonatal Med. 2019;2(24):95–104.

157- **Ryan G, Dooley J, Gerber Finn L, Kelly L.** Nonpharmacological management of neonatal abstinence syndrome: a review of the literature. The Journal of Maternal-Fetal & Neonatal Medicine. 2019 May 19;32(10):1735–40.

158 - **Reynolds EW, Grider D, Bell CS.** Swallow–Breath Interaction and Phase of Respiration with Swallow during Non-Nutritive Suck in Infants Affected by Neonatal Abstinence Syndrome. Frontiers in Pediatrics [Internet]. 2017;5. Available from: <https://www.frontiersin.org/articles/10.3389/fped.2017.00214>

159- **Lau C.** Development of Suck and Swallow Mechanisms in Infants. Annals of Nutrition and Metabolism. 2015 Jul 24;66(Suppl. 5):7–14.

160- **Maguire DJ, Shaffer-Hudkins E, Armstrong K, Clark L.** Feeding Infants with Neonatal Abstinence Syndrome: Finding the Sweet Spot. Neonatal Network. 2018;(1):11–7.

161- **Davidson E, Hinton D, Ryan-Wenger N, Jadcherla S.** Quality Improvement Study of Effectiveness of Cue-Based Feeding in Infants With Bronchopulmonary Dysplasia in the Neonatal Intensive Care Unit. Journal of Obstetric, Gynecologic & Neonatal Nursing. 2013 Nov 1;42(6):629–40.

1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn





162- **Reproductive Care Program, IWK Health, Nova Scotia Health Authority.** Guideline for Care of the Late Preterm Infant [Internet]. 2021. Available from: <https://rcp.nshealth.ca/sites/default/files/clinical-practice-guidelines/Guidelines%20for%20Care%20of%20the%20Late%20Preterm%20Infant%20202111.pdf>

163- **Merhar SL, McAllister JM, Wedig-Stevie KE, Klein AC, Meinzen-Derr J, Poindexter BB.** Retrospective review of neurodevelopmental outcomes in infants treated for neonatal abstinence syndrome. *Journal of Perinatology*. 2018 May 1;38(5):587–92.

164- **Berlin L, Ziv Y, Amaya-Jackson L, Greenberg M.** Enhancing Early Attachments: Theory, Research, Intervention and Policy. 2005.

165- **Steele M, Murphy A, Steele H.** Identifying Therapeutic Action in an Attachment-Centered Intervention with High Risk Families. *Clinical Social Work Journal*. 2010 Mar 1;38:61–72.

166- Handbook of infant mental health, 3rd ed. New York, NY, US: The Guilford Press; 2009. xvii, 622 p. (Zeanah Jr. CH, editor. Handbook of infant mental health, 3rd ed.).

167- **McManus BM, Blanchard Y, Murphy NJ, Nugent JK.** The effects of the Newborn Behavioral Observations (NBO) system in early intervention: A multisite randomized controlled trial. *Infant Mental Health Journal*. 2020 Nov 1;41(6):757–69.

168- **Velez M, Jansson LM.** The Opioid dependent mother and newborn dyad: non-pharmacologic care. *Journal of addiction medicine*. 2008;2(3):113–20.

1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn





Example Tools to Support Care

The following documents have been included as examples to provide guidance in development of locally specific tools to support and guide practice. It is important to keep in mind as the province transitions to **One Patient One Record (OPOR)**, order sets, documentation forms, and associated assessments will appear differently as they are integrated throughout the Cerner Information System (CIS).

- **IWK Health: Opioid Agonist Treatment (OAT) [methadone, buprenorphine/naloxone (Suboxone)] for Opioid Use Disorder High Alert** is a preprinted order sheet that is used for ordering OAT while a patient is admitted to IWK Health. It is completed by an authorized prescriber (e.g. physician, pharmacist), and a new form must be completed with any change in dose. If there are no changes in dose, one form can be used for the duration of the patient's stay (applicable for all care areas, PSCU, BU, FNCU).
- **IWK Health: Opioid Agonist Treatment (OAT) (Methadone, buprenorphine/naloxone (Suboxone)) for Opioid Use Disorder Flow Sheet** captures detailed information for OAT treatment for the pregnant person. It includes community pharmacy information, whether the patient has carries, their community OAT provider information and more. Any IWK Health provider can complete this form.
- **IWK Health: Management of Neonatal Abstinence Syndrome** is a preprinted order form for the initiation and maintenance of morphine for the newborn.

