

Prenatal Opioid Exposure and Neonatal Abstinence Syndrome: A Research Project with 13 First Nations Communities in Ontario

Aggregate Report





Publication information

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ICES is an independent, not-for-profit organization that produces knowledge to enhance the effectiveness of healthcare for Ontarians. ICES is internationally recognized for its innovative use of population-based health data and information. The evidence that ICES produces supports health policy development and guides changes to the organization and delivery of healthcare services in Ontario.

Photographs used in this report

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Language used in this report

This report was written for and with the First Nations communities involved in this project. We have tried to use language that is accessible to a broad audience. In addition, although the terms "women" and "mothers" are used throughout, we note that these terms may not describe all pregnant people, such as those who identify as transgender or nonbinary. In discussions with the Core Research Team and participating communities, these terms were thought to be the most accessible for the report. In addition, for the sections on the data that were collected, it should be noted that the administrative health data that are available do not have variables on self-identified gender, and the language of the qualitative data collection focused on women and mothers.

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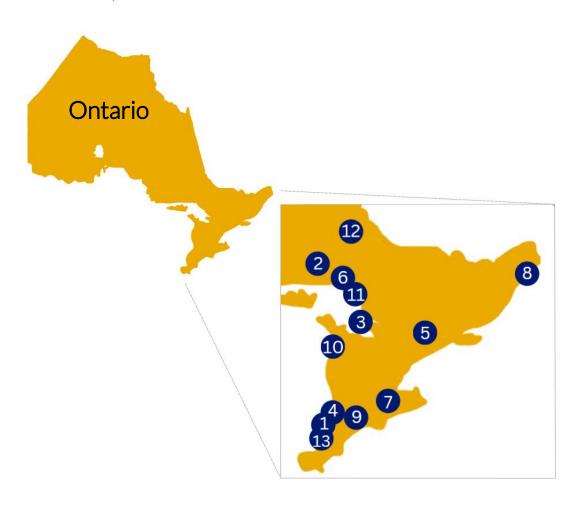
This report is the result of extensive collaboration between dedicated individuals, First Nations communities, and organizations.

The 13 First Nations communities who participated in this project are:

- 1. Aamjiwnaang First Nation
- 2. Atikameksheng Anishnawbek
- 3. Beausoleil First Nation
- 4. Chippewas of Kettle and Stony Point First Nation (participated in the quantitative research only)
- 5. Curve Lake First Nation
- 6. Henvey Inlet First Nation (participated in the quantitative research only)

- 7. Mississaugas of the Credit First Nation
- 8. Mohawk Council of Akwesasne
- 9. Oneida Nation of the Thames
- 10. Saugeen First Nation #29
- 11. Shawanaga First Nation
- 12. Temagami First Nation
- 13. Walpole Island First Nation

Community partners span the lower half of Ontario, Canada, and include those that are close to urban centres to those in more rural and remote areas, on islands, and along the Canada–United States and Ontario–Quebec borders.



The authors wish to thank the participating First Nations for their partnership on this project. These communities prioritized research on prenatal opioid exposure, provided extensive guidance, and undertook community outreach. The result is a project that is founded on community strengths, knowledges, and needs of the participating communities.

We want to acknowledge the individual participants from all communities who shared their experiences and perspectives on prenatal opioid exposure.

We also thank Wanda Smith, Executive Director, Native Horizons Treatment Centre, for her instrumental role as an agency partner in the creation of this project and her support of the work. In addition, we thank Andi Camden, Madeleine Mary Rak Harris, and Sophia den Otter-Moore for their assistance in reviewing the literature on prenatal opioid exposure.

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The analyses, conclusions, opinions, and statements expressed are those of the authors and do not reflect those of the funding or data sources. No endorsement by ICES, the Ontario Ministry of Health, or the Ministry of Long-Term Care is intended or should be inferred.

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Background

This research project was initiated in response to concerns raised by several First Nations communities in Ontario about the health of school-age children who had been exposed to opioids prenatally. In 2018, we formed a Core Research Team, which included members of the (former) Southern Ontario Community Wellness Development Team; researchers affiliated with ICES, Laurentian University, the University of Toronto, and Ontario Tech University; and a community healthcare professional.

We hosted two community-based facilitated information and planning sessions in two regionally central locations. There were representatives from 23 First Nations communities at the meetings. These two-day meetings helped the Core Research Team understand the prenatal opioid exposure research needs of communities.

We then continued to build relationships and consult with communities on this project through numerous meetings with individual First Nations communities who were interested in participating. These consultations informed our research questions, methods, and processes.

Thirteen First Nations chose to participate in this project. By working in partnership with communities, the team aimed to learn more about the impact of prenatal opioid exposure within each First Nation and across all participating First Nations.

There were two arms to this research project: a quantitative arm (using existing health record information) and a qualitative arm (using information gathered through focus groups and interviews). Eleven of the 13 communities participated in both the quantitative and qualitative arms of the project. Two of the communities only participated in the quantitative arm.

This document brings together both the qualitative and quantitative findings from all participating communities. No individual community's information is identifiable. For example, the number of babies with prenatal opioid exposure will be the total number of babies with prenatal opioid exposure from all participating communities combined. No qualitative data (quotes) will be associated with a specific community.

Ethics approval of the quantitative arm of this research project was granted by Laurentian University's Research Ethics Board. Ethical approval of the qualitative arm of this research project was granted by Ontario Tech University Research Ethics Board.

First Nations community partners have helped inform and shape all aspects of the project through:

- Championing the project and helping to engage the appropriate stakeholders and decision makers
- Acting as community delegates at engagement and planning sessions
- Recommending and inviting community advisory group members as well focus group and interview participants
- Reviewing project materials, adapting research methods, selecting data elements, and reviewing all reporting
- Ensuring processes were community and culturally appropriate



Working together to gather knowledge and information

Qualitative research

We conducted 19 focus groups and 32 individual interviews with Indigenous and non-Indigenous peoples who work in health, social services, and education; Elders, community leaders and members, and those with personal lived experience. People with lived experience included mothers who used opioids during pregnancy, family members of children and mothers impacted by prenatal opioid exposure, and caregivers such as grandparents, aunties, and uncles. The questions were focused on the impacts of prenatal opioid exposure, the strengths in the community that were helping to address prenatal opioid exposure, the gifts and strengths of children impacted by prenatal opioid exposure, and what strategies would be helpful to prevent prenatal opioid exposure, and further support those impacted.

Researchers then grouped all the quotes into themes based on the types of questions we asked and what was most repeatedly shared. The themes are groupings of similar ideas, experiences, and perspectives. To ensure that we honoured and appropriately reflected what was shared, these themes were reviewed by First Nations and non-Indigenous researchers, focus group and interview participants, and community stakeholders. On some topics, there was a diversity of viewpoints while on others there was great similarity in responses. A range of viewpoints are reflected in this report. We have also worked to ensure that the perspectives of people from different communities are reflected in the themes.

All the quotes in this document have been de-identified. "De-identified" means that names, dates, sex, gender, location, or other identifying information have been removed or changed so that people cannot guess who said a quote. We have also removed any information that may identify a specific First Nation to someone reading the report. We have worked to find a balance between ensuring confidentiality and maintaining the meaning of the quote.



We gathered and listened to stories, insights, beliefs, and values pertaining to neonatal abstinence syndrome and prenatal opioid exposure.

Quantitative research

To gather health record information for this project we worked with ICES. Please see the Detailed Quantitative Appendix for technical information about data sources, calculations, and limitations.

ICES is an independent, nonprofit research institute that uses population-based data to produce knowledge on a broad range of health and health-related issues. ICES supports Indigenous-driven use of ICES data to promote well-being, healing, and effective policy.

Data governance

First Nations hold inherent rights to govern First Nations data as an important foundation for self-determination.

For this project, participating First Nations decided which data elements should be examined based on community needs. Band Council Resolutions were obtained from the Chief and Council in each participating First Nation to formalize permission to access the data for their membership using the Indian Register linked to the data held at ICES. As a prescribed entity under Ontario's privacy legislation, ICES is authorized to collect and use healthcare data for the purposes of health system analysis, evaluation, and decision support. ICES is also the data steward of other data sets, including the federal Indian Register, which is governed by the Chiefs of Ontario at a regional level through a data governance agreement. Secure access to these data is governed by policies and procedures that are approved by the Information and Privacy Commissioner of Ontario.

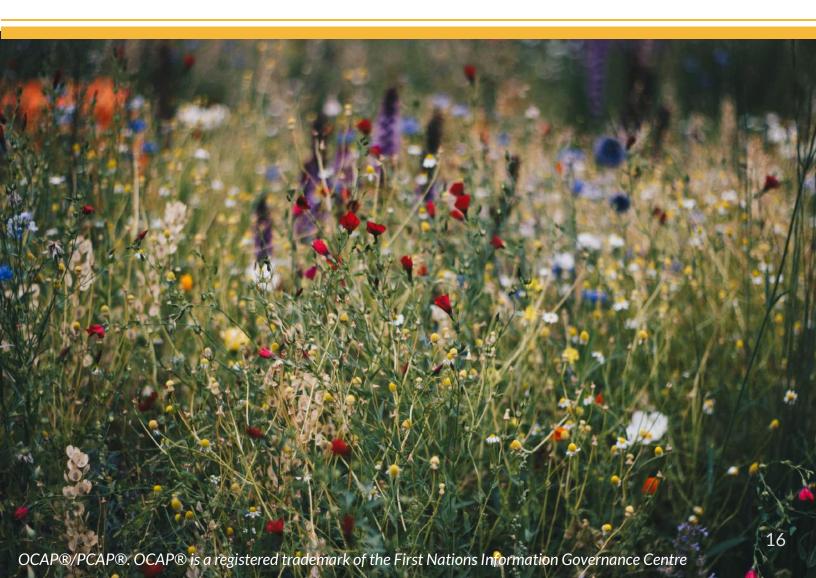
Key to ICES' work is its ability to link data from different data sets, but analysis of the data is done in a way that ensures the privacy and confidentiality of personal information. The data are encoded, and ICES only reports on de-identified data for groups of more than five people to avoid the potential identification of individual people.



Our commitment to OCAP®

The First Nations principles of OCAP® (First Nations' ownership, control, access, and possession of First Nations data) were developed through the First Nations Information Governance Centre. These principles establish the right of First Nations to have control over data collection processes, and to own and control how their information is stored, interpreted, used, or shared for research and other purposes.

The Chief and Council of each participating First Nation have given their approval to participate in this project by signing a community research agreement. In keeping with the principles of OCAP®, each First Nation and the Core Research Team have worked collaboratively to make decisions about the research process. Each First Nation's data will only be used for the purposes for which its Chief and Council have provided written approval.



Key terms

Neonatal

The neonatal period is the first four weeks of a child's life.

Neonatal abstinence syndrome

A withdrawal syndrome that is sometimes seen in babies of mothers who used opioids or were treated for opioid use disorder during pregnancy. Also referred to as neonatal opioid withdrawal syndrome (NOWS).

Opioids

Drugs that are mainly used to treat pain. Some opioids are available by prescription, such as codeine, morphine, hydromorphone, oxycodone (OxyContin), and the fentanyl patch. Others are illegally made or obtained, such as street heroin and fentanyl.

Opioid agonist therapy

Therapy used to treat opioid use disorder using medication such as methadone or buprenorphine.

Opioid use disorder

A pattern of opioid use which leads to significant impairment, with a range of severity from dependence to addiction.

Prenatal

Before the birth of a baby. Often used to discuss the care provided to women when pregnant.

Prenatal opioid exposure

When babies are exposed to opioids before being born. This can happen when a mother who is pregnant:

- Receives opioid agonist therapy such as methadone or Suboxone
- Uses opioids that were prescribed to help control pain
- Uses opioids that were made or obtained illegally

Preterm baby

When a baby is born early, before 37 weeks of pregnancy.

Removed from mother's care at birth

When a newborn is discharged from hospital into the care of the Children's Aid Society or other child social service agency due to concerns about the baby's safety.

Prenatal opioid exposure, intergenerational trauma, and intergenerational healing

Many First Nations understandings of well-being centre on the concepts of balance, cycles, and relationships. Throughout the project, we have been reminded about the importance of balance within the physical, mental, emotional, and spiritual aspects of ourselves; balance and maintaining a careful equilibrium of energy within ourselves; adjusting to the cycles of the seasons, the moon, and our own life course; and relationships. However, we also recognize that through deliberate and systematic assimilation practices, such as residential schools, land dispossession, and legislation, First Nations knowledges and practices to support these complex Indigenous understandings of wellness have been disrupted. This is why it is important to understand prenatal opioid exposure in the context of an Indigenous determinants of health framework, which acknowledges that this disruption of Indigenous knowledges, governance systems, identities, family structures, and lands have contributed to intergenerational trauma and disrupted individual and community well-being (1).



For First Nations communities that have endured disruption of First Nations identities and knowledge systems, intergenerational trauma contributes to opioid addiction (2). Intergenerational trauma is the passing of collective trauma across generations (3). This can happen through epigenetic or "blood memory" processes where the collective and individual traumas of ancestors, such as residential schools, forced relocation, and so on, influence the way that the present generation's genes are expressed and increase the chances that a person is predisposed to addiction (4). Intergenerational trauma can also happen directly by increasing the traumas that a person experiences over their lifetime. Collective trauma impacts individual people and disrupts the way that they learn to parent (4,5). Parentinfant attachment is important to child development and when a parent has a history of trauma, they may have a harder time forming secure attachment bonds with their children (5). This can set up cycles of trauma and addiction over generations (4,6).

While it is important to understand trauma and intergenerational trauma, and how they are related to opioid use and prenatal opioid exposure, it is equally important to examine the topic through an intergenerational healing lens. Intergenerational healing occurs when cycles of trauma are interrupted within families and communities and the balance between the physical, mental, emotional, and spiritual aspects of life is restored (3,7,8). This can occur in many ways, but often includes addressing addiction and unresolved trauma in families, supporting families in the development of skills that promote healthy relationships and parenting, while increasing capacity for adaptation, resilience, and growth (3,7,9). These outcomes are achieved through personal and collective efforts that can involve traditional healing practices and engaging in other social programs and interventions (9,10). An overview of programs and approaches that can support addressing prenatal opioid exposure and promote intergenerational healing are provided in the subsequent sections of this literature review.

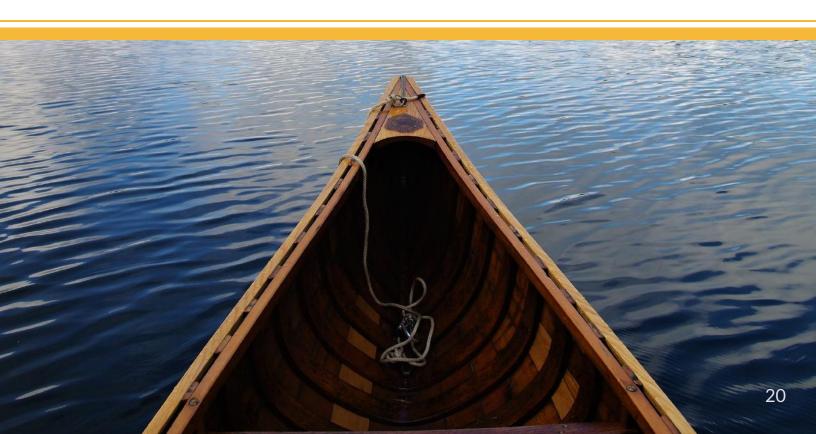


A strengths-based approach to prenatal opioid exposure research with First Nations communities

By grounding ourselves in First Nations understandings of well-being and a strengths-based approach to research, we can use research to shift from patterns of intergenerational trauma to intergenerational healing.

Strengths-based ways of conducting research are focused on identifying and supporting community and individual strengths, motivations, and other protective factors that can help people pursue better well-being and balance (10). When applying a strengths-based approach to research, the historical context and the adversities First Nations communities face are not ignored. Challenges are set alongside strengths and strategies necessary for healing, so that people and communities can experience growth through acknowledging and overcoming trauma (7).

In this work, we have highlighted the strengths, solutions, programs, and initiatives that are taking place in communities to address prenatal opioid exposure. Individuals' and communities' capacity to restore balance, health, and good function after immense challenges, known as "resilience," is a focus of this work (7,11). The resilience of individuals and communities has been demonstrated alongside the challenges of prenatal opioid exposure.



Assessing strengths in First Nations community contexts requires starting with dialogue, open-ended questions, and approaches that can capture local concepts, constructs, expectations, and experiences (10). Developing locally and culturally meaningful research that provides a breadth of information requires extensive collaboration (8). As such, knowledge exchange and community engagement are crucial to conducting strengths-based research with First Nations communities (10). Through engagement, our project has brought together both qualitative and quantitative First Nationsspecific research on prenatal opioid exposure. We have combined different types of information from different sources to provide a multidimensional and comprehensive picture of prenatal opioid exposure in the participating First Nations communities.

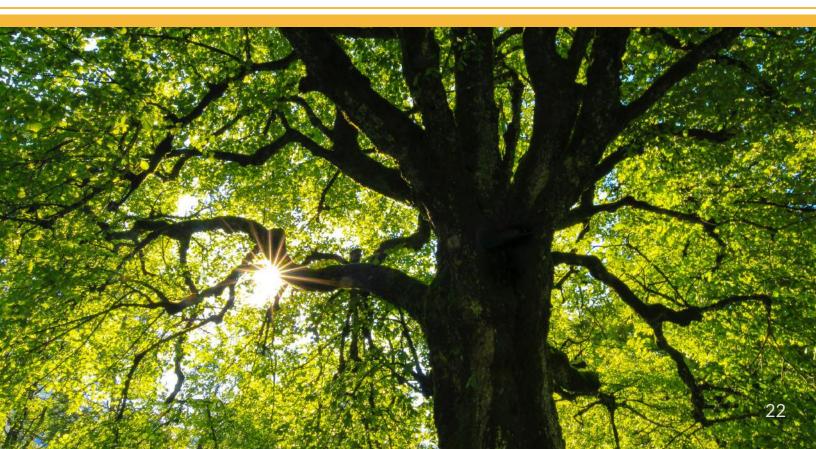
This collaborative work features the strengths, resources, and strategies necessary to heal and further build resilience in communities to address prenatal opioid exposure. This report also details the prevalence of prenatal opioid exposure and maternal and infant characteristics, while illustrating the widespread intergenerational impact through stories and shared experiences. This information may be used by First Nations communities to continue their intergenerational healing.



Available evidence on prenatal opioid exposure and neonatal abstinence syndrome

This section is a review of the literature and available information on prenatal opioid exposure and related topics. Throughout this project, communities have expressed a strong need for more accessible research on prenatal opioid exposure. Some information may ring true to many and validate experiences and knowledge. In other instances, it may be a reason to pause and reflect on information contrary to what a person or community has experienced. Taken together, the First Nations-specific results and the literature review provide helpful information that can further support the health of children, mothers, families, and communities.

All information presented in these sections is from available research and clinical guidelines. Before making any medical decisions regarding prenatal opioid exposure or related health concerns, it is best to consult with a healthcare provider.