1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn





- **IWK Health: Weaning Opioids in the Medical Management of Neonatal Abstinence Syndrome High Alert** is a preprinted order form for the administration and weaning of morphine for the newborn. It includes an algorithm to guide the healthcare team decision process.
- **IWK Health: The Care Tool Eating, Sleeping, Consoling** is kept in the newborn chart and is completed by nursing staff. It is a detailed assessment tool that provides information and definitions on the back of the form for each section of Eating, Sleeping, and Consoling.
- **IWK Health: The Family Care Diary Eat, Sleep, Console** is a patient care record that is kept at the bedside. It is a collaborative document between the family and healthcare providers that captures detailed information on the three aspects of the Eat, Sleep, Console model of care.
- **Log Sheet (Community Pharmacist):** Log sheets are instrumental in the communication and documentation of OAT management for pregnant persons. Log sheets document the dose of medication the pregnant person received, when they received it, and if there was anything to note during that visit. Doses are always verbally confirmed with the pregnant person before dispensing, and if the pregnant person has carries, the number dispensed and returned are also logged. These logs are often consulted to provide hospital pharmacists with information regarding the strength of the dose, the timing of the last dose, and adherence when pregnant persons are admitted.

1

Section One: Continuum of Care

2

Section Two: Antepartum

3

Section Three: Intrapartum

4

Section Four: Postpartum

5

Section Five: Newborn





Opioid Agonist Treatment (OAT)
[methadone, buPRENorphine/naloxone
(Suboxone®)] for Opioid Use Disorder
High Alert

K07002307 Jun/7/2002 M
SCA, TEST Visit
ER0000145/12 HCN: 22222222
Van den Hof, TEST / TEST, Maureen
Dec/8/2012

Patient: _____

☐ Alert Record Reviewed ☐ No Allergies Known

☐ Allergies–Adverse Reactions–Cautions: _____

Age _____ Patient's Weight _____ kg Date of Patient's Weight _____

DIAGNOSIS: _____

Items preceded by a **bullet** (∞) are active orders. Items preceded by a **checkbox** (☐) are only actioned if checked (√)

∞ See Care for Patients on Opioid Agonist Treatment (OAT) (methadone, buPRENorphine/naloxone) Policy 4.07 and reverse side for additional information

∞ Consult pharmacist and clinical nurse specialist, where available, to facilitate care planning

∞ Initiate Opioid Agonist Treatment Flow Sheet Form #IWKMEMATH for new admissions

∞ Use this form for new orders and dose changes

∞ Check one of the following:

- ☐ Patient is receiving OAT for the first time. Prescriber with experience in addictions medicine has been consulted.
- ☐ Change in OAT dose after admission. Guidance has been obtained from most responsible community prescriber (except in Mental Health & Addictions Program)
- ☐ Patient has been receiving OAT prior to their hospitalization. **Complete table below before first dose is administered in hospital**

Check all that apply: **minimum 2 source required**

Home OAT dose was verified with:

- ☐ Drug Information System Portat (DIS)
- ☐ Patient
- ☐ Patient Supply
- ☐ Health Record: _____
- ☐ Community Pharmacy: _____
- ☐ Community Prescriber: _____

Last Dose Ingestion: Date: _____ Time: _____

Verified by (name/title): _____ with (check all that apply):

- ☐ Community Pharmacy ☐ Drug Information System Portal (DIS)
- ☐ Community Prescriber ☐ Patient (has take-home doses/carries)

Medications (check one of the following):

- ☐ **Methadone** liquid (Dose in mg) _____ mg PO q _____ h at _____ (times)
- ☐ **Methadone** liquid (Dose in mg) _____ mg PO at _____ (times) and _____ mg PO at _____ (times)
- ☐ **buPRENorphine** 8 mg/naloxone 2 mg (Suboxone® or equivalent) _____ tab(s) SL q _____ h at _____ (times)
- ☐ **buPRENorphine** 2 mg/naloxone 0.5 mg (Suboxone® or equivalent) _____ tab(s) SL q _____ h at _____ (times)
- ☐ Other _____

∞ Next dose due: _____ at _____ hours

DATE (yyyy/MON/dd) Time (24hour/hh:mm) Prescriber Signature Printed Surname/Registration#

DATE (yyyy/MON/dd) Time (24hour/hh:mm) Verified By (Signature) Printed Surname

Note: Page 2 Clinician Information Only



Opioid Agonist Treatment (OAT) **[methadone, buPRENorphine/naloxone** **(Suboxone®)] for Opioid Use Disorder** **High Alert**

K07002307 Jun/7/2002 M
 SCA,TEST Visit
 ER0000145/12 HCN: 22222222
 Van den Hof, TEST / TEST, Maureen
 Dec/8/2012

Additional information and reminders for Prescribers and Health Centre Staff

- ∞ Prior to dose administration, assess patient to be satisfied that it is safe to provide the patient with their daily witnessed dose. Be particularly attentive to known signs of intoxication: slurred speech, impaired coordination; mental signs such as disorientation, confusion, over sedation; or physical signs such as pinpoint pupils. If any of these signs are present, withhold dose and contact prescriber
- ∞ Monitor patient closely when introducing medications that are sedating, that can inhibit methadone metabolism, prolong QTc interval or if patient has an acute respiratory illness or worsening hepatic or renal function
- ∞ If the patient has missed or vomited any doses, contact prescriber before giving any further doses
- ∞ An independent double check is required as per Policy 25.05, High Alert Medications prior to administration of methadone or Suboxone®

Methadone	<ul style="list-style-type: none"> ∞ Note that a different methadone concentration may have been prescribed for the patient in the community ∞ Always check dose with patient prior to administration ∞ All inpatient methadone shall be supplied by Pharmacy as 10 mg/mL cherry oral concentrate. The liquid can be administered undiluted ∞ Check dose, volume order and MAR prior to administration. Doses may vary significantly amongst patients ∞ Examples of methadone doses in mL using the 10 mg/mL cherry oral concentrate <table border="1"> <thead> <tr> <th>Dose in mg</th><th>Volume in mL</th></tr> </thead> <tbody> <tr> <td>5 mg</td><td>0.5 mL</td></tr> <tr> <td>20 mg</td><td>2 mL</td></tr> <tr> <td>130 mg</td><td>13 mL</td></tr> <tr> <td>200 mg</td><td>20 mL</td></tr> </tbody> </table> ∞ The ingestion of each dose must be witnessed. Ensure that each dose has been swallowed by having the patient talk after taking the dose, drink water after their dose or both 	Dose in mg	Volume in mL	5 mg	0.5 mL	20 mg	2 mL	130 mg	13 mL	200 mg	20 mL
Dose in mg	Volume in mL										
5 mg	0.5 mL										
20 mg	2 mL										
130 mg	13 mL										
200 mg	20 mL										
(buPRENorphine/ naloxone) Suboxone®	<ul style="list-style-type: none"> ∞ Note strength of buPRENorphine and naloxone components. There are several tablet formulations available. Nursing must observe patient place tablet(s) under the tongue ∞ Dose is based on buPRENorphine component 										





IWK Health Centre

Opioid Agonist Treatment (Methadone, buPRENorphine/naloxone/(Suboxone®)) for Opioid Use Disorder Flow Sheet

K07002307 Jun/7/2002 M

SCA, TEST Visit

ER0000145/12 HCN: 22222222

Van den Hof, TEST / TEST, Maureen

Dec/8/2012

See [Care of Patients on Opioid Agonist Treatment (OAT) (methadone, buPRENorphin/naloxone) for Opioid Use Disorder Policy #4.07 (IWK Pulse – OP3)]

See [Opioid Agonist Treatment (OAT) [methadone, burenorphine/naloxone (Suboxone®)] for Opioid Use Disorder High Alert IWK_OAT]

MEDICATION (select one): ☐ Methadone ☐ buPRENorphine/naloxone (Suboxone®)**Community Pharmacy Information**

	Community Pharmacy #1	Community Pharmacy #2 (if applicable)
Pharmacy Name		
Pharmacist Name		
Phone number		
Fax number		
Date and Time of notification of patient's admission to hospital	Completed by: _____ Initials Date/Time: _____	Completed by: _____ Initials Date/Time: _____

Dose Information

Dose in mg and frequency in community	
Date/time of last ingested dose	
Was last dose witnessed by pharmacist?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Length of time patient has been taking this dose	
Pattern of doses over the past week: (witnessed or carries)	No missed doses <input type="checkbox"/> Missed doses – Details: _____
Any planned changes in dose?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Details of planned dose changes	

Community Prescription Details

Name of community prescriber	
Date and time of prescriber/team notification of patient's admission to hospital	Completed by: _____ (Initials)
Community prescriber phone number and fax number	Phone number _____ Fax number _____
Current community prescription valid until:	Date: _____
If prescription is still valid, has it been cancelled?	<input type="checkbox"/> Yes <input type="checkbox"/> No Details: _____

Name / Designation (print)	Signature	Initials





Opioid Agonist Treatment (Methadone, buPRENorphine/naloxone/(Suboxone®)) for Opioid Use Disorder Flow Sheet

K07002307 Jun/7/2002 M
SCA,TEST Visit
ER0000145/12 HCN: 22222222
Van den Hof, TEST / TEST, Maureen
Dec/8/2012

Carries (Take Home Doses) Information

Does patient take carries?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Carry days of the week	<input type="checkbox"/> Monday <input type="checkbox"/> Tuesday <input type="checkbox"/> Wednesday <input type="checkbox"/> Thursday <input type="checkbox"/> Friday <input type="checkbox"/> Saturday <input type="checkbox"/> Sunday Other (i.e. pm or holiday doses): _____
Number of carries last dispensed	
Carries brought to hospital?	<input type="checkbox"/> Yes <input type="checkbox"/> No, number of doses left at home _____ Expiry Date (on container if known) _____

Disposition of Carries Brought to Hospital

- ☐ Secured and signed into the Narcotic & Controlled Drug Count sheet on care area: _____
Quantity: _____ Verified by: _____ / _____ Date/time: _____
- ☐ Sent to pharmacy for secure storage.
Quantity: _____ Verified by: _____ / _____ Date/time: _____
- ☐ Returned to patient upon discharge.
Quantity: _____ Verified by: _____ / _____ Date/time: _____
- ☐ Medication expired or dose changed on _____ and has been sent to pharmacy for destruction.
Quantity: _____ Verified by: _____ / _____ Date/time: _____