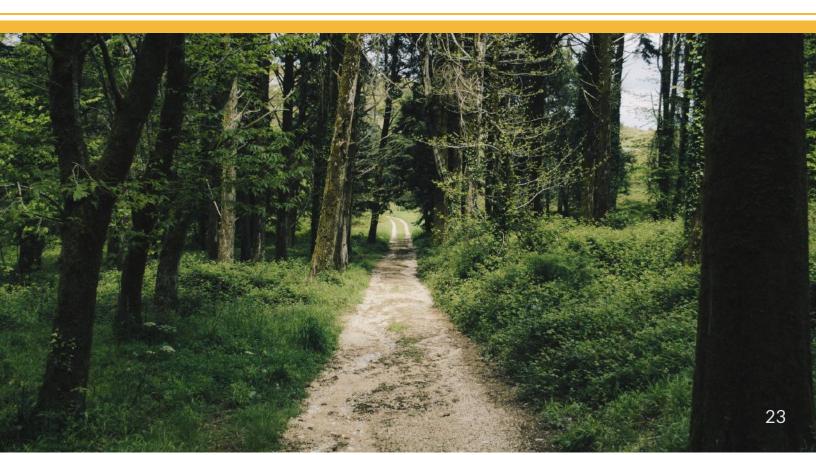
The opioid crisis

The global opioid crisis is harming many countries (12). The opioid epidemic impacts community safety, stability, and social well-being (12,13). Canada has been impacted greatly by this epidemic (14). Between 2016 and the end of 2020, there were over 21,000 apparent opioid overdose deaths (15). Almost all these deaths (96%) were accidental (15) which is why people prefer the word toxicity to overdose. There is evidence that opioid toxicity deaths have increased since the start of the COVID-19 pandemic. Over 5,000 people died from opioid toxicity in the first nine months of the pandemic, which is almost a 90% increase from the same period in 2019 (15).

Three connected problems have led to this crisis:

- 1. Increased prescription of opioids for the management of long-lasting pain
- 2. An increase in prescription opioid use for purposes other than intended or prescribed
- 3. An increase in the availability of powerful illegally obtained opioids such as fentanyl

In Canada, there is growing concern regarding opioid-related harm and deaths among seniors, pregnant women, youth, and Indigenous people (13-17).



Prenatal opioid exposure, neonatal abstinence syndrome, and children

Opioid use during pregnancy has risen dramatically over the past two decades (18). Prenatal opioid exposure is when babies are exposed to opioids before being born. This can happen when a mother who is pregnant:

- Receives opioid agonist therapy such as methadone or buprenorphine
- Uses opioids that were prescribed to help control pain
- Uses opioids that were made or obtained illegally

Neonatal abstinence syndrome

Neonatal abstinence syndrome (also referred to as neonatal opioid withdrawal syndrome or NOWS) is a withdrawal syndrome that is seen in some babies with prenatal opioid exposure. Common symptoms of withdrawal in babies include inconsolable high-pitch crying, tremors, irritability, and poor feeding. Less common are fever, vomiting, diarrhea, weight loss, and seizures (19).

Not all babies exposed to opioids prenatally experience signs of withdrawal and are diagnosed with neonatal abstinence syndrome. Neonatal abstinence syndrome occurs in 45% of babies with any kind of prenatal opioid exposure (20). The type of opioid used, the timing of use in the pregnancy, how often the opioids were used, how the mother's body breaks down drugs, and whether there were other substances used during pregnancy, can determine whether a baby shows signs of neonatal abstinence syndrome. Neonatal abstinence syndrome is very common in infants whose mothers are being treated with opioid agonist therapy, especially methadone, but there is strong consensus that this therapy is important for both the mother's and infant's health and should not be discontinued during pregnancy (21,22).

What is more, the presence of neonatal abstinence syndrome in infancy does not necessarily indicate that the child will have health or learning challenges later. Health and learning challenges can arise in children with prenatal opioid exposure regardless of whether neonatal abstinence syndrome was present at birth (23,24).

Impact of prenatal opioid exposure on babies and children

Researchers still have a lot to learn about the long-term impacts of prenatal opioid exposure and neonatal abstinence syndrome on children's health and development. Recent research (23-28) has shown that children born to mothers who use opioids during pregnancy can experience challenges related to:

- Prematurity at birth, which may put the baby at risk of other problems such as chronic lung issues
- Behaviour
- Social and peer interactions
- Learning disabilities
- Mental health
- Speech and language
- Movement
- Vision

Some of these challenges arise shortly after birth, while others become increasingly noticeable as children grow older. Without support and intervention, many of these challenges can worsen over time (27-29). Babies with prenatal opioid exposure are also at somewhat higher risk of sudden infant death but it is not known why; however, the overall risk is still very low. There is emerging evidence that prenatal opioid exposure may put babies at a slightly higher risk of some malformations such as oral clefts and heart defects (30).



Impact of environmental risk factors on child development

Of the long-term developmental outcomes that have been seen in some children with prenatal opioid exposure, many factors during pregnancy or after birth also play a role. These environmental risk factors are conditions that can shape a child's health and development, such as:

- Exposure to other substances such as alcohol during pregnancy
- Chronic stress on the mother while pregnant
- Poor nutrition during pregnancy
- Poverty
- Instability in the home environment
- Caregiver quality
- Maternal mental health

These other important contexts have an impact on child development even when there is no prenatal opioid exposure (26,27,29,31,32). In fact, some studies on the influence of these environmental factors have shown that they can impact child development equally or more than exposure to opioids (26,27,33,34). However, other research shows that prenatal opioid exposure can still be associated with developmental difficulties, even when there are minimal environmental risk factors (25,27,29). Most of the studies on prenatal opioid use and child development are in those exposed to opioid agonist therapy.

In any case, it is clear from the evidence that children exposed to opioids during pregnancy may experience a variety of health and developmental challenges throughout childhood. These outcomes are likely due to a combination of prenatal opioid exposure and environmental risk factors. Supporting mothers in accessing appropriate healthcare, before and during pregnancy, is important for both the mother and her child.



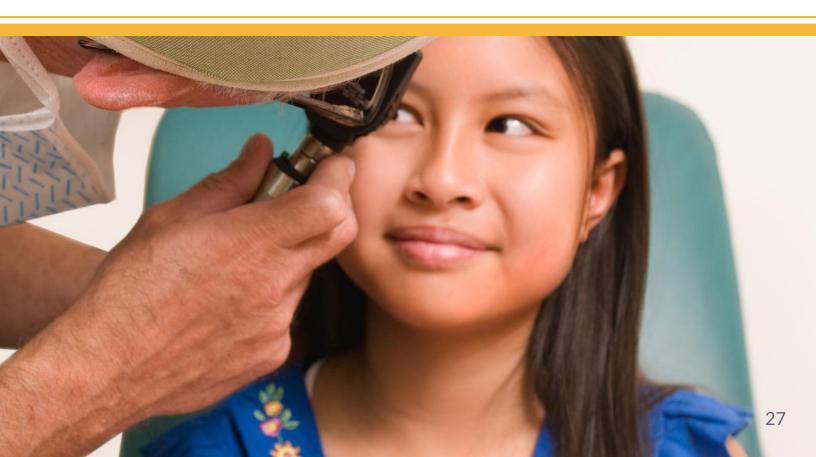
Recommendations on developmental screening

Screening for developmental issues in children who have been exposed to opioids prenatally is important so that difficulties can be identified and addressed early. The American Academy of Pediatrics (35) and Queensland Health in Australia (36) have guidelines recommending routine developmental assessments be conducted by a primary care provider such as a doctor or nurse practitioner. The Canadian Pediatric Society guideline (35) is less proscriptive about regular developmental assessments. Queensland Health offers more specific recommendations, including follow-up appointments for at least 12 to 24 months of age as well as an eye exam (36).

The American Academy of Pediatrics worked with representatives from the Indian Health Service in the United States to create standards of care for treating mothers and babies affected by prenatal opioid exposure (37). The recommendations include standardized developmental screening tests administered regularly at the 9-, 18-, and 24- or 30-month well-child visits.

Based on their review of existing studies (38), members of our research team are advocating that Canadian guidelines regarding the long-term care of children with prenatal opioid exposure should be strengthened to include:

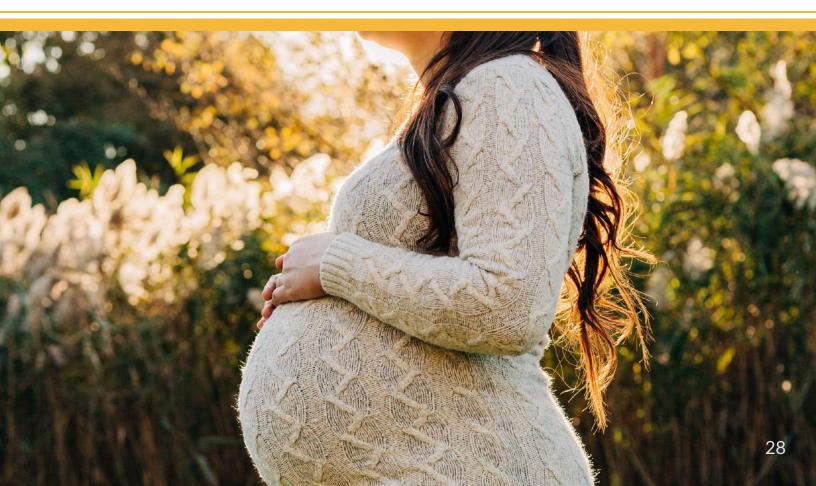
- Standardized developmental screening, including detailed guidance on the timing of assessments and validated screening tools
- A comprehensive eye exam



Maternal health

Prevention and early intervention

Pregnancy and pre-pregnancy are important times to offer treatment and support to Indigenous women who use drugs or may have become dependent on or addicted to prescription opioids (37). The best way to help develop resilient and healthy future generations is to start by supporting women's health before and during pregnancy (2,37). Recent research on prenatal opioid exposure shows that the mother's health during pregnancy, and the social situation she is in, can affect her child's development even more than prenatal opioid exposure (29). Supporting women's physical and mental health before, during, and after pregnancy is important when developing strategies to help prevent prenatal opioid exposure and to reduce challenges for children who are exposed to opioids.



Treatment of opioid use disorder

Opioid use disorder gives people an overpowering desire to use opioids and leads to higher amounts being needed for the same pain control or feeling of well-being — in other words, higher tolerance. Part of the diagnosis of opioid use disorder relates to the extent to which opioid use interferes with functioning, such as the ability to work or care for oneself or one's family. People with opioid use disorder experience a withdrawal syndrome when opioids are stopped. Opioid use disorder includes both dependence and addiction. Addiction is the most severe form of the disorder.

Strategies to help individuals who have opioid use disorder include:

- 1. Opioid agonist therapy
- 2. Psychosocial interventions
- 3. Social programs and resources
- 4. Cultural programs

Bringing these strategies together is called integrated treatment and has been shown to improve treatment results (39).

Opioid agonist treatment

Opioid agonist therapy is when healthcare providers prescribe medications such as methadone or buprenorphine to prevent withdrawal and reduce cravings for opioid drugs. Opioid agonist therapy can help stabilize people's lives and reduces harms related to drug use (40).

Although there is the potential for some negative effects of prenatal opioid exposure on children's health and development, it is not recommended that pregnant women who are being treated for opioid use disorder or who use opioids regularly for pain, stop taking their medication during pregnancy. This could result in severe withdrawal, relapse, and the possibility of fatal and non-fatal toxicity, or other pregnancy complications for the mother.

The benefits of opioid agonist therapy

Opioid agonist therapy is the standard of care for pregnant women with opioid use disorder. It has been shown to eliminate or substantially reduce the use of illegal opioids and related issues, leading to improved health for mother and baby (22). In studies comparing methadone treatment to untreated opioid use or medically managed withdrawal, methadone treatment has much better outcomes for the baby. These benefits include (22,25,41,42):

- Reduced prematurity
- Higher rate of live birth
- · Higher birth weight
- Earlier discharge from hospital
- Reduced fetal stress

Types of opioid agonist therapy

Most information on opioid agonist therapy in pregnancy has focused on methadone. Buprenorphine, a partial opioid agonist, can be used either alone (Subutex) or with naloxone (Suboxone). For many years, it was not recommended that pregnant women take buprenorphine, especially Suboxone. However, more recent studies have recognized that it is both safe, and associated with better infant outcomes, such as less prematurity and neonatal abstinence syndrome, than methadone (21). Professional guidelines now recommend that if pregnant women are on buprenorphine, they should stay on it rather than switching to methadone (22,42). While weaning any opioid agonist therapy during pregnancy is not recommended, it is generally recognized that buprenorphine weaning is better tolerated than methadone, which a woman could eventually do, when appropriate, after the birth. Unlike methadone treatment, taking either buprenorphine product does not require daily trips to a clinic. However, methadone may be a better choice for some people depending on their symptoms and circumstances.



Opioid agonist therapy and neonatal abstinence syndrome

While opioid agonist therapy is an effective treatment for pregnant women who have opioid use disorder, it often causes babies to experience symptoms of withdrawal and to be diagnosed with neonatal abstinence syndrome. It is important to recognize that neonatal abstinence syndrome is not the same as a baby having a substance use disorder or being born "addicted," which is sometimes the word that people use which is an incorrect term. It is a treatable and temporary condition. Many babies will not need medication, as their symptoms respond to things like skin-to-skin contact, swaddling, and breastfeeding, also known as the "eat, sleep, console" method (43).

These strategies are facilitated if hospitals offer "rooming-in," where newborns are able to stay in the same room as the mother. Some infants need medication such as low-dose opioids like morphine and are then weaned off under medical supervision. Sometimes, withdrawal symptoms associated with opioid agonist therapy persist more than those from illegally obtained opioids, because the drugs last longer in the body (44,45). However, the challenges that babies and mothers experience due to opioid agonist therapy are much smaller compared to those from illegally obtained opioids. Short-acting illegal opioids cause a harmful cycle of intoxication and then withdrawal symptoms for pregnant mothers, which can cause pregnancy complications and increase the risk of toxicity (41,44,45).

Research suggests that there is little to no relationship between opioid agonist dose and the severity of neonatal abstinence syndrome (33,44,46,47). Pregnant women should be on the lowest effective dose of opioid agonist therapy, but the risk of relapse due to too low of dose needs to be considered. A dose that completely, or almost completely, reduces cravings is safest for baby and mother to reduce the risk of relapse (45).



Psychosocial interventions for opioid dependence and addiction

Psychosocial interventions, such as therapy, are often delivered by psychologists, social workers, mental health counsellors, and community health workers (6). Psychosocial therapies include a variety of approaches, including therapy to increase motivation, cognitive behavioural therapy that addresses unhealthy thinking patterns, and contingency management where people are rewarded for positive behaviour change. These therapies are often delivered by a trained healthcare professional. Mutual self-help groups such as narcotics anonymous or other group-based programs are also very helpful in treating opioid addiction (6). Mutual self-help groups are peer-led and community-based. They provide members emotional, social, and practical support from people who share similar experiences. Research in Indigenous communities has shown these groups can also expand people's social networks, providing friendships with people who are not using substances, which is important for changing people's drug use behaviour (48).

There is strong evidence that opioid agonist therapy is very effective at detoxification and preventing relapse, but when psychosocial approaches are added, people are more likely to continue with their opioid agonist therapy (49-51).



Social programs and resources

Treating opioid use disorder and underlying trauma is more effective when mothers' basic needs are met (49,50). Mothers in poverty are at an increased risk of not being successful in the treatment of their opioid use disorder if they do not have appropriate services and resources (50). Growing evidence indicates that housing security is a very important factor in mothers seeking out and staying on a treatment plan (49,52). Stable housing is also critical for the health and healing of children whose parents have opioid use disorder (51). Transportation is important in the treatment of opioid use disorder, and while public transit can be helpful, a better option, if feasible, is transportation that is tailored to the treatment program (51,52). A transportation service that picks people up at their homes and takes them directly to appointments or treatment is seen as ideal (49). In many treatment programs, childcare is a highly prioritized service by patients and is associated with mothers staying on a treatment plan (49,53). Childcare provides mothers time to attend treatment, focus on their health, and needed respite from the challenges of parenting. Assistance in securing employment can also be an important service on the path to recovery (49,52).

Cultural programs

Cultural programs can be a critical aspect of recovery for many Indigenous people (3,54,55). Many Indigenous communities and healthcare professionals integrate holistic, spiritual, and culturally based forms of care to address substance use and addictions (54). These programs and interventions are led by people who are recognized as traditional practitioners, community members, and spiritual leaders, and who will facilitate cultural activities (16,55). Cultural programs are often designed to be specific to a place, person, and time, to increase their effectiveness (54,55). In many cases, these approaches are blended with Western healthcare practices. Cultural approaches to treating substance use and addictions support culturally safe care, and encourage connection and good relations in communities (3,55). Available research indicates that integrating Indigenous culturally based care and Western care results in a reduction in substance use and improvements in spiritual, social, emotional, mental, and physical wellness (56,57).



Trauma-informed approach

Interventions are best delivered through a trauma-informed approach (58). Trauma-informed care recognizes the impact of trauma on families, groups, organizations, communities, and individuals, as well as on the professionals who help them. Trauma includes an event(s) or experience(s) that create long-lasting adverse effects on the individual's physical, social, emotional, mental, and spiritual well-being, such as physical, emotional, and sexual abuse (59). Trauma plays a role in mental health and substance use disorders and should be systematically addressed in prevention, treatment, and recovery settings (59).

Addressing the barriers to treatment of opioid use disorder

In Canada, there is limited access to all types of treatment and programs for people who use opioids (6). Access to opioid agonist therapy is limited due to a lack of trained medical prescribers and addiction specialists (6,13,14). Having to travel long distances on a regular basis, sometimes daily, to access opioid agonist therapy is a barrier for many Canadians. This is especially true for First Nations people who may live far away from treatment sites. Even when distance is not an issue, it can still be hard for Indigenous people to access treatment due to a lack of culturally safe care (6,16). Barriers to psychosocial interventions are similar; long distances and a lack of qualified providers prevent many people from accessing this type of care (6).

Addressing the opioid epidemic will require increasing access to treatment and educating those who may be able to support people with opioid use disorder. It is important to educate healthcare providers, patients, families, and communities about the crisis and evidence-based treatments (6). Similarly, addressing the stigma and shame associated with opioid use will be critical to ending the crisis (13,49,60). The adoption of non-stigmatizing attitudes and non-shaming behaviours by clinicians, leaders, and families is important to empower people to seek out and stay committed to treatment (12,49). Lastly, investing in the lives of people who use opioids is important in order to create an environment of healing, recovery, and stability. Without the basic needs of life, such as housing and food, people are less likely to seek out treatment and are more likely to die from toxicity (6).

Programs for children with prenatal opioid exposure and their families

Child removal practices that allow for racism and discrimination in child protective services and healthcare have led to the disproportionate separation of Indigenous mothers and children at birth (61). The separation of mothers from their children disrupts attachment, a crucial component of healthy child development. This interruption to child development, combined with intergenerational trauma from the residential school system, can contribute to intergenerational family violence, parenting stress, and substance use to numb the pain of loss (57). There are changes in a number of Canadian provinces to transition child welfare services to First Nations agencies. In Ontario, the practice of birth alerts has been discontinued. In addition, while the safety of the child needs to be prioritized, there are programs and approaches that can minimize separation and support mothers and families. These programs help address these intergenerational family issues and support children and families affected by opioids. Two common program models include integrated programs and parenting programs.



Integrated programs

Integrated programs are designed to address women's physical and mental health, socio-economic well-being, and substance use, while also providing care for their babies and children (49,52). Integrated programs provide holistic support in a coordinated way that addresses the unique needs of the mothers and children, ideally in one location (49). Research shows that integrated programs improve results for maternal mental health, attendance at prenatal visits, parenting skills, and child health. An integrated approach is aligned with the promotion of wellness from an Indigenous perspective, where a healthy person has a balance of spirit, emotion, mind, and body (62). Integrated programs can help individuals and families regain balance in these domains.