Discharge Planning

OBS Team Notification before anticipated newborn discharge in order to coordinate maternal discharge including any requirements for a bridging OAT prescription. <input type="checkbox"/> Not Applicable (ex. IWK MHA patient)	Completed by: _____ Date/time: _____
OAT patient has future visit appointments arranged with Community Prescriber on Date/Time _____.	Completed by: _____ Date/time: _____
Community Prescriber notification of discharge and any dose changes <input type="checkbox"/> Discharge summary and cMAR faxed (by request only)	Completed by: _____ Date/time: _____
Community Pharmacy notification of discharge and any dose changes	Completed by: _____ Date/time: _____
cMAR faxed to Community Pharmacy with documentation of time of last dose administered.	Completed by: _____ Date/time: _____

Name / Designation (print)	Signature	Initials





**MANAGEMENT OF NEONATAL
ABSTINENCE SYNDROME
HIGH ALERT**

K07002307 Jun/7/2002 M

SCA, TEST Visit

ER0000145/12 HCN: 22222222

Van den Hof, TEST / TEST, Maureen

Dec/8/2012

Patient: _____

☐ Alert Record Reviewed ☐ No Allergies Known

☐ Allergies-Adverse Reactions-Cautions: _____

Age _____ Patient's Weight _____ kg Date of Patient's Weight _____

DIAGNOSIS: _____

Items preceded by a **bullet** (•) are active orders. Items preceded by a **checkbox** (☐) are only actioned if checked (✓).
The Comfort Promise will be offered to all patients.

Refer to page 2: Treatment Algorithm for the Newborn Exposed to Substance(s) in Pregnancy

VITAL SIGNS/MONITORING

∞ Eat Sleep Console assessment, documentation, and management, according to Care Tool: Eating Sleeping Consoling
IWKCATOESC

∞ Vital signs: ☐ q4h ☐ Other : _____

MEDICATIONS

Select one of the following. **Complete new orders for each step and dose escalation.**

☐ **Step One**

∞ **morphine** (0.04 mg/kg/dose) _____ mg PO q4h PRN for 24 hours starting at _____ (time)

∞ Prescriber to reassess after three PRN doses or 24 hours (whichever comes first)

∞ Discontinue PRN morphine if no doses given within 24 hours (order required)

∞ Infant may re-enter Step one, if necessary (new order required)

∞ If three or more PRN doses are required within 24 hours, move to Step Two

☐ **Step Two**

∞ **morphine** (0.04 mg/kg/dose) _____ mg PO q4h x 24 hours starting at _____ (time)

∞ **morphine** (0.02 mg/kg/dose) _____ mg PO q4h PRN x 24 hours

∞ If three or more PRN doses are required within 24 hours, move to Step Three (new order required)

∞ If no PRN doses are required within 24 hours, reassess maintenance dose

(Form IWKWENAS – Weaning Opioids in the Medical Management of Neonatal Abstinence Syndrome)

DATE (yyyy/MON/dd) Time (24hour/hh:mm) Prescriber Signature Printed Surname/Registration#

DATE (yyyy/MON/dd) Time (24hour/hh:mm) Verified By (Signature) Printed Surname

NOTE: Page 2 Clinician information only

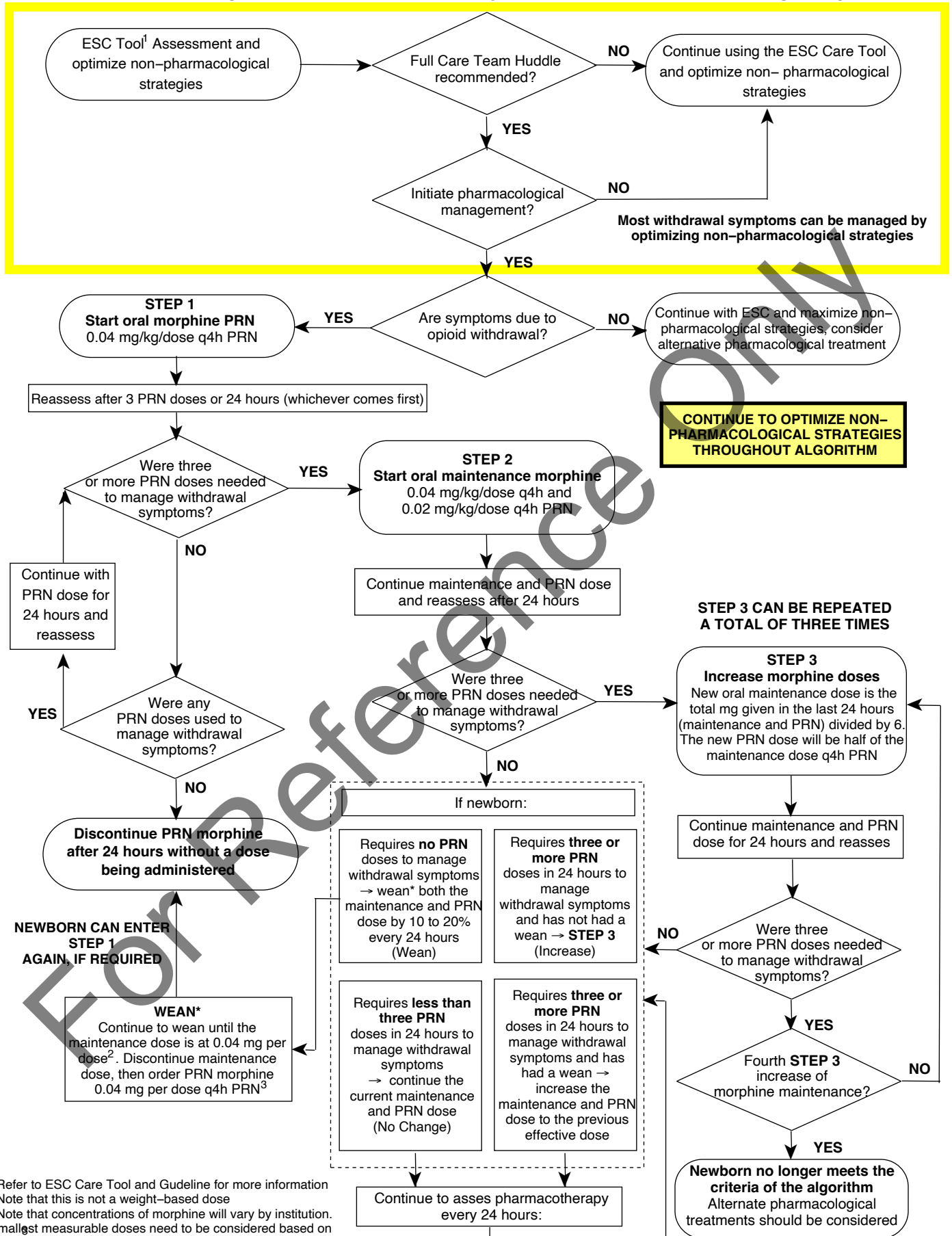


ER0000145/12



IWKMANAS

Treatment Algorithm for the Newborn Exposed to Substances(s) in Pregnancy



¹ Refer to ESC Care Tool and Guideline for more information

² Note that this is not a weight-based dose

³ Note that concentrations of morphine will vary by institution. Smallest measurable doses need to be considered based on morphine concentration available





**MANAGEMENT OF NEONATAL
ABSTINENCE SYNDROME
HIGH ALERT**

K07002307 Jun/7/2002 M
SCA, TEST Visit
ER0000145/12 **HCN:** 22222222
Van den Hof, TEST / TEST, Maureen
Dec/8/2012

Patient: _____

☐ Alert Record Reviewed ☐ No Allergies Known

☐ Allergies–Adverse Reactions–Cautions: _____

Age _____ Patient's Weight _____ kg Date of Patient's Weight _____

DIAGNOSIS: _____

Items preceded by a **bullet** (•) are active orders. Items preceded by a **checkbox** (☐) are only actioned if checked (v).
The Comfort Promise will be offered to all patients.

MEDICATIONS (Continued)

☐ **Step Three**

∞ If three or more PRN doses are required within 24 hours, escalate dose again, to a maximum of 3 escalations

☐ **First dose escalation**

☐ **Second dose escalation**

☐ **Third and maximum dose escalation**

∞ **morphine** [total mg given within the last 24 hours (maintenance and PRN) divided by 6]

_____ mg PO q4h x 24 hours starting at _____ (time)

∞ **morphine** (half the above maintenance dose) _____ mg PO q4h PRN for 24 hours

∞ For First and Second dose escalation, if three or more PRN doses are required within 24 hours, move to **next** dose escalation (new order required)

∞ For Third dose escalation, if infant required further dose escalation, alternative pharmacological treatments should be considered

∞ If no PRN doses are required within 24 hours, reassess maintenance dose

(Form IWKWENAS – Weaning Opioids in the Medical Management of Neonatal Abstinence Syndrome)

DATE (yyyy/MON/dd)	Time (24hour/hh:mm)	Prescriber Signature	Printed Surname/Registration#
DATE (yyyy/MON/dd)	Time (24hour/hh:mm)	Verified By (Signature)	Printed Surname



ER0000145/12



IWKMANAS



WEANING OPIOIDS IN THE MEDICAL MANAGEMENT OF NEONATAL ABSTINENCE SYNDROME HIGH ALERT

K07002307 Jun/7/2002 M
SCA, TEST Visit
ER0000145/12 HCN: 22222222
Van den Hof, TEST / TEST, Maureen
Dec/8/2012

Patient: _____

☐ Alert Record Reviewed ☐ No Allergies Known

☐ Allergies–Adverse Reactions–Cautions: _____

Age _____ Patient's Weight _____ kg Date of Patient's Weight _____

DIAGNOSIS: _____

Items preceded by a **bullet** (•) are active orders. Items preceded by a **checkbox** (☐) are only actioned if checked (✓).
The Comfort Promise will be offered to all patients.