Features of integrated programs include (49,53):

- Use of a patient navigator
- Home visits
- Group-based treatment and support
- Parenting groups
- Parenting training
- Childcare
- Mental health support for mothers and children
- Cultural programming for mothers and children
- Primary care
- Prenatal care
- Care coordination with other social services
- Life skills training
- Food security support
- Housing support
- Transportation support



Parenting programs

While integrated programs often include parenting training, parenting programs alone can also have positive impacts. The complex effects of intergenerational trauma and parental substance use can be addressed in part through strengthening parenting capacity among Indigenous families (56,57,63). Often, when parents are using substances, they are not using healthy parenting methods. This can be because of substance use or other related reasons like lack of parenting skills, low parenting confidence, high stress, and isolation (5). These issues can lead to parenting inconsistency, emotional neglect, and sometimes abuse (64). If the child has behavioural challenges, parenting can be harder, especially when substance use is involved (64).

Parenting programs have been shown to have many positive outcomes for parents with opioid use disorder and children impacted by prenatal opioid exposure (64). Parents report less stress and show better child management practices after taking part in parenting programs (65). By increasing social support and building healthy social networks with other parents who do not use drugs, parents feel less isolated, and they engage in less risk-taking behaviour such as substance use (66). All these actions lead to reduced child neglect and abuse, as well as improvements in parent-child relationships and child behaviour (67).

Parenting programs designed specifically for Indigenous parents who have substance use disorders have similar positive outcomes as other parenting programs but can also feature approaches that increase connection to culture, healing from intergenerational trauma, building trust through cultural safety, and self-determination of parents and communities (57). These approaches are being increasingly utilized to support Indigenous families impacted by substance use (54,56,57).



Examples of programs for children with prenatal opioid exposure and their families

Organization	Program Name	Description of Program	Outcomes of Program † indicates increase ↓indicates decrease	
Integrated Programs				
Vancouver Aboriginal Health Society (Canada)	Indigenous Early Years: Sheway (68)	Medical care, parenting support, counselling, social work, infant development program, basic needs support.	↑ access to medical care and housing, up to date immunizations ↓ substance use, nutritional concerns	
Mothercraft: Shaping Children's Lives Through Learning (Canada)	Early Intervention Program: Breaking the Cycle (69,70)	Medical care, addictions counselling, development screening and assessment, early childhood interventions, parenting support, basic needs support.	↑ parenting skills, child development, parental mental health, access to housing ↓ substance use, rates of separation of mother and child	
Sioux Lookout Meno Ya Win Health Centre (Canada)	Sioux Lookout Meno Ya Win Health Centre Integrated Pregnancy Program (71)	Medical care, addictions counselling and treatment for mothers and partners, traditional healing practices, development screening and assessment.	↑ opioid agonist treatment retention ↓ rates of prenatal opioid exposure, positive drug screening tests	

Organization	Program Name	Description of Program	Outcomes of Program ↑ indicates increase ↓indicates decrease	
Parenting Programs				
Parents Under Pressure (Australia)	Parents Under Pressure (64,65)	Home-based program with a therapist; teaches parenting skills and mindfulness techniques; 12 sessions.	↑ parental mental health ↓ substance use, child abuse potential, child behaviour issues	
PCIT International (USA)	Parent-Child Interaction Therapy (72)	Live coaching sessions using a playroom and observation room with a therapist; developed for families with children with behaviour issues; minimum of three sessions.	↑parenting skills ↓ child behaviour issues	
Johns Hopkins Center for Indigenous Health (USA)	Family Spirit (63,73)	Culturally appropriate parenting lessons delivered during weekly home visits to Native American mothers and pregnant women.	↑ parental mental health, parenting skills, ↓ child behaviour issues, substance use	

Navigating this report

The findings of this report are in three sections.

The **first section** of the report shares both qualitative and quantitative findings on the impacts and issues associated with prenatal opioid exposure.

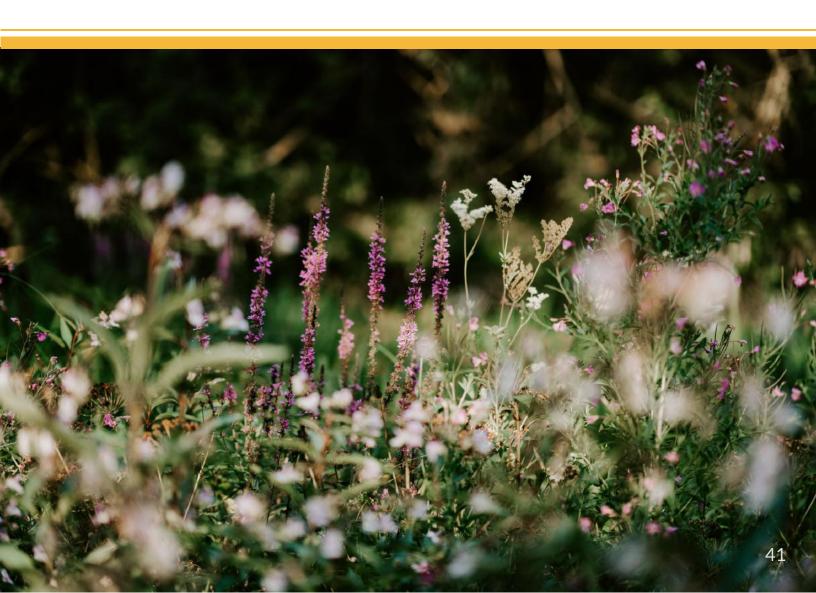
The **second section** shares the strengths that already exist that are helping communities address prenatal opioid exposure. These findings are qualitative.

The **third section** provides community-developed strategies that could be implemented to further address prenatal opioid exposure. These findings are qualitative.

The qualitative findings are shared through quotes and descriptions. The quantitative data is shared through visualizations and numerical descriptions.



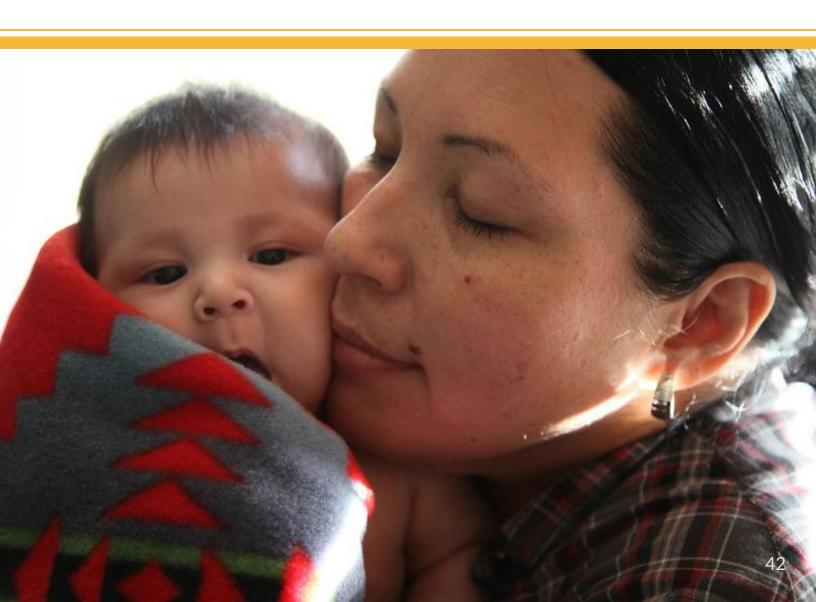




The numbers behind prenatal opioid exposure and neonatal abstinence syndrome

This section includes the main quantitative findings related to prenatal opioid exposure and neonatal abstinence syndrome for the 13 participating First Nations combined.

There are more statistics and results in the Detailed Quantitative Appendix at the end of this document. Please see the appendix for a comprehensive set of definitions, methods, and other findings.



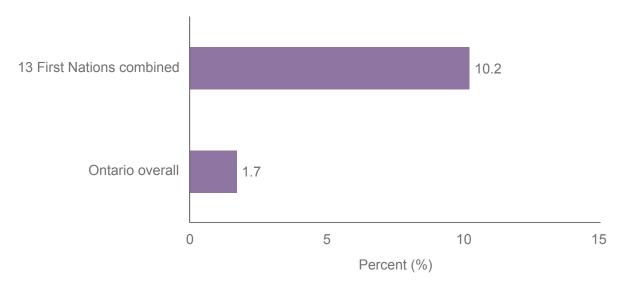
Prenatal opioid exposure

10.2% of babies born between 2013 and 2019 had prenatal opioid exposure.

This works out to **279 babies over 7 years** with prenatal opioid exposure. This number includes babies who lived within the 13 First Nations communities, whether they were registered or not, as well as registered babies who lived outside the communities but within Ontario.

The percentage of babies with prenatal opioid exposure was **considerably higher** for the 13 First Nations than for Ontario overall.

Percentage of babies born between 2013 and 2019 with prenatal opioid exposure



Living within community compared to living outside community

The percentage of babies with **prenatal opioid exposure** was **similar** within and outside the 13 First Nations.



VS



within the 13 First Nations communities

includes babies living within the communities (registered or not)

This works out to 111 babies.

outside the 13 First Nations communities

includes registered babies living outside the communities and within Ontario

This works out to 168 babies.

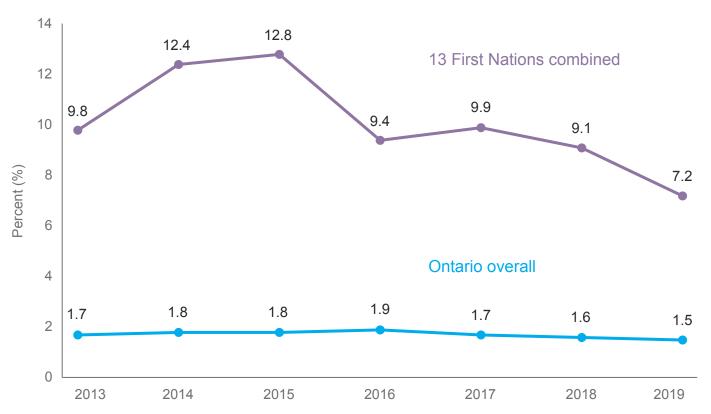


Change over time

This graph shows how the percentage of babies with prenatal opioid exposure has changed over time.

The percentage **increased** for the 13 First Nations between 2013 and 2015 and **decreased considerably** thereafter. The percentage remained relatively stable for Ontario overall between 2013 and 2019.

Percentage of babies with prenatal opioid exposure born between 2013 and 2019



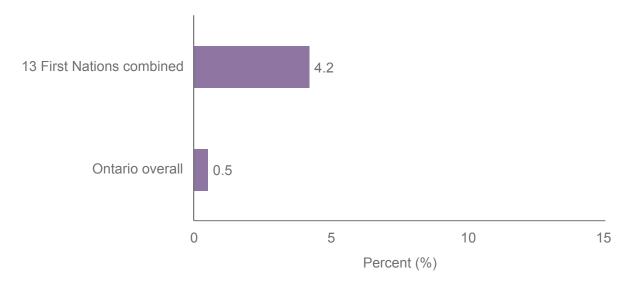
Neonatal abstinence syndrome

4.2% of babies born between 2003 and 2019 were diagnosed with neonatal abstinence syndrome.

This works out to **337 babies over 17 years** who were diagnosed with neonatal abstinence syndrome. This number includes babies who lived within the 13 First Nations communities, whether they were registered or not, as well as registered babies who lived outside the community and within Ontario.

The percentage of babies diagnosed with neonatal abstinence syndrome was **considerably higher** for the 13 First Nations than for Ontario overall.

Percentage of babies born between 2003 and 2019 who were diagnosed with neonatal abstinence syndrome



Living within community compared to living outside community

The percentage of babies diagnosed with **neonatal abstinence syndrome** was **similar** within and outside the 13 First Nations communities.



VS



within the 13 First Nations communities

includes babies living within the communities (registered or not)

This works out to 140 babies.

outside the 13 First Nations communities

includes registered babies living outside the communities and within Ontario

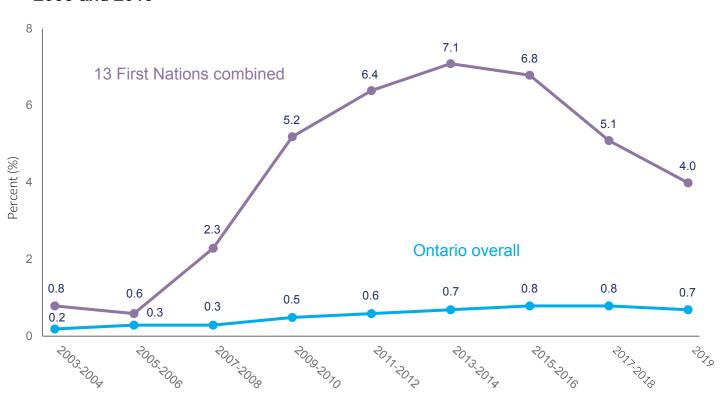
This works out to 197 babies.



Change over time

The percentage of babies diagnosed with neonatal abstinence syndrome **increased considerably** for the 13 First Nations between 2005 and 2014 and **decreased considerably** thereafter. The percentage increased steadily for Ontario overall between 2003 and 2019.

Percentage of babies diagnosed with neonatal abstinence syndrome born between 2003 and 2019



What we learned about babies

On average, babies with prenatal opioid exposure from the 13 First Nations:

- weighed 7 pounds at birth
- stayed in hospital for 6 days after birth

Compared to babies without prenatal opioid exposure, babies with prenatal opioid exposure were **more likely** to:



Be born early (before 37 weeks)



Need a higher level of care (neonatal intensive care unit)



Stay longer in hospital after birth



Be removed from mother's care at birth

These findings are common among all babies exposed to opioids prenatally, not just babies from the 13 First Nations communities.

What we learned about mothers

On average, mothers from the 13 First Nations who used opioids or were treated for opioid use disorder during pregnancy:

- were 27.7 years old
- had 2 previous children

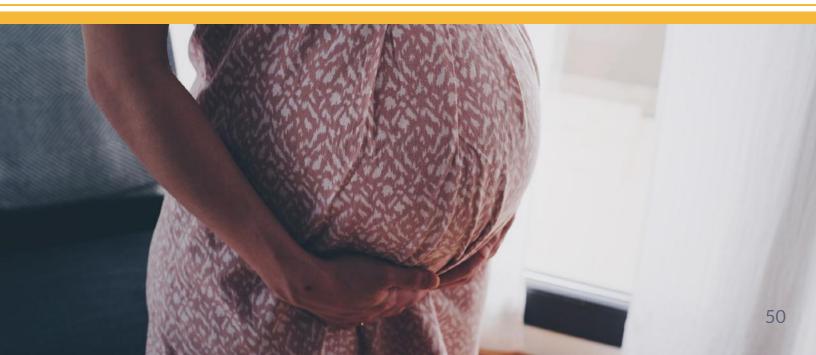
Compared to mothers who did not use opioids during pregnancy, mothers who used opioids during pregnancy were **more likely** to receive care at a hospital in the two years before delivery for:



Substance use or addictions



Mental health



Opioid use before, during, and after pregnancy

When looking at mothers from the 13 First Nations who used opioids during pregnancy:

One year before pregnancy

- Almost 6 in 10 were prescribed treatment for opioid use disorder
- Just under 2 in 10 were prescribed opioids for pain control

During pregnancy

- Almost 7 in 10 were prescribed treatment for opioid use disorder
- Almost 2 in 10 were prescribed opioids for pain control
- Almost 2 in 10 were using opioids that were likely illegally obtained

One year after giving birth

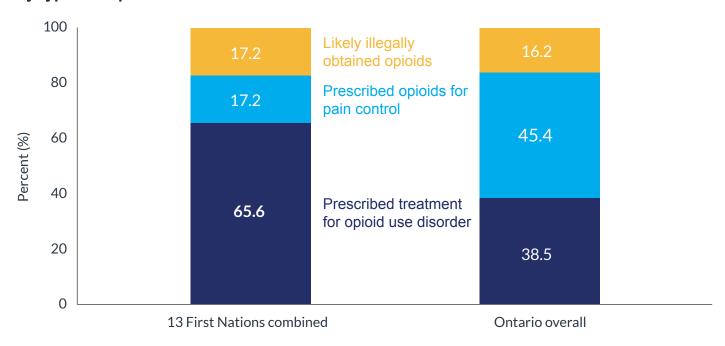
- Just over 6 in 10 were prescribed treatment for opioid use disorder
- Just over 2 in 10 were prescribed opioids for pain control

Opioid use during pregnancy by type

The type of opioid use during pregnancy between 2013 and 2019 was very different for the 13 First Nations than for Ontario overall. For the 13 First Nations, opioid use among mothers during pregnancy in the form of:

- Prescribed treatment for opioid use disorder was considerably higher than for Ontario overall
- Opioids prescribed for pain control was considerably lower than for Ontario overall
- Likely illegally obtained opioids was **similar** to Ontario overall

Opioid use during pregnancy of mothers who gave birth between 2013 and 2019, by type of exposure



In addition to those using illegally obtained opioids, women who are prescribed opioids for pain control for long periods of time may have undiagnosed opioid dependence or addiction. For women with opioid dependence or addiction, treatment such as methadone and buprenorphine is a healthier option for mothers and babies.

Change over time

Among mothers who were treated for opioid use disorder, there were changes over time in which medications were prescribed.

The percentage who were prescribed methadone between 2013 and 2016 and between 2017 and 2019 **decreased** (from 90.1% to 80.0%) for the 13 First Nations and for Ontario overall (from 81.0% to 65.1%). This means that the percentage of mothers who were prescribed buprenorphine* **increased** for the 13 First Nations (from 9.9% to 20.0%) and for Ontario overall (from 19.0% to 34.9%).

9.9% of mothers were prescribed buprenorphine from 2013–2016.

20.0% of mothers were prescribed buprenorphine from 2017–2019.



These findings reflect the growing evidence that supports both the safety of buprenorphine treatment for opioid use disorder during pregnancy, and the better baby outcomes compared with methadone treatment. However, prescribing for buprenorphine in First Nations communities is lower overall and did not increase as much over the study period compared to the rest of Ontario. While decisions around which medication to use may reflect the healthcare provider's recommendation and the mother's preference, it also relates to which treatments are accessible.

^{*} includes only buprenorphine/naloxone

The impact of opioid use on communities

Prenatal opioid exposure and neonatal abstinence syndrome impact entire communities. The impacts are far-reaching and intertwine with the opioid crisis in Canada and the ongoing intergenerational trauma in Indigenous communities. Participants spoke about the increase of opioid use in First Nations communities over the last 10 to 15 years. Most communities reported seeing a transition from the use of alcohol and marijuana to opioids and other harder drugs. The impacts of the drug trade and substance use in the community were very visible. Participants spoke about higher rates of crime, suicide, and death due to overdose. In addition, many participants expressed concern that youth in their community were experimenting with substances, including prescription medication, at a young age. Most thought these issues were getting worse year by year and were troubled that opioid use was becoming increasingly normalized. Geographic location was an issue for some First Nations communities. People reported increased access to drugs due to being close to the Canada-United States border, or geographic isolation resulting in higher rates of unemployment, poverty, and substance use. Over time, participants reported a large increase in the number of women using opioids while pregnant. Many spoke about how quickly one can fall into addiction, become pregnant, and not be able to stop.

"The problem is getting bigger every year. Within the last five years or so, it just seems rampant for this population of young women. That translates into more that are pregnant that I'm seeing are using opioids. It's becoming worse."

"The rapid growth of the amount of drugs and the variety of drugs grew way faster than our services could keep up. Knowing what's out there and providing services to help people who may suffer with addiction or even the trauma; there's more drugs and it's easier to access than it would be to seek help."



In almost all communities, participants indicated that opioids were cheaper and more accessible than other substances. They discussed the highly addictive nature of opioids and how it is one of the hardest drugs to stop because of the severe withdrawal symptoms. Participants commented that drug dealers want to make money and do not care about the impacts of drug use on people's lives. Across communities, members pointed to the lack of accountability from some health professionals for their role in the opioid crisis in their communities and specifically, the issue of doctors overprescribing opioids to First Nations people. Some participants also commented on opioid agonist therapy being overprescribed to First Nations people, women being kept on higher doses for long periods of time, and a lack of plans for weaning. Many saw it as a targeted practice of doctors "preying on the weak" to make money. The Non-Insured Health Benefits program drug coverage that registered First Nations individuals in Ontario receive was also thought to play a role. In contrast, in some communities, participants noted a link in the rise in drug use to members receiving large land claim settlements.

The link between poverty and opioids was discussed by many people. In numerous communities, participants shared that most community members live in poverty. This leads some to sell their prescription opioids for money or to buy heavier drugs such as cocaine, heroin, and crystal meth. In particular, some seniors sell their medication for added income due to the high cost of living, although participants were concerned that their communities are turning a blind eye to the issue. However, it is important to note that many participants shared stories of opioid use being an issue for all people, including those with good reputations or high social status in the community.

"It's more easily available for people to get a prescription for opioids than it would be for anything, and it's also cheaper to prescribe Indigenous people opioids than to go through any other rounds of treatment because NIHB will cover it, whereas NIHB won't cover holistic healthcare."

"I'm going back to this one individual where it was a back problem, back surgery, and pain control for the back surgery. Codeine wasn't working and, therefore, the surgeon got this new drug. 'This is gonna take care of your pain,' and that's many years ago. And it did take care of the pain, but it led into immediate addiction."

"You have elders and seniors that sell their pills to get some extra cash. We're all turning a blind eye to it. And when the people do try to address it, they are pretty much removed from their jobs. There's a lot of people in our community that have tried to address it."

"Poverty; we're an impoverished community. Our wages aren't even living wage and 75% of our community probably lives on some type of assistance. Even the workers still qualify for assistance because our wage is so low, so people live in poverty and have that need for extra money."

Community safety was an issue brought forth by participants from many communities. Most thought that the increased rate of opioid use influenced the rate of crime and violence in the community. Participants explained that individuals who use opioids and other substances often experienced domestic violence and partake in illegal means to obtain or sell opioids. For example, some community members commented on high rates of sex work. Participants agreed that many engage in this behaviour to support their addiction, and some become pregnant. One community member spoke about issues related to gang-related violence. People shared concerns about high rates of sexual abuse in their communities. Human trafficking was also raised as an issue of concern for a small number of communities.

Participants in every community spoke to the relationship between addiction, individual trauma, and the impacts of intergenerational trauma related to the residential school experience. Most people remarked on the intergenerational cycle of substance use and how people living with trauma might turn to opioids and other substances as a coping mechanism to numb their pain. The legacy of being denied affection and bonding stemming from the abuse in residential schools was another noted factor. Others shared that often people who use opioids are lost and lack a sense of identity and confidence in who they are. All agreed that the challenge is to understand how to stop the cycle of trauma and addiction and prevent the youngest generation from turning to drug use and addiction.

"We live in a positive community for sure, but our crime rate or domestic violence rate has gone up due to people using. We used to be able to not have to lock our doors at night."

"The trauma that happens in people's lives get them to start using, get them to start drinking, is because the trauma in their lives has been so traumatic that they need something to dull the pain. So, they turn to use the drugs, they turn to the opiates, and they try to use that as a coping mechanism."

"Now the children are growing up. They don't think that people care enough about them. I believe that there's a history of deep hurt and pain. It's like the era of residential school. And it's a learned lesson. It's a learned behaviour. It's just more apparent and evident now because before, back say five, maybe even 10 years ago, it was all about alcohol. And now it's about drugs. And we see that growing vastly in our communities."



Many community members indicated that they were afraid for the future generations. Participants from all communities thought that the intergenerational impacts of residential schools on families and parenting impacted youth greatly. Without healthy relationships with parents or role models, youth can grow up feeling like nobody cares about them. Participants cited boredom, peer pressure, low self-esteem, struggles with identity or a sense of belonging, and seeing people around them using substances as factors that can often lead to substance use.

Participants expressed that the opioid epidemic had in some ways eroded the relationships that hold their community together. Other participants thought that it was a lack of community-mindedness and strong relationships that was, in part, causing the increase in opioid use. People remarked that many community members' eyes are closed to the issue of substance use and addictions or they turn away because they do not know what to do. Others thought that families were so tied up trying to deal with issues within their own family that, despite wanting to, they could not help at a community level. People thought that they should be working together to help each other more, but many felt fractured and tired due to suicide, death, loss, and grief resulting from the opioid epidemic.

"So many people, including children impacted by opioid exposure, are going to need mental health services and assisted living and how are we going to afford that as a community? I'm scared we don't have the resources now. It's been a great deal of help with Jordan's Principle, but I don't think that's gonna be there forever. Who's gonna be the workforce? Who's gonna maintain what we have now? I'm scared for us because it's taxing on our resources."

"A big part of it is our community as a whole is kind of ignoring the problem. It's almost becoming normal to see this stuff happening. It's crazy, but it's becoming the norm. I keep saying if our whole community would get on board and admit that we have a huge problem here that we could actually work toward fixing it. Young people are dropping dead. Even community leaders' families are being impacted. I personally thought that would be the wakeup call for the community, but nope. We're waiting for the next funeral."

"I think our eyes are closed, and a lot of our hearts."

The impact of prenatal opioid exposure on babies

Participants felt strongly that the impact of prenatal opioid exposure starts before birth. Community members discussed the impact of maternal opioid use and addiction, poor nutrition, high stress, and lack of prenatal care during pregnancy. Most thought that these risks, individually and together, resulted in a challenging start to life. Participants spoke to the short- and long-term impacts of prenatal opioid exposure. Some babies with prenatal opioid exposure are born healthy and do not experience any long-term impacts. Whereas, for others, the impacts might not be apparent until they are older.

Participants shared experiences watching and supporting infants after birth. They reported that babies with prenatal opioid exposure may be born premature, have a low birth weight, require monitoring and specialized medical care, and have prolonged hospital stays. When diagnosed with neonatal abstinence syndrome at birth, withdrawal symptoms included muscular tightening, inconsolable crying, shaking, tremors, diarrhea, sleep issues, breathing issues, feeding issues, vomiting, sweating, light sensitivity, and sensitivity to touch. Participants discussed the trauma of babies going through the pain and treatment of withdrawal and imagined how distressing this might be for a newborn.

"The physiological impact of opioids on a growing fetus is not favorable. And then my experience, I have a ton of children who are being diagnosed with global development deficiency."

"Emotionally, a lot of the moms are feeling depressed because of their use, which can also affect the baby. I think any emotion that a mom feels during pregnancy the baby feels too, in not only what it's hearing, but what the mom's feeling in her stomach and the stress in the mom's body is going to stress the baby too."



Concern was raised about the impacts of child apprehension on babies and the increased rates of apprehension among Indigenous children. People explained that the Children's Aid Society or an Indigenous child and family well-being agency were often involved when babies are born with neonatal abstinence syndrome. This is often when service providers get notified and get involved with the family. Participants shared that some babies are discharged from hospital into the temporary care of a child services organization and then put into foster care or kinship care. Most thought that child welfare staff, alongside Band Representative and service providers, worked hard to place babies in the community with family if they were unable to remain with the mother, but acknowledged sometimes that does not happen.

Some shared stories of challenging and discriminatory interactions with these agencies resulting in outcomes that were not ideal for the baby or the family. Communities were saddened and frustrated by the high number of infants being cared for outside of the community. Some saw this as an issue of not having enough kinship care or foster families within their community. Others thought that the rules and regulations around fostering were too restrictive and set up in a way that reduced the ability for community members to care for infants.

"Thirteen babies within the last six months have been removed from their house, from their parents. That is a statistic that just came out, 13 of our children removed by CAS. There's some that have stepped up to try and foster, but more than half of them have actually left this community because of opiate addiction."

"They wanted me to leave my baby at the hospital and I didn't wanna leave them there so they gave me a room. I'm pretty sure they helped with that, the CAS."

"I see the change because I see a lot more kids getting scooped up right at birth by CAS. They get taken immediately at the hospital and usually they're given up for adoption because the person that was using doesn't go to treatment, or doesn't get the help they need."

"As far as child protection goes, I've seen a really positive shift as far as our relationship with the CAS. I grew up with my parents being foster parents and it was not good. CAS were not good to work with. They were not great to First Nations families. And I haven't had really any contact with them up until recently but, at this point, with them having an Indigenous team, it's so much better. The relationship is so much better. And the focus is on keeping those families together and supporting parents, kids, families in any way they can."

Community members thought that the biggest impact of prenatal opioid exposure on babies was a lack of secure attachment and bonding, which are vital to infant and child health. Many participants discussed the separation of baby and mother at the hospital due to the baby being apprehended, cared for in the neonatal intensive care unit, or being transferred to another hospital. Some mothers with lived experience shared experiences of not being able to stay at the hospital with their baby due to lack of space or policy. The separation of mother and baby in the hospital also impacts breastfeeding, as well as skin-to-skin contact. All these factors can result in parents and babies being denied the opportunity to form a secure attachment and bond.

"I think early on attachment because skin-to-skin contact is so important when the babies first born. And if they're being taken away and put in NICU for a week, a month, they're not getting that skin-to-skin contact and it's gonna develop into attachment issues."

"At birth, that disconnect, that the bond is not allowed to happen, and that baby's has a real traumatic birth because they're born and, immediately, they're taken away, based on their severity, to be treated for their symptoms that they're experiencing. And I think that that really plays a big part in how they develop and carry on in life. Right into adulthood when they end up getting into the criminal system, and then they get stuck in there. You know, can't get a job because of it, it just goes on and on."

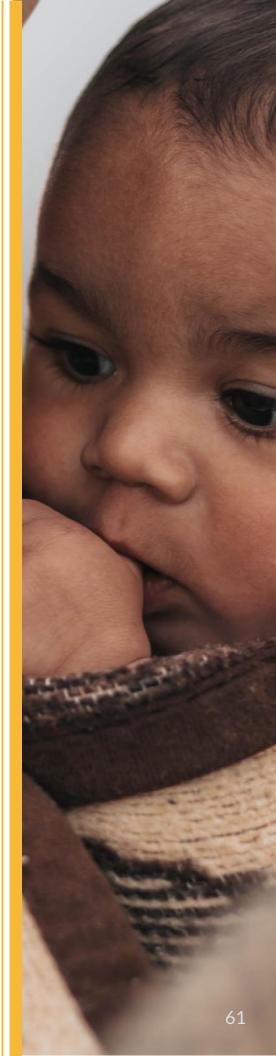


Once home from the hospital, participants expressed concern that the parents' substance use and addictions can lead to infants being neglected, thereby missing the second crucial period for early attachment and bonding. Participants discussed infants' needs not being met because the parents were ill or too busy attending to their own needs. Some participants discussed parents putting their babies in unsafe and unhealthy situations due to their addictions. Another factor that was raised was the intergenerational impact of trauma on early attachment. That is, parents may struggle to establish secure attachments with their baby if they did not experience this with their own primary caregiver.

Most participants spoke of the importance of the first stage of life being a crucial period for child development and were concerned that the combination of complex health issues and lack of attachment would have lifelong impacts on children's development and well-being.

"She wasn't really interested in the baby. I told her many times, 'You have to hold baby. You have to bond with them.' That baby's milestones were later. They walked later, crawled later, sat up later."

"It's really hard for those kids to figure out the world because from their very get-go, they don't have a parent who is trying to connect with them and look after their fundamental basic needs in a way that makes them feel safe, and connected, and loved, and all the things that babies need to develop properly."



The impact of prenatal opioid exposure on children

Prenatal opioid exposure can impact children's physical, social, mental, emotional, and spiritual well-being — and these impacts can be lifelong. Participants who care for and work with children with prenatal opioid exposure discussed the many developmental challenges children experience and the complexities that surround them. They pointed to issues with speech and language, motor development, attention, self-regulation, and hyperactivity. Challenges related to behaviour were also identified. Importantly, many people reported that some children who were exposed to opioids prenatally have no developmental challenges. Some participants remarked on the lack of research on the long-term effects of prenatal opioid exposure.

"Over the years, I get a lot of different difficult situations in my work, and something I've always done is I've gone to see kids at the daycare. Just for the energy. Over the years, I always say I like going because I like seeing those happy eyes. Those beautiful, brown, happy eyes. But I notice some of them happy eyes now aren't happy. They're not focused. You can see developmentally, the delays or difficulties they're having and, you know, they're easier to pick out now. I'm not a professional, but the children's energy is starting to become different. And that's just something I've noticed over the past bit of time."



The most discussed challenge associated with prenatal opioid exposure was related to children's social skills and emotion regulation, including issues with aggression, attention, and impulse control. Participants discussed social challenges such as difficulty making friends and navigating relationships. Likewise, participants shared that they found that children with prenatal opioid exposure often experience high levels of anger and were not easily calmed. Others spoke of children exposed to opioids prenatally being very sensitive, introverted, and somewhat removed. Another topic raised by many was how a lack of attentional capacity, hyperactivity, and an inability to display impulse control interfered with children's ability to learn.

"The kids very often have hyperactivity disorder, learning disabilities, speech delays, and then they're dealing with it in the school system."

"Not being able to control their temper or how they respond to something they don't like. And it's because they're frustrated, and they don't know how to communicate."

"It's almost like they exist in a state of being distressed. That's the norm and that's not our norm at school. So, them trying to fit into our norm, with regulated behaviour, caring for each other, kind words. They don't appear to be comfortable with that. Whether it's the drug impacts or the fact that they're coming from an environment where there's distress, and drug or alcohol addiction. I see a lot of discomfort, and states of distress, and that's like their norm sometimes."

"So if they want to play with somebody they don't just say, 'Hey, you want to play?' They might come and intrude. That's not appropriate to the other students, and then it turns into a negative thing, and then aggression. So, they have a difficult time making friends."



Many community members spoke about the mental health challenges experienced by some children exposed to opioids prenatally. Participants remarked that children are keenly aware of their reality in their homes and in their communities. For example, a participant shared that a child was able to identify when their mother is taking methadone because she is sleepy. In some situations, children are also being trained to care for their parents who are using drugs, or to use a naloxone kit in case their parent overdoses. Anxiety, depression, and low self-esteem were commonly identified as challenges experienced by children with prenatal opioid exposure. Some participants spoke to the fact that children who had been raised by family or caregivers, regardless of how loving, can feel like they don't belong. As children get older, participants said that depression, suicide, and self-harm become concerns. Some participants were concerned that teens who had been exposed to opioids prenatally might be more prone to addiction as a coping mechanism for their mental health issues, leading to another generation of opioid addictions.

"Children know what's going on. We took the child to visit their mom, she was very out of it, she kept falling asleep. And she said 'I'm on methadone. I'm sorry I keep falling asleep.' We talked to the child and said, "I'm really sorry, I hope you weren't too hurt. We've gotta be a little compassionate with your mom. She's trying her best right now.' And the child said, 'It's okay. I like my mom better when she's on methadone. She's better on methadone. She just goes to sleep. When she takes the pills, she's gone. But when she has the drink she's home."

"They see the items; they see all the tools. They know what they're for. They're not stupid."

"And my child still has a hard time, they ask me 'When are you coming home? When are you going to bed? How long are you going to be? Are you going to pick me up at school?' They still feel anxious that I am going to leave them. I say 'I'm sorry' all the time, 'I'm not going anywhere. I'm not leaving.'"

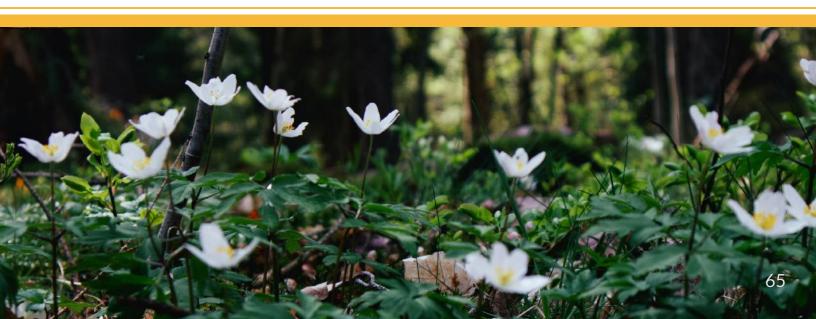
"The hardest thing about raising a child who's been exposed to opioids prenatally is the way they are emotionally. It's like they're always on the verge of being depressed, or in the teen years it seems like they're suicidal, and they're always depressed. And then how confused they are. Who loves and cares for them? How long are they going to be able to stay? And it seems like they feel like they don't belong. It's still not the same as having their parents."

Speech and language delays were frequently cited as common issues that may be associated with prenatal opioid exposure. In almost every community, service providers, teachers, daycare workers, and parents explained that speech and language delays were incredibly challenging because they often led to difficulty in school and social interactions. For example, if children could not communicate their needs in a situation, then they would often become aggressive or physically act out in frustration. Teachers shared the importance of speech and language development in academic development, linking it to reading ability and other crucial academic skills. Many communities discussed the need to hire or bring in speech pathologists.

Participants discussed developmental motor delays that continue from early childhood onward. Participants remarked that children with prenatal opioid exposure often appear to be clumsy and have issues with gross motor skills such as walking, running, and jumping. Other participants identified challenges with fine motor skills such as the pincer grasp used for pencils or utensils. Other concerns that participants discussed included sensitivity to noise. Many people also brought up that autism diagnoses had gone up over the same period that their community had experienced increased rates of prenatal opioid exposure, and that sometimes children with prenatal opioid exposure are diagnosed with autism. Most participants didn't know whether these two issues were related but noted that, together, they have created large service and educational demands for their communities. Sometimes, parents and caregivers were encouraged to keep the diagnosis to increase access to critical supports and services.

"We also see a lot of the children don't have the fine motor skills. They also don't know how to express their feelings. If they're upset, they don't know how to calm themselves down. We also find that speech and language is a big thing."

"So, when those kids transition into elementary school, we had to get them on the list and hire a speech pathologist to come and work with them. That's something that isn't provided to us because we're not a provincially funded school. We're considered a private school, so all of those extra services are at a cost, too, to the First Nation."



People from all communities acknowledged the difficulty in determining if the challenges children exposed to opioids experience are solely associated with prenatal opioid exposure or other factors, such as family and social issues. Many thought that a breakdown of the family unit, trauma, and a lack of nurturing, love, and attachment were at the root of some of the challenges faced by children with prenatal opioid exposure. Regardless, participants touted the benefits of nurturing parents and caregivers, healthy and stable homes, and good social support.