Refer to page 2: Treatment Algorithm for the Newborn Exposed to Substance(s) in Pregnancy

VITAL SIGNS/MONITORING

∞ Eat Sleep Console assessment, documentation, and management, according to Care Tool: Eating Sleeping Consoling
IWKCATOESC

∞ Vital signs: ☐ q4h ☐ Other : _____

MEDICATIONS

Select one of the following.

☐ Initial Order

☐ Order Change

☐ Weaning dose (when no PRN doses are required for 24 hours)

∞ **morphine** (decrease previous dose by 10 to 20%, lowest dose 0.04 mg) _____ mg PO q4h for 24 hours
starting at _____ (time)

∞ **morphine** (50% of above maintenance dose) _____ mg PO q4h PRN

∞ Wean every 24 hours, until dose reaches 0.04 mg (new orders required)

☐ Final wean (after 24 hours of maintenance dose of 0.04 mg)

∞ Discontinue **morphine** maintenance dose

∞ **morphine** 0.04 mg (note this is not a weight based dose) PO q4h PRN

☐ **Discontinue morphine** (when no PRN doses required for 24 hours)

DATE (yyyy/MON/dd)

Time (24hour/hh:mm)

Prescriber Signature

Printed Surname/Registration#

DATE (yyyy/MON/dd)

Time (24hour/hh:mm)

Verified By (Signature)