"Sometimes you are not too sure whether all of the effects are specifically because of drugs or substance use, or if some of the effects are linked to the whole bio-psycho-social. Are some of these kids struggling because somebody is struggling with their addiction, and they're not able to meet the needs of their children? But if somebody might have dealt with their addiction five years ago and they've been clean, off of illicit drugs, but they've been part of an opiate dependent program, and they are doing well for themselves, are they able to tend to the baby's needs more? Then you start looking at the whole nature versus nurture. And is some of the difficulties that these children are having specifically due to these substances? Or is some of it the fact that they're going from the hospital back to these homes where they aren't really nurtured properly, they aren't really cared for properly, and the families don't have supports, or the children are being apprehended right at birth and being put into foster care?"

"It's too hard to diagnose. You got to go through a psychoeducational assessment. And you got to go through all these assessments, which themselves are very, very hard to get. So, in the end, you end up with a child who has no diagnosis but has been impartially evaluated and not enough to be able to access any services. And it's because we just don't have the means to do what they expect us to do."



The breakdown of the family unit and children living in an unhealthy and unsafe home environment were large concerns for participants. Many remarked that children are keenly aware of their reality. People shared that many children exposed to opioids parentally, who have parents who are still using, are neglected because the needs of the parent in relation to their addiction get prioritized over the needs of the child. Some shared stories of children being alone for long periods of time at a young age. Without adequate levels of healthy parental interaction, children were not learning the basics of human interaction and lagging behind in physical development. Participants explained it takes nurturing to learn to walk and talk. Others spoke of children being exposed to experiences and situations such as family violence, parental drug use, sex work, police intervention, the death of a parent from an overdose, and poor parenting practices. There can also be drugs and drug paraphernalia such as needles in easy access of children. These experiences result in high levels of trauma for children that have lasting impacts and with which they need help understanding and processing.

"Mother's Day was extremely hard for our students. I feel bad for our moms who don't have their children because the little ones will say, 'I just want my mom.' But mom hasn't been at home for a few days, or mom has been at home for a few days, that's why they're acting out. They don't wanna be at school because they know mom might not be at home when they get back from school. So, if I can get sent home because I threw a chair across the room then at least I get to be with mom. Because mom doesn't take care of me, gram does, but mom is allowed back in the home, and that's what I love the most."

"I look at my children, the trauma they went through when I was addicted. They watched me poke a needle in my arm. They watched me sniff a Perc off the table. And I never looked at the bad and the wrong. What if they would've got one of those needles? What if they would've got one of my morphines? I could've killed my own kids."

"I think there's been a breakdown in our family unit. I've always been educated in child development, and I know the importance of the early years in one's life, and sometimes that early years nurturing and love doesn't always happen. I'm not a scientist or anything, but I think it makes a big difference. There's trauma in a lot of the children's lives and they have anxiety. I see more children with anxiety nowadays than I thought I did, or maybe I didn't notice it when my children were growing up."

Participants explained that, in many cases, children exposed to opioids are often in the care of their grandparents and great-grandparents. For many, grandparents provide a stable and loving home with countless benefits. However, there can still be issues as well as potential harm. For example, sometimes the parent with the addiction will come in and out of the home or sometimes they still live at the home. There can be confusion about parental roles between grandparents and parents. One participant expressed apprehension about children with prenatal opioid exposure being fostered in homes that raised the parent with opioid addiction because they thought there was a higher likelihood of unhealthy childrearing practices that may have contributed to the mother's addiction. There was also discussion about the resentment and animosity in some homes because the grandparents felt compelled to take on a role that they did not necessarily want to be in, which participants reported children could sense. Sometimes grandparents do not have the financial resources, health, skills, or stamina to adequately care for their grandchildren and to help them meet their developmental milestones. For example, some participants discussed children not having enough food, not attending school regularly, and not getting potty-trained.

"So, you can see where now the grandma that's got care would have poor coping because you know damn well what she went through, and what her sisters and brothers went through. So, a lot of that all feeds down into where, why people have poor coping skills, why they would use to begin with to try to bury that, and how painful that must be in there to choose to have to hide that pain, or kill that pain, and have to lose everything out here. That's what I see going on. And I know it's not an easy fix either."

"What I see a lot is these grandparents are stepping up, raising the children, but the parent is still in the home, still using. So, the child is confused on what role there is there, but that child then calls Grandma, Mom. And the person that is the mom is okay with that because it works for them. It helps them stay. That's happening a lot in our community."

"A lot of kids are losing their parents, and that's part of their identity, and to lose that is long-term effects and it's traumatizing. They don't understand at a young age that their parents' choices aren't healthy for them. They only love them. They don't see their flaws, or they don't see what we see, right? They're trying to function, daily, and they're traumatized. Adults can't function well in traumatizing situations, but then we expect children to function well."

Taken together, these collective issues can result in separation anxiety, low self-esteem, sleep issues, feelings of insecurity, resentment, aggression, and issues with trust.

When it comes to supporting the needs of children impacted by prenatal opioid exposure, participants outlined many difficulties. Participants discussed issues associated with diagnoses of developmental delays or behavioural disorders, including parental refusal for assessment, and the children being in the care of someone who does not know the child's or mother's background. The reduced ability to track children's health history when they are transferred to many different homes and foster families was also discussed. The lack of continuity in health records inhibits healthcare providers and foster families from providing necessary care and intervention. Lastly, in some communities, there is a lack of services, support, and resources for children exposed to opioids prenatally. Many identified Jordan's Principle funding as helpful, but still left gaps. Some worried about children transitioning into high school and leaving the community to attend provincially funded schools where there was not the same level of support as provided in the First Nation's elementary schools. This was in part because, in some communities, they have a high level of support for children with diverse needs, and because some children did not have an adequate diagnosis to receive support in a provincially run school.

Participants acknowledged the complexity of the challenges that children exposed to opioids often face and that there are many factors that can cause these types of challenges. Many recognized how important it was to not assume all children exposed to opioids had developmental challenges or that, if they did have issues, they were caused by the exposure. People thought it was important to reduce the stigma children exposed prenatally experience, as this can exacerbate the social and developmental issues they face. Most participants thought it was essential to better understand and support children with prenatal opioid exposure.

"We're finding that we have to have interventions where we can help them, and without the Jordan's Principle funding, unfortunately there probably wouldn't be as many resources as we can offer now. But it only goes to 17. What are we gonna have in place for these children when they age out? There's really hardly anything for them here."

"It seems that some children exposed to opioids prenatally are not affected at all. Their development is on board with children who haven't been exposed and they do fine."



The impact of prenatal opioid exposure on mothers

The impact of prenatal opioid use on mothers is far-reaching. Participants shared that during pregnancy many mothers experience stigma, judgement, gossip, lack of confidentiality, and rejection by family, members of their community, and healthcare providers. Mothers also have an enormous fear of having their baby apprehended after they give birth, which often keeps them from disclosing their opioid use during pregnancy. These experiences can impact women and their babies negatively in multiple ways, including hiding their pregnancy, avoiding or delaying prenatal care, not seeking out support from their family and the community, social isolation, termination of pregnancy, and poor mental and spiritual health. Many participants spoke about the strong grip of addiction that makes it difficult for mothers to appreciate the consequences of their opioid use on themselves and the baby. However, some provided examples of pregnancy motivating some mothers to seek treatment.

"I could never have pictured myself to ever choose anything over my child, but I did, and that is still heavy. A real big guilt — to know all that pain. I mean it finally clicked. It finally triggered for me to heal; to heal those traumas and to work endlessly to fix that. Because I couldn't bear to ever put my baby through that again, or me for that matter."

"Stigma. Because not everybody understands addiction. And not everybody is in a place of not blaming and shaming. So I think that our professional interactions often impact community members and how willing they are to get help."

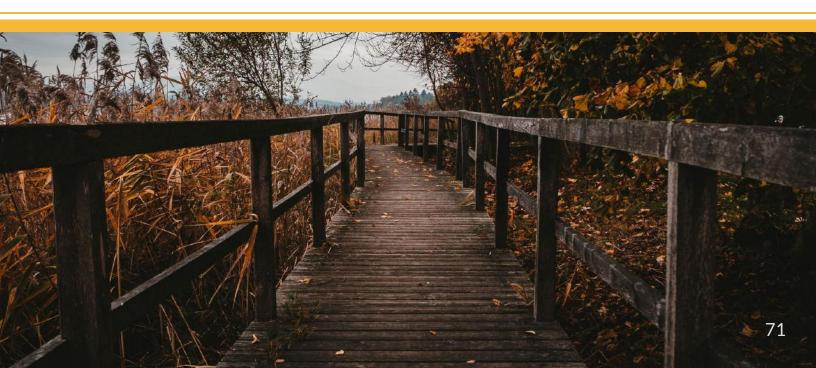


"My heart and my soul were in this child but I was still an addict. I would sit there and promise as much as I could. And I knew that I was a breaker of promises, and I knew that I wasn't consistent, and I knew that I needed help."

"I think they burned a lot of bridges. Being accepted in the community is hard for them, and then a lot of shame and guilt comes with it, so they kind of isolate themselves and detach themselves from the community 'cause they feel judged, and they feel like they're not wanted. I know my friend, that's the way she felt. She felt embarrassed. She didn't want to come out to community events, or she didn't want to show herself because of what her addictions had done to her and her life, and the people that she loved."

"A lot of guilt and shame. Some separation anxiety. There would be the anxieties there. Lot of depression, lot of guilt which would lead to more addiction."

"We see the children getting apprehended from birth. Watching what mom goes through with that experience of having to give their children up at the hospital, then come home without children. And then be in the community where normally we'd be like, 'Oh, congratulations.' And then not even knowing how to talk to them after. What do you say? Like do you acknowledge that birth? Do you just pretend like it didn't happen?"



Participants indicated how important it was for healthcare providers and community members to understand why mothers use opioids. Participants agreed that past and current trauma underpin opioid use and addiction that lead to prenatal opioid use. For many, opioids are used to numb the pain of the trauma. Participants from different communities commented that low self-esteem also contributes to opioid use. Many thought that women use opioids to try to fill a void of love, comfort, and connection that they are missing. Some participants linked community members' drugs use to the intergenerational impacts of the abuse in the residential school system, and the hurt of being denied affection and bonding from parents who were survivors.

Privacy and confidentiality were significant concerns and barriers to accessing care for mothers who used opioids during pregnancy. In some circumstances, mothers indicated they did not feel safe or comfortable, and sometimes the issue was related to community size and close relationships amongst community members. Participants indicated that in a small community the care providers were often individuals they knew or to whom they were related. Women were also afraid of who might see them accessing services in their community.

"I think that a mother that is doing the opioids, or on drugs or whatever, even the methadone, that they have trauma. It's all trauma based. I don't care what kind of trauma, it's just trauma."

"The mother is not able to hold the baby and do skin-to-skin. She hasn't grown up that way. She may have her own disassociation, and her own issues around that, and that's why things are the way that they are. And it's unfortunate that people can't have that bond."

"You're definitely not going to go into a place where your cousin, or your aunt, or somebody you know is working because they're going tell others about your issues."

During childbirth, many participants agreed that First Nations mothers are often treated poorly in hospitals. They experience anti-Indigenous racism and discrimination for their opioid use. Many shared stories of traumatic and clinically complex births, inadequate pain management during labour and delivery, healthcare providers who did not understand addiction, and the presence of child protective services immediately after delivery. The lack of ability to bond with their baby due to apprehension or the baby going to the neonatal intensive care unit often amplified their trauma. Many mothers spoke about being alone in the hospital, without support or an advocate for them. Some mothers shared experiences of an absence of care from healthcare providers in the hospital, with little support or care from nurses or doctors despite their vulnerability.

"I had to chase the nurse out because the nurse was arguing with the patient with their child there watching. I was surprised and shocked. Don't they know about addictions? Don't they know about withdrawals? Do they not know how to address or even work with a patient that has those? The whole situation was really awful. The child talks about it every once and a while. 'Remember that nurse that was yelling at my mom when she was sick?' So that kinda memory that they have of a nurse. It was the other nurse that came flying from the other side to make us feel it's okay."

"Healthcare is really judgemental, lacks compassion, and understanding regarding trauma and addiction. Even if they're on an opioid replacement, they're not treated as though, 'Hey, you're taking a step in the right direction."



Many people discussed that often mothers are discharged without supports in place. Others expressed concern about mothers bringing babies with prenatal opioid exposure home without anyone knowing and supporting them. This happens when women hide their opioid use during pregnancy and delivery. Participants recounted the stress and risk for postpartum depression that all new parents experience and explained how it might be compounded for mothers who used opioids prenatally, due to feelings of shame and blame after seeing the impacts of their prenatal drug use on their baby. Other factors that increase the risk of challenges in transitioning home include untreated addiction, other mental health challenges, poverty, and the potential high needs of the baby. Participants explained that the cycle of poverty, which often accompanies opioid use, perpetuates addiction for mothers as they continually struggle to have access to the necessities to care for themselves and their babies. Participants also shared that the fear and threat of apprehension does not stay at the hospital. Being continuously under the scrutiny of the Children's Aid Society, even when they have support from family, is very stressful for parents.

"I think throughout their hospital stay it's really tough. It's near next to impossible for them to even get back to the hospital, when they are discharged, for the care that they're expected to do. And then when they don't show up they're on watch for mistreating their child, like child abuse or child neglect. It's not because they're actually intending to neglect their child, they just have no way of doing what's expected, because they don't have the money. Like it's a cascade of they can't get it done. And then they're judged for that. And it's kind of brutal. And it's not a system that works well."

"The moms end up failing for a multitude of reasons. They don't have the money to care for the kids the way they're expected to be cared for. It's a vicious cycle of poverty and just poor self-esteem, and all of that. It's hard."

"Withdrawal without management is awful. You get physically sick, and I wasn't able to take care of my child. And just going from how I wanted to be: loving, and caring, and attentive. Instead, I would be sick and miserable a lot of the time. I was really hurt over it because, more than anything, I wanted to be a mother, and a good person, and a clean person."

As the child grows, mothers continue to experience fear, guilt, and shame. Some mothers experience guilt and shame because of the challenges and needs of their children who were exposed to opioids prenatally. Even if there are no present issues with the child, mothers often stay on high alert watching for any signs of difficulty. Some mothers also feel shame when they hear about their children's difficult behaviour from others such as teachers. Most mothers shared that one of their biggest fears is that their children would grow up and face addiction themselves.

"You know how hard that is? Filling out papers for a child that gets speech therapy, occupational therapy, and all those things, and tell them what happened, and don't be ashamed."

"It's nerve-wracking. It's always a thought in the back of your mind, like, if it won't come up. If it's going to have long-term effects. The biggest fear is if they are going to grow up and be exposed to drugs and go down the same road I went down."

"What's the hardest? Knowing that they're different, everybody knows your kids are different and saying, "Oh, that kid doesn't listen," or "That's a bad kid" because it's such a small community. Yeah, that's what people say about other people's children who are affected by prenatal opioid exposure."



In some communities, mothers face many barriers in acquiring treatment for opioid addiction. Treatment facilities lack the capacity to respond to the high rates of opioid addiction and there are often wait times to get into treatment. This is difficult for mothers because when they finally make the decision to go into treatment they want to go immediately, before they lose their conviction. There are very limited treatment facilities in which women can bring their children. Participants shared that many mothers do not want to give up their children to go to treatment because they may not have healthy people in their lives to care for their children when they are away, or they do not want to have them go into foster care for fear that they will not get them back.

"You know what's so ironic in the addiction field, it's nearly impossible to find a treatment facility that would take a mother and a child together. And if that mom wants to go get well, she has to find a place for the infant or sign the infant over to somebody while she gets treatment. And then if she doesn't do the standard treatment, the shame and guilt that accompanies that failure. They disappear."

"A lot of the time you can't just take your kids. That'll keep a mother sick. How are you going to leave your kids? Who are you going to leave your kids with?"

"Because you don't ever really know when someone's really ready to stop. And when they are, I promise you that that conviction doesn't stay for long. It's quick."



If a mother chooses to go on opioid agonist therapy, she still experiences many challenges. While expectant mothers are told that it is safer to use opioid agonist therapies such as methadone and Suboxone, they are still flagged as being at risk by health and social services, resulting in the involvement of the Children's Aid Society. Mothers reported being devastated when their baby was diagnosed with neonatal abstinence syndrome because they were experiencing symptoms of withdrawal. Many mothers explained that they took methadone because they understood it to be a healthier choice, but then they had to watch their baby go through the challenging process of withdrawal or were separated from the baby if it needed to go to the neonatal intensive care unit or be transferred to another hospital for care. Most mothers shared that no one explained to them that their babies would spend weeks in the hospital.

"You got this mom who was using and then finds out she's pregnant, so then she wants to go on methadone. Which, right there, she's already trying to better herself. Then she goes through the whole pregnancy using it. Then the baby comes out, and she can't get that bonding because the baby's in an incubator. And we always encourage skin-to-skin, but she can't do that. So, then she just keeps cycling down, but in her head, she's doing what's right because she's not using those drugs. She did get help. She's getting counselling. But then there's such a negative stigma because now her baby's got to stay in the hospital for 10 days. And you can see it when you walk into the room. The shame."

"Because a lot of them really believe the doctors. 'No, as long as you're on this program, you're sober.' But yet you're tormenting your family and your kids and neglecting your kids. And the doctors don't see that."

"A lot of people here have a bad habit of getting methadone from NIHB. And they'll gain the trust of the doctor to take their methadone at home, and then they give it to other people, and a lot of people will drink on top of that." Many participants thought that people should not be on opioid agonist therapy and that it was not a long-term solution for mothers as it doesn't address the root issues of addiction. Several mothers discussed desperately wanting to be off methadone. Some people thought that opioid agonist therapy was no more than an opioid that the government pushes on people. Others articulated that with opioid agonist therapy most of the addiction behaviours and social harms are still present with some patients. However, other participants, including mothers, thought it was an important part of harm reduction and a long-term solution. Many people shared stories of healthy mothers and healthy babies living good lives, in part, due to opioid agonist therapy. In this way, some stressed the importance of acknowledging women as the "experts in their path."

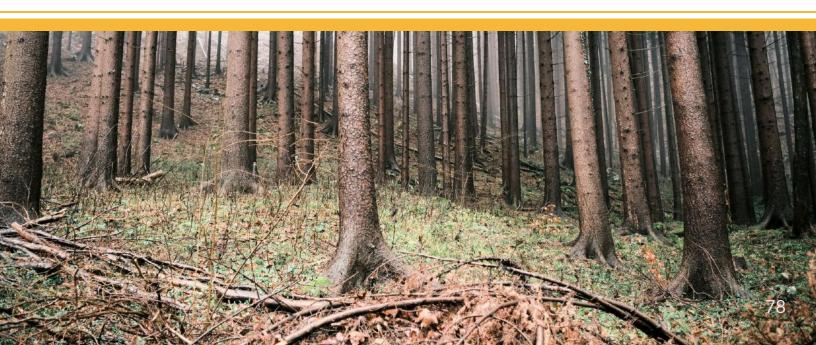
Although people had different opinions on the role of opioid agonist therapy in treatment, all agreed that in most cases mothers on opioid agonist therapy did not receive the counselling or other treatment approaches necessary to return to good health. Most participants thought there was a lack of communication and education on opioid agonist therapy in pregnancy for mothers. The lack of education for the public and healthcare providers on opioid agonist therapy negatively impacts mothers who are seeking to help themselves and their babies.

"It's just an opiate that the government gives you. That's all it is."

"Looking at it from an addictive standpoint though too, the behaviours are the same. They're going to lie, steal, and cheat to get the methadone or Suboxone, and things like that."

"Methadone, you know, I agree with it, but I don't. It's almost like a Band-Aid."

"Opioid maintenance therapy was never a program to wean anybody off anything. It was a treatment. It's like diabetes, you have insulin."



"I have a video and I'm talking to my child, and they're laughing, like smiling. And then it was time for their drugs. That's what it was. And they'd give it to them, and they would just go right out of it. I have a video and I'm picking my child's arm; they just look like they're not even alive laying there."

"When people are accessing a form of treatment like methadone, and it's only one-sided treatment. In my understanding about having to access methadone or Suboxone, is that you get it distributed to you, but that counselling piece never happens."

"And let them be the experts in their path. Because some moms might be perfectly fine just doing the methadone. 'No, I don't want to go to rehab.' We have to let them be the driver."

"I was already set up doing methadone and they knew that my baby was going to be withdrawing, so they put us in a private room. When I went to go get my dose that night it must have been too much for me. Because I was a new mom, a first-time mom, and not knowing what to expect or how to go about it. So, I took my dose then my baby fell. I remember hearing my baby crying, so I grabbed my baby, and I went running to the nurses. My baby was seriously injured. I think if there was more help for me, and having someone stay at the hospital with me, I think that would've been good. Because you're tired anyway, and then they give you methadone."

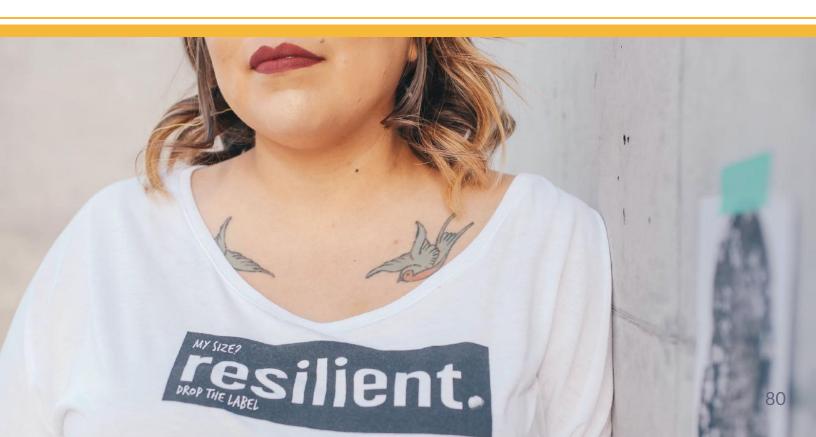


Despite the many negative impacts of prenatal opioid use on mothers, many stories of success and joy were shared. Mothers spoke of the joy that they experienced because of their children and in recognizing their own resilience. They proudly reflected on their extraordinary healing journeys and remarked on the responsibility they felt to be there for their children. Mothers were able to look more optimistically toward their futures while also acknowledging that the recovery process is lifelong, and how important it was to continuously monitor and seek out help when they needed it, particularly around their mental health.

"I've conquered things a year ago I would never be able to conquer. I'm comfortable in my life today. My gifts are waking up every morning. I don't sleep all day. I have responsibilities and a future. But when I was on drugs, I never saw daylight. I would wake up like five, six o'clock at night. So that's a gift on its own, to get up."

"I need to keep on the right track and my children need to see a strong mom. I see them tell me, 'I'm so proud of you, mom.' I'm their biggest teacher because they're always with me. I went through a lot of parenting classes and like I see it now, even the way I talk."

"Luckily, there's a lot of us that are in recovery. And I'd say like within the last five years, more and more women are going on methadone and things like that, instead of just using pharmaceuticals, and heroin, and things like that."



The impact of prenatal opioid exposure on families and caregivers

The impacts of prenatal opioid exposure can be an immense challenge for families and caregivers. Participants discussed the challenges of caring for a family member with opioid addiction who is pregnant or has children, as well as caring for their children with prenatal opioid exposure. They spoke about the strain from sleepless nights, constant worry, and the frustration from not being able to help, or not knowing if their daughter, sister, or partner is alive. Many people explained how challenging it can be to understand addiction and why people who use drugs can't just stop, and how mothers can take opioids and other substances while pregnant, knowing it is going to harm the baby. As a result, many family members and caregivers feel anger, fear, shame, resentment, and a sense of powerlessness. Many families are torn apart by addiction as they grapple with how to respond to the situation. They spoke to the tension between wanting to help their children and enabling them to continue their drug use or addiction. On top of these issues, many participants spoke about the stigma they experienced because of their family member's substance use.

"They're worried like heck about their kids. They're worried like heck about their daughters, their sons. They're worried about everybody using it and they pray hard, and there's absolutely nothing they can do about it. So, it affects them, it affects their mental health. It makes them worried. They take the kids, and they try to raise them, but they're getting up in age and they have health problems like diabetes or something, and it's really hard. It's really hard on everybody. I think it affects everybody and that war on drugs, like it's getting worse. I mean, very few come out of that drug thing and try to straighten up and get their kids back."

"The sleepless nights. You never know from one day to the next whether your child is going to be alive."



Participants described the incredible role that families, including aunties, uncles, siblings, grandparents, and great-grandparents play in raising children impacted by prenatal opioid exposure. In all communities, participants reported that grandparents and great-grandparents are often the caregivers when parents are not able to raise their children due to their substance use or addiction. Participants shared how grandparents are often pressured into raising their grandchildren so that they can stay in the community and out of foster homes. Many grandparents or foster parents feel pressured to take in more children to keep siblings together. These decisions are often made without time to fully comprehend the short and long-term challenges; and no sense of how long they will be expected to care for the children.

Some grandparents feel guilty for their own substance use — stemming from the abuse they experienced in the residential school system — and how this impacts their children. So, they are willing to help raise their grandchildren because they feel partly responsible for the parent's substance use. Regardless of the reason, many grandmothers were careful not to take the place of their daughters and to correct their grandchildren when they referred to them as their mothers. On the other hand, some grandparents indicated that they would step in if needed under extraordinary conditions, but otherwise thought it was not their role to parent their grandchildren. One participant indicated this approach had a positive outcome as their daughter was required to take responsibility and care for their own child.

"A lot of stress on extended family. Right from the grandparents who have to take over even to frontline workers that have to try to make a plan for what we're going to do with these babies. Family members may be fighting over who's going to take care of them. Families breaking up."

"It's not usually short-term, it's always been long-term. I don't think I've found a family where we just put the child in for a few weeks and then they're back home with their parents. That doesn't happen. These children are gonna remain with family members for quite a while, while parents are looking after themselves. Sometimes they don't even really know their bio-parents at all. They get attached to the other family members. We have to look after those families because oftentimes they get pushed into this without even knowing it's going to happen, and then next thing you know they've got a baby in their arms. We have to help them and train them as well how to look after these children. We have to find services for them as well."

"They do it because they love their kid, they want to raise their grandchild, and a lot of them will say, 'You know what? I was part of this because of how I dealt with residential school. 'I was an alcoholic, and I feel guilty.' They take on that, I created some of this, so I'm going to take care of my grandkid. Because there is some guilt there."

Participants described the challenges that grandparents face in assuming this role, in particular grandparents who are retired, older, or in poor health. Participants spoke to financial hardships associated with raising grandchildren, along with the physical and emotional demands of childrearing, especially without the necessary training and resources on how to support children with developmental challenges. In some cases, there are often numerous appointments that the grandparents must take the children to, such as speech and language development or occupational therapy, further contributing to their responsibilities. In other situations, grandparents are not able to get access to the resources or services they and their grandchildren need. This can be due to many factors including geographical barriers, issues related to the mother not disclosing their opioid use, and lack of appropriate screenings or visits to the doctor prior to them receiving the child. Additionally, in certain cases, some grandparents do not get any government child benefits to help with the costs of raising children because the parent is still receiving it. Some family members are embarrassed to admit they need the money.

"Then the kids can't see their mom and I would imagine there's financial strain because now that you got extra kids in your household, childcare if they work, or childcare if they don't work. Then they're at an older age and they're having to have to have the energy to raise the kids."

"The hardest thing for me I think was giving up my life. I'm not who I want to be because I'm so tired. Because this is a sunup till sundown, and often through the night, gig. I love to garden, and I love to sew and quilt, and I also care for my 90-year-old mom. I had friends I don't see anymore. I don't have a life anymore."

"The child I am caring for is a handful, even with all the training I've got, and all the extra training I took so that I could help them. And we've now got some help, and respite care. It's exhausting. I'm burnt out. I've seen lots of grandmothers who are in the same boat who are burnt out. They're wondering what to do with these kids. Because you can't connect with them. They don't connect, so it's really hard to keep loving, and caring, and pouring your heart and soul out to your kids."

"I get angry sometimes. I'm just like, 'How could you do this [take opioids] to the baby?' Nobody ever thinks about the impacts of what happens when they're pregnant. It's like they're being selfish and that they're not thinking about the person inside of them growing. And I'm the one that's stuck here taking care of your child."

Some family and caregivers discussed the challenges of interacting with the birth mother while caring for her children. Grandparents are often forced to negotiate and navigate visitation and financial support with the mother, which can be difficult if she is actively using. Many felt they were trying to balance the needs of the children and their own needs while trying to be understanding and compassionate toward the mother. Grandparents with the lived experience described a high level of burnout from caring for children exposed to opioids prenatally and were desperate for support, including respite care.

"There's grandparents, there's aunts, uncles, you know, families that are there to protect the children. But we go and take them, and then, 'Oh, you are enabling them.' And we're not enabling them, we're looking out for the safety of the children right now. We can't stop someone's addiction, but they have a baby who needs to be fed. So that's where a lot of us don't know whether to back away or to step in because of the child."

"The mother would still see the kids. It's just that the babies and the kids are with the family, and they're the caregivers of the kids. So, whenever the mother comes, they would have to put up their own restrictions like, 'No, you're not coming here when you're high, you're drunk,' and put the rules up or fight with them. Because you wouldn't want the kids around their parents like that; that are on drugs and drinking."

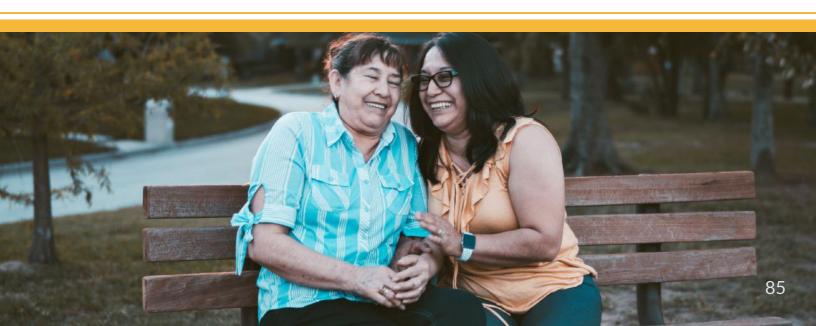


Other caregivers and foster parents described the tension and blame they often encounter, such as being accused of trying to keep the children away from their mother or other family members. This can be very challenging in small communities, where gossip can add fuel to these situations. Caregivers described the difficulties of coordinating consistent visits between the children and their mothers. Others spoke to the challenge of navigating age-appropriate discussions with the children about what they are experiencing. Caregivers also worry if they are good guardians.

Despite all the challenges, there were many stories of resilient grandparents and dedicated foster families raising healthy children, even in the face of adversity. Workers were impressed with the ability of families and community members to assume the role of primary caregiver and were indebted to the vital role they played in helping to support the health and well-being of children impacted by prenatal opioid exposure and the community. Many mothers with lived experience who were now healthy, expressed immense gratitude for their families and for everything they had endured and provided, citing them as their greatest source of strength.

"I see a lot of the moms who lose custody of their children blame the caretaker for not having their children with them. 'If you didn't take my kids from me, I would have them,' and not looking at themselves. And that's a huge effect on a family too, having that grandparent or caregiver blamed for the parent not having their child and keeping them. 'Oh, I would like to see you, but so-and-so won't let me."

"I think I took a lot out of my mom and my dad. 'Cause when I was on it, they helped me. They helped me a lot. They're still my support, but when I was on it, it seemed like they always watched me. While I was on it during pregnancy, they would always take me up to go get my [methadone] drink and take me to my appointments, and like make sure I made it to all these different programs. They didn't ever kick me out. I think it took a lot on them. For them driving me, and even while I was in the hospital with my baby, they drove up there every day to see me. It was a lot on the vehicle, a lot of gas, and they would always bring me food; home-cooked food instead of the hospital. I think it took a lot out of them."



Participants expressed concern for the well-being of fathers with substance use, or fathers of children with prenatal opioid exposure. Some participants spoke about the intense, long-term shame and heartache that fathers, like mothers, can carry as they recognize the trauma their addiction has caused their children. There can also be deep concern about the long-term physical, mental, and emotional impacts on children from parents' drug use. Some participants spoke of the challenges that fathers and partners experience when a baby who has prenatal opioid exposure is brought home. They described the challenges of not being able to sleep due to the high needs of the infant at night, not being able to cope with the "emotional rollercoaster" that the mother and baby are on, and the issues that then arise with the other children in the home. This can lead to partners, particularly those in already vulnerable relationships, leaving the home. Lastly, several participants wondered if the father's opioid or substance use also impacted the development of the fetus either on its own or in conjunction with the mother's use.

"For families already challenged with so many other issues, you then throw in a child who is inconsolable for the first three months of their life, it's a recipe for disaster. And a lot of partners don't stay because they can't, because they can't sleep, and they can't take the emotional rollercoaster that the moms are on and that the babies are on. And then there's the siblings who, you know, may or may not be able to cope with that. The lack of sleep from the baby screaming in the night for hours."



The impact of prenatal opioid exposure on service providers

Service providers, workers, and healthcare providers are being challenged and sometimes pushed to the brink of their capacity due to prenatal opioid exposure. Service providers shared how much they love and care about their community, and how committed they are to improving members' health and well-being.

Participants spoke about the many competing priorities in their work and their lack of capacity to meet the range of demands. Many felt stretched too thin. Service providers spoke about the stress of trying to create workable solutions within tense family situations, such as finding a foster family for a baby exposed to opioids prenatally. Many felt exhausted and frustrated trying to figure out what supports might be helpful and feasible for each client or patient, and continuously coming up against more challenges. They spoke about increased demands from community members seeking support, counselling, and help getting into treatment. Service providers can experience frustration when clients or patients say they will follow through, then do not. It is a continuous process of providers patiently meeting people where they're at. Moreover, being in continuous crisis mode makes prevention work very hard to do.

"We get the mothers that have lost their home. They're homeless. They either come into our shelter with their kids or they lose their kids. So, we get them at their really lowest. At that point we try to bring them in, listen to them. You know, do as much as we can for them. Helping them realize they're not alone. Because they come from domestic violence, homelessness, addictions."



"I think the workers that we have. Like I think they go above and beyond. I think that's good, but we need more. Because they get tired too. That's what I always get afraid of too is they'll get burnout, and then there's that gap for a while until they fill the, like if they have to take a leave, or if they actually just say, 'I can't do it anymore.' Then there's a gap until it gets filled again, and then those young mothers have to give trust again by filling in all the info and going through their story again."

"It's unfortunate because they're so worried about us taking them right away. No, we don't want to take children away from mothers who took opioids prenatally. It's our intention to help you keep your child."

"Staff burnout is another thing 'cause it's such a large demand on such a little, wee bit of staff, and staff get burned out. So, you see a constant overturn."

"There's so many different priorities that exist in our community that we're just stretched and we don't have the capacity."

"It's hard to do like prevention work when you're constantly working in chaos. Like at that moment, it's hard to do prevention. It is crisis every minute."

"You take it very personally when they don't tell you and then you find out that they had their baby go through withdrawal, and you had no idea. You feel like you somehow failed."



In many communities, participants expressed there are too few service providers and increasing demands due to the opioid crisis. Staff are doing their best, but extremely long days with no break are unsustainable and jeopardize their health, well-being, and home life. Even when not working, staff are approached by community members for support. Some service providers explained that they receive harsh criticism from families or community members for actions that are beyond their control, and this anger and resentment can last for many years. High service provider turnover due to burnout leaves community members having to rebuild trusting relationships with new staff. Often, remaining service providers members are left to cover the roles and caseloads of those who leave.

Participants indicated that there are often challenges in communication amongst those working to support the health of the mothers and their babies. Many service providers shared that there was a lack of communication between hospitals, doctors, and community-based health and social service providers, particularly after an infant is discharged, leaving staff to try and determine what is going on. Even within communities, many participants shared that health and social services departments often worked in silos, thereby preventing best care for mothers and babies. The issue of staff needing to be more knowledgeable about the programs and services available within and outside their communities was also raised.

"There is no communication between the hospital and the doctors who see them prenatally. There's very little communication between everybody."

"They're just there to go through the motions and they're like, 'Alright, yeah, you can call me,' but then you make 20 phone calls, and they don't call you back."

"The high-risk moms that need the service don't get it. They don't want it. Because obviously there's issues in the home or their use. So, they isolate themselves, and they don't have the additional supports or access. Those are the ones we're chasing."

"I find that when we're in our own silos, sometimes we don't know what each other's working on or what we need to help each other. I mean we do have case management, but there are certain things we can't discuss because we have to have consent."



Many service providers recognized that confidentiality was sometimes a barrier to helping mothers and babies. Some shared stories of not being informed of the mother's opioid use until after she delivered. Participants thought that if they had the patient's or client's consent to work as an interdisciplinary, cross-sectoral team, they could better strategize how to help the patient. Some service providers also thought that confidentiality prohibited them from debriefing with a colleague on a difficult situation.

Participants indicated they were concerned with the overprescription of opioids and opioid agonist therapy. Healthcare providers acknowledged that they are often placed in a difficult position when treating a patient with substance use or addiction issues. Providing a prescription for opioids may reduce the likelihood of that individual acquiring illicit substances which may be tainted; in effect, practicing a form of harm reduction. However, there was full realization that this contributes to the opioid problem in the community.

"Doctors have had a few women who've had addictions who presented late in the past few months, and they have no idea what happened to them. But we can't talk to each other because of the way that confidentiality set up."

"I had no colleagues to talk to. I can't because of confidentiality. I've sat there, and I can't talk to anybody. So having a colleague is a huge thing."

"They're going to find it anyway. So, you feel like you have to give them the medication, because they're going to go and find it somewhere else and put themselves in more danger. It's safer for me to give them a script than it is for them to go and find it on the street and have it tainted with something."

"Every time we prescribe, we are part of this problem. We didn't make the problem. I get so annoyed with physicians in the emergency room providing scripts just like that. So many community members are going to get ER care, and they just want you out of there."



The impact of prenatal opioid exposure on educators, daycares, and schools

The places and people who care for and teach children have been greatly impacted by prenatal opioid exposure. Participants shared that their schools were facing numerous challenges because of prenatal opioid exposure coupled with high rates of other disabilities such as autism. Early years educators, teachers, and educational assistants stated that they struggle to deal with the high needs and behavioural issues of some children exposed to opioids prenatally. They also indicated this had a ripple effect in the daycare or classroom, sometimes affecting the other children negatively. Early years educators and teachers spend much of their time focused on children with high needs. This causes them angst because they are unable to attend to the needs of the other students. Teachers shared that some children with prenatal opioid exposure have behavioural issues that make it difficult to participate in regular classrooms. This is challenging for some schools that do not have extra space, or human and financial resources for more teachers or support workers. Participants discussed wanting to be inclusive of all children but explained they are not always equipped or trained to support them.