Printed Surname

NOTE: Page 2 Clinician information only

PERMANENT RECORD Page 1 of 2 2022/FEB/01

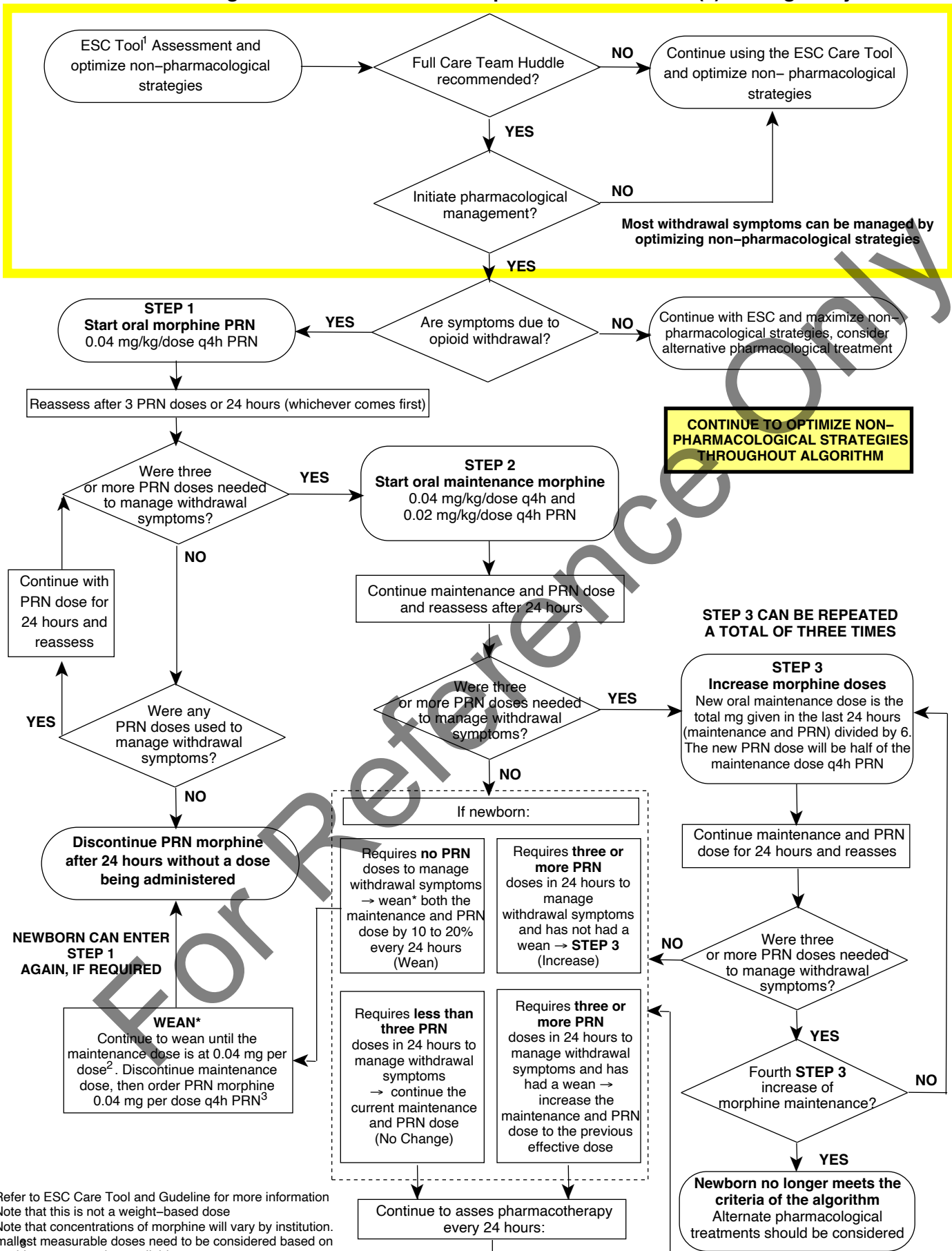


ER0000145/12



IWKWENAS

Treatment Algorithm for the Newborn Exposed to Substance(s) in Pregnancy



¹ Refer to ESC Care Tool and Guideline for more information

² Note that this is not a weight-based dose

³ Note that concentrations of morphine will vary by institution. Smallest measurable doses need to be considered based on morphine concentration available





Care Tool Eating, Sleeping, Consoling

K07002307 Jun/7/2002 M
SCA, TEST Visit
ER0000145/12 HCN: 22222222
Van den Hof, TEST / TEST, Maureen
Dec/8/2012

- Initiate a new ESC Care Tool record every shift.
- Review ESC behaviors with parents/caregivers every 2 – 4 hours after feedings.
- If not clear whether the baby's poor eating, sleeping, or consoling is due to substance withdrawal, indicate Yes and continue to monitor closely while optimizing all non-pharmacological interventions.
- Numbers within this tool are NOT intended as a score but as a coding key
- Review definitions of items prior to performing assessment of ESC behavior (back page)

Date:		Birth weight (grams):		Daily weight (grams):	
Gestational Age:		Age in days:		Weight loss % since birth:	
Corrected Gestational Age:		Weight loss more than 10%:		<input type="checkbox"/> Yes <input type="checkbox"/> No	
		Time of assessment			
ESC ASSESSMENT		Y=Yes N=No			
EAT:					
Poor eating? (If Yes, answer next question; if No, go to Sleep)					
Poor eating due to substance withdrawal?					
SLEEP:					
Sleep less than one hour? (If Yes, answer next question, if No, go to Console)					
Sleep less than one hour due to substance withdrawal?					
CONSOLE:					
Unable to console within 10 minutes (or cannot stay consoled for longer than 10 minutes)? (If Yes, answer next question, if No, go to Consoling Support Needed)					
Unable to console within 10 minutes (or cannot stay consoled for longer than 10 minutes) due to substance withdrawal?					
Support needed to console: (Use # to code)					
1. Able to self-console					
2. Able to console (and stay consoled) with caregiver support within 10 minutes					
3. Unable to console (or cannot stay consoled) with caregiver support within 10 minutes					
PARENT/CAREGIVER					
PARENT/CAREGIVER PRESENT FOR:		Use # to code			
1. More than three hours 3. One – two hours					
2. Two – three hours 4. Less than one hour 5. No parent/caregiver present					
WHO PROVIDED MOST OF INFANT CARE?					
1. Mother / Birth Parent 3. Family Member 5. Nurse					
2. Partner 4. Support Person 6. Other (define):					
PLAN OF CARE		Y=Yes N=No			
Recommend Bedside Nurse and Parent/Caregiver Huddle?					
Recommend Full Care Team Huddle?					
Management Considerations (Use # to code)					
1. Continue/optimize non-pharm care 3. Continue medication					
2. Medication treatment pharm care 4. Plan documented in narrative notes					
NON-PHARMACOLOGICAL CARE INTERVENTIONS					
S = Start intervention I = Increase intervention R = Reinforce intervention					
Parent/caregiver presence					
Optimal feeding at early hunger cues					
Cue based newborn-centered 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/respice					
Other (Describe in Narrative Notes)					
Signature/Status		Print Name		Date (yyyy/MON/dd)	



Care Tool Eating, Sleeping, Consoling

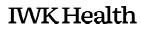
K07002307 Jun/7/2002 M
SCA, TEST Visit
ER0000145/12 HCN: 22222222
Van den Hof, TEST / TEST, Maureen
Dec/8/2012