"If you don't have an education assistant in the classroom that makes it hard. If you have a child that's being aggressive, throwing things in the classroom, and then the rest of the students, they're on the other side of classroom and I need help."

"I see the children are going to school, and Head Start, and daycare, and I don't think we're equipped. I really don't think we are equipped to handle this big tidal wave of children that were exposed to opioids prenatally."



These issues lead to high levels of stress and burnout for early years educators and teachers. The high levels of stress and burnout lead to a lack of compassion and understanding for children with prenatal opioid exposure. Many communities have a difficult time retaining staff. This negatively affects the education of all the children.

"It even goes further into the daycare and childcare systems. Because they're seeing it firsthand. They know there are delays. They can't diagnose either. But they don't have the supports and trained staff to give that child what they need either."

"What we're getting here at the school is new teachers that are fresh out of teacher's college, and they have no idea. When they're coming to school here, they have no clue how to handle our kids. The behaviour issues that you see is, you don't learn that in teacher's college."

"We feel the need to have extra staff in the school because children with prenatal opioid exposure can't, or with great difficulty, function in the regular classroom. It's interfering with the learning of the other kids and we're finally at a place where we've made a separate classroom. It was a sensory room and now we have another classroom, and we're already full to the top with our school. We have no space."







Strengths that exist in communities that are helping address prenatal opioid exposure

Love, family, and community

There are many strengths and strategies that exist in Indigenous communities that are addressing prenatal opioid exposure. The strengths that people identified the most were rooted in relationships, family bonds, community, and culture. Stories of success were shared where children and mothers were on a good path, many of which spoke to how vital a role that the love and support of their families had played in their recovery. Despite issues amongst youth, including opioid use, there are many young people who are strong and doing wonderful things with their lives. Participants spoke about their community's commitment to the well-being of babies, who represent the next generation.

Across communities, participants spoke about the strength that comes from love, family, and community. People also shared stories that illustrated the transformative role that compassionate responses play in reducing blame, shame, guilt, and judgement. Mothers with lived experience shared how critical it was to their recovery that their families continuously showed care and concern. Participants discussed the value of making mothers feel like they matter and how detrimental it would be for someone to feel like no one cared. In a few communities, celebrations were hosted for people coming out of treatment or meeting sobriety milestones.

"If I didn't have my safety net of my family, I don't know where me and my kids would be."

"My kids are my motivation to do better, and my family are like my support. I call them for everything. I don't have the manual to be a mom, right? I don't think anybody does."

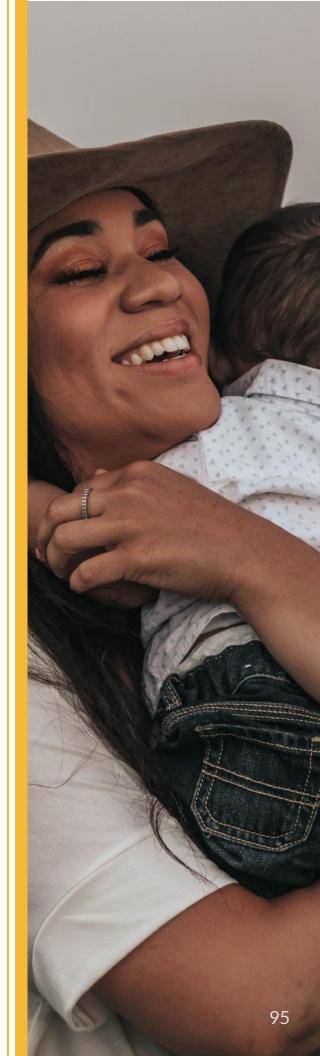
"It's really beautiful being at a community event when you do see these people that were in a bad way, you know, now in a positive light, or trying."

Service providers explained that when you teach community members what's good in them, it changes their world. Participants spoke about the importance of programs that build self-esteem in mothers. Others shared about the success that comes from accepting people who use substances for who they are and "where they are at" and letting them know that it's okay to struggle and ask for help.

Although participants identified that there are challenges living in small communities, such as issues with gossip, most were also quick to identify that their community was tight-knit, and people cared immensely for one another. Similarly, while many participants stated that leadership needed to develop a better understanding of opioid use and prenatal opioid exposure, many thought that their community leaders do care about community members and were becoming increasingly aware of the issues and impacts related to substance use and addiction.

"My family would remind me of how I used to be and how it was. And how I was different. They reminded me all the time, it wasn't just one day; it was all the time. So, that would make me think. Like it does make you think when somebody tells you, 'Oh my God, I don't know what I would do without you' or 'You're such a good person.' It does do something to you as a person, and your feelings, and that you're important, that you matter. If you don't have somebody there telling you that, then you just think that if I die tomorrow nobody would notice. A lot of people don't say what they're thinking. I don't know why."

"My siblings would come look for me downtown. Because my dad didn't hear from me, or nobody saw me downtown when they were driving by. If I didn't have that I don't know where I would be today."

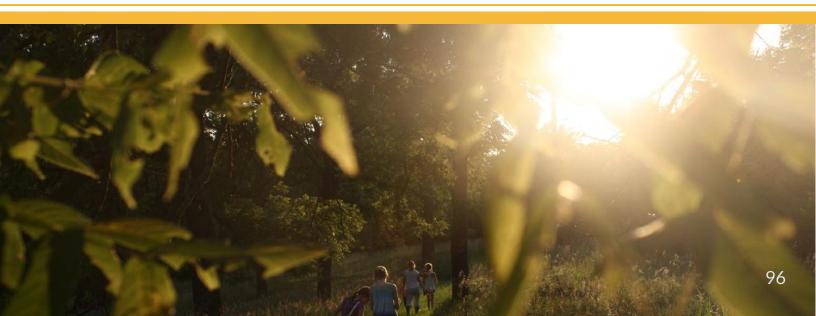


"There are a lot of mother types or grandmother types who can talk to our younger people if the younger people are ready to listen or communicate. And I thank God that we have those resources here, and that the women that I've met have the heart to sit down, and talk, and listen."

"A strength that I would see and observe is that the leadership, sometimes when they have activities leadership is there. You'll see a Chief there, or a Councillor there. You see an Executive Director there, or your Supervisors there. It's like, wow. It validates what you're trying to do in that they're behind you too; they're you're backups too."

"I actually have seen an increase in attendance to positive parenting classes and sports. A lot of people will fundraise to help people. That's what I've been seeing. Even though there is a dark side to our community when it comes to drugs alcohol, and abuse, we also have this beautiful side to our community too."

"When I first came home, I was living in supportive housing because I was like newly off drugs, newly home from treatment. I just didn't want to be rushed into parenting, like, here's your kids, your home, take care of this. It was so nice that they paid for my supportive housing. I knew that this second time getting clean, I couldn't rush into this again. They were so helpful when I got home. And it's work that I had to do. I was doing community service. I went to school, they bought me a laptop too. You know, like they've helped a lot and they continue still to check up on me, even today, like, 'How are you doing?'"



Culture

Participants spoke about an increased interest in language and culture revival and that many people in the community are now learning about who they are and embracing it. People identified that culture and tradition were important aspects of prevention and recovery from opioid use. Cultural and traditional healing processes were identified as being important in maintaining sobriety and in helping youth and adults have a strong sense of identity.

Teaching children about culture and traditions was seen as critical to supporting their development. In some communities, children go berry picking, fishing, hunting, and camping through daycare, school, and community organized events. Participants also commented on how cultural land-based activities help children impacted by prenatal opioid exposure to connect with their homeland, which creates positive memories and helps build their self-esteem. One participant explained how cultural land-based activities are therapeutic, mentally uplifting, and support cognitive development, logical reasoning, social development, and language development.

"I really think going back to culture is probably the strongest thing that we have for our community."

"We go back and welcome them back. We do the spirit retrievals from those traumas and do it in that sense where everybody is involved because the words that we hear are like, 'Well, nobody cares, nobody cares,' without realizing that everybody in this community cares about everybody in one way, shape, or form."

"I see a strength. Even just starting working here, is how prevalent our culture is now, or becoming. It's really the foundation of everything, even at the daycare, how we're working from our culture and building out from there. Our values and our beliefs in our teachings, we work out from there. I think that's a big strength that I see growing in our community."



"My greatest source of strength is always my family, my culture, my language, and the Creator, of course."

"The strength in our community is when you look at, years ago, there was a lot of alcohol and drugs. You see a lot of people that are in their sobriety. There's a lot of people here that are in that path. So, you use that strength and a lot of them have actually learned about the culture, which they never knew when they were growing up. So that's a strength, we have more people learning the culture."

"Even when they're young, like at the daycare, we take the kids out ice fishing because we have skidoos. We take them out with the boat and stuff like that, set traps, go snare rabbits, and go check out a maple sugar bush. We do all that with our children and those are memories that they're making. And it's always that positive memory so that's helping out their self-esteem and they're building on those."

"My daughter attends a girls culture program, and she raves about it, and it's opened her mind, because there's a cultural element."



Programs and people

Participants shared examples of passionate and strong people who are working to make positive changes in the communities. Most thought that service providers in their community are knowledgeable, genuinely care, and work hard to do whatever they can to help people impacted by prenatal opioid exposure.

In many communities, service providers and people with lived experience agreed that reaching out personally to people to invite them to programs, events, or appointments, and providing them with transportation were very effective strategies at engaging community members that need support. This made them feel important and like they mattered. Mothers who have used opioids also highlighted the importance of having a trusted person to turn to when struggling with their addiction — for example, someone who is open, listens to people's stories, and who people can sense genuinely cares and wants to help. Service providers described the importance of helping women every step of the way, including doing a warm handoff so they are supported while accessing new care and not left alone at a critical point where they may be tempted to give up. Staff spoke about the need for ongoing patience regardless of how long it takes someone to take the next step. These gestures of compassion, kindness, and a keen understanding of addiction and recovery were immensely helpful.

"We have a health program here, and they also offer counselling, both group and individual. And I just hear a lot of their ads on the radio. They have billboards up. At any a little community gathering, they'll have handouts. You know, a pamphlet here or those little trinkets they give out with just some information on the consequences of abuse."

"Our child and family services team are the ones that take care of a lot of cases. They put on a lot of presentations and sessions. They put things out and, like for the foster parents, or for the grandparents, or for caregivers, they do cool programs too. They do little sessions, evening sessions, and, you know, they do really cool information too, like dealing with opioids, and knowing the difference of withdrawal symptoms."



In one community, a very successful combined Alcohol Anonymous and Narcotics Anonymous meeting group was formed by the National Native Alcohol and Drug Abuse Program (NNADAP) worker. The individual called and invited people to every meeting, texted reminders, and drove around picking up people who did not have transportation. A number of communities also had strong medical transportation systems, allowing mothers to access daily treatment outside the community if necessary.

Many people also spoke highly of the programs and people at their Health Centre. Healthy Babies Healthy Children programs were often identified as having excellent resources. Many of them used incentives such as food vouchers or movie passes for coming to a certain number of programs. In some instances, people reported that incentives can make someone feel proud that they have accomplished something, and can increase attendance. But service providers also mentioned that some people come only for the gift card and are not engaged, or they have become so used to this incentive that they expect to be given something for engaging in any program. Some communities had strong or emerging wraparound services for families that were helping those impacted by prenatal opioid exposure. Participants described wraparound services as diverse healthcare professionals and service providers working together in a coordinated way to provide high-quality care. Community outreach and communications about programming, through the use of social media or individual invitations, were also well-used practices in many communities.

"Sometimes we have to move the chairs over because more and more people are coming, and we just help each other just by sitting at AA. It's not only AA but it's NA, so people that are doing the opiates, they feel comfortable. They come out and we talk about our problems. It's only for an hour but, you know what, that's all we need. We just need people to talk about it. They need to express their traumas on the daily and it's helped so much."

"The NNADAP worker's the one I turn to when I'm struggling with my sobriety. They're the one I call up and I'm like, 'I need help,' and they're right at my door, and then they will come over, or text me, or call me. Like, "Okay, what's up? What's going on?" and help any way they can."

"And I really feel good when I get to give somebody a gift card 'cause they got their first credit, or if I get to give a parent something because they participated in assessment. Like it's just a good feeling, and you can see the parents are like, 'Yeah, I did that. Wow, that was hard but like, I did it."

"Whether it's educational, spiritual, cultural, history, it's an amazing thing. It is an amazing place to work and the amount of support in this community that is offered by different workers. 'How can we help you? how can we improve your program?' It's been phenomenal."

"Our community works hard at keeping our children within the community. If the parent isn't able to take care of the child because of an addiction, our community is usually pretty good in finding or having a home ready for them. And I think that keeping children exposed to opioids prenatally in the community, and around their culture, and around their other family members, is a huge strength."

"I think even childcare programs. Like if a family is struggling to have their infant placed into a childcare program during the daytime, then you know that child is receiving quality care throughout the day, they're being fed, and taking care of; safe environment. And hopefully during that time, the parents are able to or their family is able to seek services that can help them as well. So, they can get on a healthier path."

"This community is so welcoming and wonderful with any children. They feel like the children are the ones that they want to make their lives; they're the ones that are like the next generation. And we are so open to anything they can do to promote wellness for the babies in the community."

"There's Healthy Babies Healthy Children. And they do a lot of evening and weekend programs for young mothers or for the whole community. There's a community prevention worker. They do a lot of after-school activities and community events more directed towards like ages six to 18."



"A lot of our children that are born into addictive parents, they either have special needs, they're delayed, and they've been deemed to have autism. A lot of times what we find out once we get the supports in place and we start working with that child, is that the child has no autism, it's trauma. But we leave that diagnosis there because we can get more supports for that child. A lot of times that's what's happening because with that label there you can get more intensive treatment. I talk to doctors, I go on those doctor visits, and they say, 'Let's just leave that there 'cause that person is receiving all these services through that.' But it's trauma. Either they've witnessed their parent passing or really bad in their addiction, or there's just a lot of trauma that affect these children."

"But just one of the nurses comin' up to the hospital with me and being there. She was willing to come there, and be there with me, and brought little presents or little things I would need while I was stuck at the hospital. There were about two or three times that she came up which I thought was really good. And then they helped me get baby supplies while I was pregnant."

"We network. I know that the daycare helps out quite a bit with the stuff that I go through. And the school, I do have a dialogue now with the teacher, and I know that some promotion stuff from here at the clinic, it's all stringed together to address some of the themes that they do have. We all network together and that's how the things are going positively for the children."

"We have a really great program here. If you're addicted, or you've been mentally or physically abused, they do lots of counselling. They help with the children in the schools. They work with the schools to keep the contact going. Then, if there's traumas, they send them to their special counselling. Their program is like a safehouse too."



"I think the children's mental health worker at the school is really good at that. She'll take a child who's exhibiting a typically negative behaviour and be like, 'It's so awesome to see how strong-willed you are, and it's great to see that you have such a strong opinion on this. And I really appreciate that about you.' And then she'll kind of spin it, right, just to make the child feel empowered; make it empower them to see it as a strength and not as a weakness, or something that's always gonna get them in trouble, so that they can feel like they have strengths too. And they can be empowered by those different personality traits that don't necessarily fit into this box or this mold that they're expected to fit in at the school or in a structured environment."

"It's self-regulation. It's right from JK/SK. It's about, 'What's being a good friend?' 'I can see you're excited, what are you excited about? "I'm mad!" 'Why are you mad?' Identifying our feelings because kids don't know that. Kids aren't being taught that because our parents don't know that, right? 'You have this look on your face, what does this mean?' 'I'm frustrated.' They don't even know the word 'frustrated,' so we have to teach them frustration and, 'When I'm frustrated, this is what I do.' 'Well, is that a good thing to hit our friends? No, we don't hit our friends.' Or taking turns. All of that stuff starts at JK/SK and all the way through up to eighth grade."



In many communities, daycares were identified as a strength. Daycares are places where children can be nurtured. Many people shared how their daycares provided healthy meals and taught the fundamentals of living a good life, including social skills and basic literacy and math. In some communities, the daycares are free for all community members. Several people shared that parents impacted by opioid use or experiencing other challenges can use the time that their children are in childcare as respite or to get help, go to appointments, and become well.

Some communities have strong connections with child development centres and support families in attending appointments and programming at these centres. One mother shared how she received parenting strategies and resources from her regional children's development centre. She explained how they showed her how to work with her child and gave her tools to use when her daughter was struggling with behaviour regulation and she as a mother was beginning to feel overwhelmed.

In many communities, participants discussed approaches that they were utilizing to support children exposed to opioids prenatally. Jordan's Principle funding was discussed as an asset that was being used to fund individual families and community programs. While many schools noted the strain they are under, they also shared about innovative programs they had developed to support children exposed to opioids prenatally. For example, programs to help children develop self-regulation skills and classrooms tailored to children's sensory challenges. Many schools also reported improved communication and coordination between the daycare, health centre, and school. One participant discussed tuition agreements with high schools outside the community to ensure supports are in place for students who might otherwise fall through the cracks.

"We also have seen some occasions where moms had really healthy families. There were plans put in place. There were great things that happened, even though there might have been a drug dependency. CAS might have been involved, but the family was involved, and kinship care, and there was counselling, and support for each other, and healing circles. People have turned to their culture and to their family, and there are happy beginnings for some. They haven't always been horrendous cases of prenatal opioid exposure."



Gifts and strengths of children impacted by prenatal opioid exposure

Most participants held the perspective that all children are gifts. They recognized the strength and resilience of children with prenatal opioid exposure. Many people shared that children exposed to opioids prenatally can teach people about love, patience, and acceptance. Participants also remarked on the innocence and joy that babies can bring to families and communities as a gift.

"So, if we all can see all of our young moms, and all the babies, and all the children being born, and we notice a gift that that person has, we flourish, and we help bring that gift out instead of looking at all the negative, and all the needs. So, it's looking at strengths-based help instead of needs."

"It brings people's spirit like, oh, you know, new life. That's a gift, having a new life. And they can bring joy in a family. Children, you know, they're so innocent and honest. That's a good gift. You know, children when they're a bit older, they're honest and they just make the world a little brighter. Yeah, that's a big gift."



Participants acknowledged that sometimes children with prenatal opioid exposure can spark positive change. Some participants with lived experience shared how their baby signalled a turning point for them and their opioid addiction. Most mothers who were on a healthy path acknowledged that their children continue to be a source of strength that keeps them from engaging in unhealthy behaviours such as opioid use. Another gift that participants spoke about was family unification. In order to support a new child, a family and community need to unify, so that the child can be the vehicle for bringing people together. Many participants recognized that children, no matter how they come into the world, are a gift in their community, and need to be supported and loved.

Mothers, caregivers, and community members spoke of the strengths and talents of children. People spoke of children who were energetic, intelligent, determined, caring, humorous, excellent at problem solving, and hard working. Participants agreed that these gifts needed to be fostered using a strengths-based approach. People thought it was the job of families, educators, and the community help children discover their gifts and to help them to develop them.

"Whether it's that family and everybody pitching in to help, there's a unification there. So that's a gift in itself, the gift of bringing a family together to support that child."

"It's sometimes all I need. I could be having the most miserable day, and then go pick up the kids and it's like, oh my God, it's worth living."

"They represent hope, and new life, and I think that's their strength."

"The gifts would be that they've already gone through so much. So, they're going to be much stronger if they're given all the right opportunities, and that people are nurturing, and caring, and helping them along the way to build them up."







Strategies to support babies and children impacted by prenatal opioid exposure

The home environment

People across communities spoke extensively about the home life of children exposed to opioids prenatally. Most participants thought that the most important way to support children is to provide them with love and nurturing, and they shared stories of children with prenatal opioid exposure who grew into healthy adults.