EAT, SLEEP, CONSOLE CARE TOOL DEFINITIONS

WEIGHT LOSS	Weight loss based on daily weight assessment is calculated as more than 10% requires a full care team huddle
EATING	
Poor eating	Baby unable to coordinate feeding within 10 minutes of showing hunger cues AND/OR Baby unable to sustain feeding for age appropriate duration at breast OR Baby unable to take in age and weight appropriate volume by alternative feeding method
Poor eating due to substance withdrawal	Answer YES, if due to substance withdrawal symptoms (e.g. fussiness, tremors, uncoordinated suck, excessive rooting)
Poor eating due to reasons other than substance withdrawal	Do not answer Yes if poor eating is not due to substance withdrawal (e.g. prematurity, transitional sleepiness, excess mucus in first 24 hours, and inability to latch due to infant / maternal anatomical factors).
Not sure	If it is not clear if poor eating is due to substance withdrawal or not, answer Yes and continue to monitor.
SLEEPING	
Poor sleeping	Baby unable to sleep for at least one hour after feeding
Sleep less than 1 hour due to substance withdrawal	Answer YES, if baby is unable to sleep for at least one hour after feeding due to substance withdrawal symptoms (e.g. fussiness, restlessness, increased startle, tremors).
Sleep less than 1 hour due to reasons other than substance withdrawal	Do not answer yes if sleep less than 1 hour is not due to substance withdrawal (e.g. physiologic cluster feeding in first few days of life, interruptions in sleep due to external noise, light and clinical care).
Not sure	If it is not clear if the baby's difficulties in sleeping is due to substance withdrawal or not, answer Yes and continue to monitor
CONSOLING	
Unable to console	Baby unable to console within 10 minutes and/or stay consoled for longer than 10 minutes
Unable to console due to substance withdrawal?	Answer Yes if baby unable to console due to substance withdrawal symptoms
Unable to console due to reasons other than substance withdrawal?	Do not answer yes if inconsolability is due to other factors (e.g. caregiver non-responsiveness to infant hunger cues, pain).
Not sure	If it is not clear if inconsolability is due to substance withdrawal or not, answer Yes and continue to monitor.
Consoling Support Needed:	
1. Able to self-console	Able to self-console without any caregiver support needed.
2. Able to console with support	Able to console with any level of caregiver/consoling support provided e.g. skin to skin, rocking, swaddling.
3. Unable to console	Unable to console with caregiver support within 10 minutes, or can't stay consoled for longer than 10 minutes.
PARENTAL/CAREGIVER	
Parental/Caregiver Presence	Time since last assessment that parent, or another caregiver, spent with baby. Caregiver can be parent, other family member, designated visitor, volunteer respite worker, or healthcare worker that can deliver cue-based care in a timely manner.
Who provided infant care	1. Mother/birth parent refers to the biological or adoptive/foster mother/parent. 2. Partner as identified by the mother/birth parent or foster/adoptive parent 3. Support person: family, friends, support workers not associated with hospital 4. Nurse: Bedside Nurse 5. Other: Any person not included in previous categories including volunteer respite worker
PLAN OF CARE	
Bedside Nurse and Parent/ caregiver Huddle	Bedside Nurse and parent/caregiver meet if infant Score Yes for any ESC item to determine if non-pharmacological care interventions need to be implemented, or can be optimized further.
Full Care Team Huddle	Bedside Nurse, parent/caregiver, physician and CNS (if available) meet if infant has more than 10% weight loss and/or CONTINUED Yes for any ESC item, (or any other significant concerns) despite optimal non-pharmacological care.
NON-PHARMACOLOGICAL CARE INTERVENTIONS	
Start Increase Reinforce	Initiate intervention for the first time Need more discussion and/or teaching on intervention Encourage caregiver to continue intervention

Tool adapted with permission from Perinatal Services BC





Family Care Diary

Eat, Sleep, Console

K07002307 Jun/7/2002 M
SCA, TEST Visit
ER0000145/12 **HCN:** 22222222
Van den Hof, TEST / TEST, Maureen
Dec/8/2012

Date (yyyy/MON/dd): _____

[illegible]

Tool adapted with permission from Perinatal Services BC



METHADONE Log

M Tu W Th F Sa Su

Name: Jane Smith

Dates: Jan. 1 - Jan. 29

Doctor: Dr. OAT

Notes: Dose Increase (was 62 mg)

[illegible]

***Patients who have 3 or more take home doses are advised of the risks of missing 3 or more consecutive days:**

1. You will lose tolerance to the dose you have been prescribed.
2. You could be seriously harmed, require naloxone, hospitalization or die from the subsequent dose.
3. Contact your doctor to inform them of the doses missed and receive a new/updated dose that is safe for you to resume.



REPRODUCTIVE CARE PROGRAM OF NOVA SCOTIA

Halifax Professional Centre
Suite 700
5991 Spring Garden Rd.
Halifax, NS B3H 1Y6 Canada
Tel: 902-470-6798
Email: rcp@iwbk.nshealth.ca

IWK HEALTH

5980 University Ave,
Halifax, NS B3K 6R8 Canada
Tel: 902-470-8888

NOVA SCOTIA HEALTH

<https://www.nshealth.ca/contact>

This comprehensive summary serves as an accessible, inclusive, and evidence-based resource that informs care provider practice and education across Nova Scotia in caring for persons diagnosed with opioid use disorder, their newborns, and their families during the perinatal period. This resource was created using a diverse, interprofessional team, including patient partners, to ensure the practice guidance and recommendations within the comprehensive summary align with and enhance care provider clinical practice and the patient's personal experience.

© 2025 Reproductive Care Program of Nova Scotia