Many thought that a structured home with routines, healthy eating, and good sleep were foundational for children with prenatal opioid exposure. Participants spoke about children being raised by adults who were able to provide them safety and security. Parent education programs were seen as an important strategy that enabled mothers, fathers, and caregivers such as grandparents to learn healthy parenting skills and how to better support children in meeting their developmental milestones. However, many people acknowledged that it is often the parents who need these programs the most who are not present. Some people suggested incentivizing these programs, by providing gift cards that could benefit the family, for example, or by making the program more of a social event.

"Nurturing. Children with prenatal opioid exposure need nurturing. They need guidance. They need solid people they can turn to for guidance."

"I think that all children just want to be loved, and accepted, and their needs provided for while they're growing up, while they're little people. They look to us, you know. They look to adults for that security, for that love, for that communication. Just empower them as much as we can through the love and through the communication, through touching, through nurturing."

"A good home, a good home life, lots of language, lots of gross motor activities, lots of nurturing,"

"As Indigenous people, we're all very resilient despite everything that's happened. Using those strengths and focusing on their strengths and the good things about them, despite what has happened is key. Including them, and not making them the scapegoat of the family and not treating them like they're different."

"Family events or activities that involve both the mother and child, and it's just not exclusive to adults. Like being family-friendly and including the kids in activities. And activities that are support groups that help that bond. Using that time to spend time with each other and not just like a program where you're dropping your kids off."

"But I think diet is pretty important for them, and a routine where their bedtimes are a regular time, mealtime, quiet time, routine. So that's important for them, they respond good to that stuff, and they know the routine"

"Encouragement and praise. Praising them all the time for all the stuff they do well. Then giving them love. Loving them up all the time."



Foster care

Many children with prenatal opioid exposure go into some type of foster or kinship care for part of their infancy or childhood. For this reason, many participants thought that continuing to improve the foster system was crucial to supporting children with prenatal opioid exposure. Some participants explained that their Indigenous-led child protection organizations or the Children's Aid Society worked hard to keep children in their home community, but there were often not enough eligible foster families or healthy kinship foster families. Some participants wanted better training and supports for community members to increase their ability to take in children from their community or provide respite care. Others indicated that there needed to be adjustments to the foster family requirements; they explained that sometimes the Children's Aid Society's standards are so strict and unattainable for families that they inadvertently rule out good homes. An example of this is requiring children to have their own bedrooms. In some communities, people thought that the policies that exist to support First Nations children, by way of requiring First Nations foster or adoption families, could inadvertently harm children. Some participants explained that there are often not enough First Nations families available to foster or adopt. As a result, the children stay in the system longer or stay in unideal homes.

Participants discussed the need to improve communication between health and social service providers and foster families. Foster parents would benefit from more information about the health of the child they are caring for, including whether they were exposed to opioids prenatally or other issues that needed to be considered to give the best care.

"We need to train more foster parents to do respite care or just take a kid in immediately. We need more homes like that to take them in immediately until they find a placement for them."

"You know, say you need to have a crib, or it has to have its own room. And I think that's one of the main society, the white society, is that they put a lot of rules into how the agencies place children. There's so many rigid rules. So, I think if we were to have anything, and if we had our own terms, then it releases a lot less stress."

"A child who was exposed to opioids prenatally got adopted by non-Native people who are doing really, really well. But they stopped letting non-Natives adopt the kids, but the Native foster homes, there isn't enough of them. So sometimes the kids just keep going into the system."

Training on prenatal opioid exposure

Ongoing education and training on the impacts of prenatal opioid exposure was seen as critical for anyone interacting with children, including health centre staff, service providers, educators, parents, extended family, and community members. For example, some parents and grandparents hoped it might help teachers be more understanding and supportive of children with prenatal opioid exposure who have behavioural issues and may have experienced trauma. Others were interested in learning about best practices in therapy for children with prenatal opioid exposure. In addition to training, many people, particularly educators, service providers, and healthcare providers, wanted access to research on prenatal opioid exposure and potential interventions.

"We were always trying to search for training just for our programs, for our prenatal programming. And we've yet to find training on prenatal opioid exposure anywhere. That would be very beneficial for us."

"We need in-house training for all the staff. Like even the use of naloxone kits. We don't know anything about using them."

"I think educating the community with the issue so that there would be more empathy for the children and more inclusion."

"I think that teachers and staff need more training. Trauma-informed care, especially, and just anything on opiates and what the effects are. Not to hop on that kid 'cause of their behaviour. It's lack of training for the professionals in the school system to understand what really is going on and why children are like this."

"I think we need more professional development; ongoing professional development that we can refresh our child development skills; refresh anything that we learned at school that's going to help us to provide better care for that child and family that we're working with."

Daycare and school

Participants thought daycares and schools play a crucial role in supporting children exposed to opioids prenatally because they provide consistent and structured environments, along with a learning environment that can serve as an intervention to some of the challenges children may face. Many agreed that children impacted by prenatal opioid exposure might be in environments where they are forced to grow up too fast, so it was important to provide them with positive spaces to be children, foster their self-esteem, and learn self-love. Moreover, the high level of stimulation and engagement was seen as an approach to combat the potential neglect that some children may experience due to addiction in the home.

Daycare also serves as an effective place for identifying children with developmental delays, because early childhood educators are trained to recognize developmental milestones. Daycare providers explained that children with prenatal opioid exposure often need more individualized care and attention. A potential strategy suggested to address this challenge was lowering the ratio of children to child-care providers. However, participants recognized that this requires a high level of financial investment.

"Some of these kids have a lot of trauma or a lot of anger, and then that's brought to school. And I think that a lot more attention on that needs to be established in order for them to be able to learn effectively. To be able to talk through the issues and what's making them angry, because it always turns into this aggression. Even if it starts out as something like they just want to play with somebody. It turns into something negative and then eventually aggression. So, I think that a more focused support on psychological help within the school would be beneficial for kids."



At school, participants explained that even though there are supports available to children exposed to opioids prenatally, there are often not enough. They identified the need for more educational assistants and teachers with increased training on how to better support children with complex needs. Having a dedicated therapist in the school to support children's emotional health was also seen as an important strategy because most children impacted by prenatal opioid exposure have also experienced trauma. In the high school years, it was suggested that increased mentorship and youth development programming could help to prevent addiction. Participants agreed that schools are places youth can learn about important issues like addiction, mental health, opioids, and pregnancy.

In a few communities, participants were excited by the possibility of having mass screenings and evaluations of children's physical and mental health at daycares and schools to promote early detection and prevent children with health issues from falling through the cracks. Participants agreed that these programs could be done in a way that does not single out any one group of children, including those with prenatal opioid exposure. One community member suggested making it a training event, where residents and other health practitioners in training come twice a year to provide the screenings.

"It's overwhelming when you have ten babies in a classroom with three educators and one baby does a lot of crying. Some of them need more rocking; they need one-on-one."

"I think it's beneficial for them to be in daycare and to be in the school system for that structure they might not get anywhere else. And that's where you can see their strengths."

"I find the kids who go to daycare do really well because they're stimulated all day. So, stimulating their interests, and feeding that curiosity, and answering those questions, and reading to them, and helping them develop their speech. Positive development and support. And I'm thinking of like moms who just don't talk to their babies, don't stimulate them. Those are the ones I worry about. So here we have this child that's just dying to learn and explore the world, and sometimes they're denied that opportunity just because they're kept in a car seat or a bouncer seat and ignored."



"One of the things we talked about was a mass school evaluation where we go to a school and basically set the gym up and get everything: their height, their weight, their blood pressure, skinfolds, teeth. All the kids at once!"

"If we catch everybody and it's not like you're being singled out. Testing every single student. We could have medical students, residents, and doctors who come and visit."

"Making sure that there's support like extra teachers and aids in the classroom makes it a lot easier."

"Having those supports and maybe some sort of discussion groups on how it impacts us teachers on a day-to-day basis because it does take a toll on us as educators. Because we're having to deal with the behaviours, we're having to deal with the speech pathologist and their recommendations, and play therapists with their recommendations, and then getting parents on board to do some of the work at home. It's not always the easiest thing."

"I think it's harder for people that have to work with children that are undiagnosed, and you can't diagnose them. It's more difficult in childcare because you're responsible for all those children, and I think what they need to do is decrease their ratio. Instead of having three to one, maybe it could be two to one so that there's more time to work with the child, especially if they have a special need."

"So, all these children that have issues, they're just falling through the cracks. They're moving on to the next grade and then they're off the reserve. Then they're nothing, right. Then that's where you get the addictions because these issues aren't being helped. They're not being helped. They're just pushed off."

Healthcare

Participants thought that it was important not to shame children or their families as this prevents people from reaching out for support. Shame is a large barrier to families engaging with the healthcare system.

Participants identified a need for more access to qualified professionals such as nurses, speech pathologists, counsellors, and occupational therapists. One suggestion was to have a mobile unit that can travel to communities or even homes to provide these services to children. When care in the community is not an option, increasing and maintaining strong relationships with specialists and children's development centres outside the community was proposed to increase care for children exposed to opioids prenatally.

People spoke to the importance of implementing infant, toddler, and child mental health supports and counselling as early as possible to help children with prenatal opioid exposure process their trauma. Training about trauma and mental health is also crucial to ensuring that family members, caregivers, and educators are informed about what to look for and how to work together to better support children. Many participants suggested designing or bringing in a program to build social skills and improve emotion regulation because many children exposed to opioids prenatally struggle with forming healthy relationships and managing their emotions.

"Availability of qualified individuals. We don't have enough speech pathologists. We don't have enough nurses. We don't have enough physical therapists or occupational therapists. We don't have people mobile — I'm talking professionals in a mobile unit coming to rural areas to do service. I'm talking about the inequities of our service. Those are the barriers. If you're living in an urban setting and you're a non-Indigenous, you have a higher rate of being serviced than someone from here."

"So, getting those mental health supports in place for these kids so they can talk about these things in real life. They've seen their moms banging needles, they've seen their mom turning tricks, they've seen their mom do a lot of things. They've seen their dad beat the shit out of their mom over the last hit. They need that support now because they need to process that."

"Even the process for the diagnosis, that takes forever. So, the family's still waiting and waiting. So, it needs to be a quicker process, specifically for our community, so that the children don't have to be added to that big list."

Participants, including those with lived experience, shared how important developmental screening and assessments are throughout childhood for children exposed to opioids prenatally. Many health and social service providers were concerned that there were large gaps in healthcare monitoring for children with prenatal opioid exposure. Many shared that children who do experience delays are often not being screened and receiving help in the most crucial window for closing the gaps that exist in early childhood. Many healthcare professionals explained that they ask parents to bring their children back every year for annual check-ups, but it does not always happen. Increasing outreach and making sure that children are being monitored and screened is a strategy to help reduce the challenges children exposed to opioids experience.

One barrier to accessing healthcare and healthcare funding for children with prenatal opioid exposure is not having a status card, health card, or birth certificate. To access funding through Jordan's Principle or other First Nations- or Indigenous-specific programs, children need a status card. But it is difficult to get the child a status card if they are not currently living with their birth parents or if the parents are not willing or able to fill out the paperwork. Participants discussed having somebody within the community, perhaps somebody in the Band Office, whose responsibility it is to navigate getting these forms of identification for children with prenatal opioid exposure as a first step in accessing care.

"The child reaches all their developmental milestones through zero to 18 months when I see them and, then suddenly, they're going to school at age four and they can't talk. What would be helpful is trying to get everyone to come every year for follow-ups. I always say, come back every year and especially if there's speech problems. At 18 months you can't really tell if it's a big problem or if it's gonna resolve itself. And I find children who go to daycare do much better, because daycare picks up on this. Someone kind of monitoring."



Culture, art, and recreation

Culture, language, and traditional teachings were suggested as ways to help support children exposed to opioids prenatally and their families. In many communities, these opportunities were not being offered to all children. Reaching out and encouraging children and families to participate was seen as a way to connect children with their roots, give them an increased sense of belonging, and provide high-quality culturally based learning opportunities. Some participants also thought culture helped children stay on a good path away from drugs and other harmful activities. In some communities, participants explained that in addition to cultural activities they would like to see children with prenatal opioid exposure have more access to recreation, sport, and art. Art therapy, music therapy, play therapy, and recreational therapy were identified as ways to provide therapy through enjoyable activities where children learned new skills and alternate outlets to express their thoughts and emotions. Participants also discussed the importance of having a safe space for parents and caregivers to socialize, bond, and have fun with their children without having to worry about their situation. For example, by hosting family-friendly community events and including children in activities.

"Well, if they could learn their culture and their roots, and learn to dance and drum, and have a sense of belonging and pride, it would help the child."

"I did art therapy with the children that I worked with. And what I found was that the art therapy really helped them to bring out that hurt and that pain."

"What has helped my children is a recreational therapist. He helped the children so much. Taking them out biking, going on a hike, walking with them, and talking with them while they were having fun. They looked forward to that day that they can hang out with him."



Strategies to support mothers impacted by prenatal opioid exposure

Pregnancy

Mothers who use opioids need support that meets them "where they are at," reduces risk, and helps them on a healing journey. Mothers need continued support from pregnancy through childrearing.

During pregnancy, participants thought it was important to encourage and guide mothers to prenatal care. Many participants discussed judgement, shame, blame, and fear as the largest deterrents to accessing prenatal care. Participants identified the need for care where mothers can feel confident that their stories and health information will be kept confidential. Others spoke about the importance of meeting mothers where they are and not overloading them with information or planning on the first few visits. Letting mothers drive the planning and conversation was seen as crucial. What might be the number one thing to address on a healthcare provider's list might be number four on a pregnant woman's list and these conversations need to be negotiated with care.

"We have these programs out here and some people don't want to utilize them; afraid of the lack of confidentiality because a lot of things are not confidential on the Rez. We're a small community and it just takes one person."

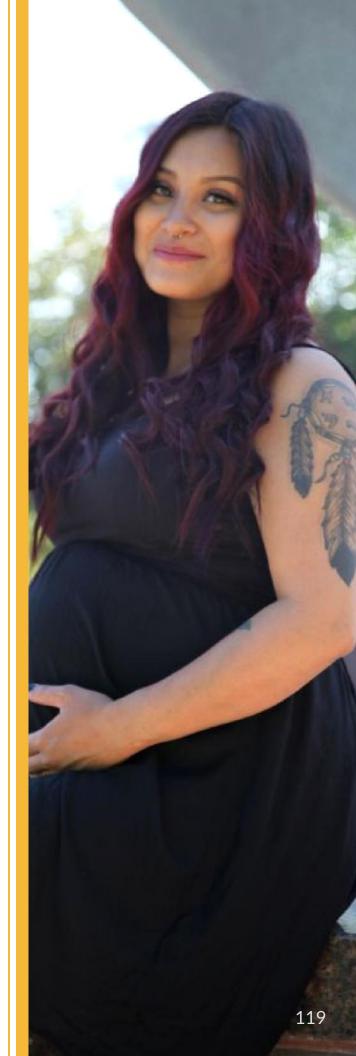
"You don't want to overwhelm them because they're not going to come back. You want to put them in a comfort zone where you can draw them in and say, 'Okay, this is what's available. This is what we can do.' And one step at a time because that's probably what it's going to take. Comfort."

"A lot of times mothers who use opiates avoid any prenatal care at all. They need the caregivers themselves — the nurses, the doctors, the social workers — they need to be nonjudgemental. They need to have the education, the understanding, to keep these women, to bring them into the umbrella of care instead of shunning them or making it impossible because they don't have transportation, or they don't have childcare. It's impossible for them to even get to their appointments."

"You have to really just be quiet, and listen, and hear, and sometimes disclosure will happen over many visits of different kinds."

"Moms need a caregiver to follow them through their pregnancy; to make sure they get to these appointments and get rides. Because people on opiates, they don't really have too much. They'd be lucky if they got a car. On the reserve, we have medical transportation. But a lot of times they forget their appointments."

"Empower the mom so that they can feel like they have control of the situation. You know, there's no judgement or nothing, we just want to make sure that your baby is given the best opportunity. So, if they agree, then that becomes about disclosure and whom do I tell so that we can follow up with her. I think it will all come down to communication."



When discussing opioid agonist therapy during pregnancy, participants agreed that it was crucial to ensure that mothers understood the benefits and the challenges. Participants agreed that women need to be better informed about why opioid agonist therapy is a healthier choice and that the baby may experience symptoms of withdrawal and be diagnosed with neonatal abstinence syndrome when born. Carefully explaining harm reduction, and the high risk of continually using non-prescribed or illicit opioids, is an important conversation that needs to happen at many points throughout the pregnancy. Women need to understand the long-term impacts of prenatal opioid exposure, the effects of opioid agonist therapy, and be partners in their care plan.

"They have a methadone clinic in a nearby First Nation. I think there's a real lack of education for clients that are on methadone because it's a business for doctors. Doctors will keep clients on methadone for years and years. But doctors are pushing it because it's a business for them."

"It was something that I was told that's healthier, that's better. In which way? Not for my baby obviously. And then they go and shoot more drugs into them, after my baby didn't even get the methadone that I was pumping into them out their system yet. Nobody could answer me. A doctor wouldn't answer me."

"But again, with the opioid replacement, mothers still fear what side effects that might have."

"Be more explicit. Be truthful. Prepare them. Prepare them properly so that they understand that withdrawal is something their babies with prenatal opioid exposure are going to go through. Not one of these moms understood that cry. It was cruel."

"We need to teach the doctors at the methadone clinics that they need to be more realistic with these moms. These moms came into our nursery and into labour and delivery with a totally wrong idea of what was going to happen. They were told their babies might feel a little sick for a few days, or they might have a little bit of trouble feeding. It was so unfair to these moms. They were devastated when they got these babies and what actually happened to them. They were so unprepared, and it was so unfair. They just didn't tell them the truth."

Participants thought that when mothers are approaching the end of the pregnancy, health and social service providers need to walk them through the many scenarios of how their delivery might unfold and make plans as best they can. This includes discussions on pain management, neonatal withdrawal syndrome, potential separation from baby, support people, and if necessary, the role Children's Aid or their local Indigenous child and family well-being agency will play. Some participants thought that "asking mothers what their greatest fears are" would be a good starting point.

Wraparound care should start in pregnancy. However, many acknowledged that it takes time to get mothers on board with this approach because it means many will know about their addiction and related challenges. A skilled first point of contact person, who is good at building rapport, was seen as key to opening the door to wraparound services. The wraparound services would include health and social services, and access to individual, group, and couples counselling.

"A lot of mothers probably fear what's to happen with the baby and will isolate themselves and won't get the prenatal care. If we focus on the whole aspect of educating them, we accept that, yes, you are using. But what are the steps that you can take today to ease your situation or ease into services that your child will need? And then what you might need after or during? Like just something to be put in place and to kind of give them that education as what's to come, and what's to happen, and how each one of us can help."

"It would be important to really talk about the next steps because that would be their fear, right? If they admit to it, then their children will be taken away or apprehended. So, communicating to them about the what-ifs. That's important to talk to them about because they're scared and they're not going to admit it."

"Our programs, they really don't work together. There's one for social, there's one for health. They work in their separate capacities, and they don't work together. I think communities need to start working together more with their programs and thinking outside of the box."

"Years ago, we used to do case conferences where we get the client, sit them in the room, and do wraparound services. This woman needs housing. They need parenting programs. They need advocacy. It was time-consuming. We don't do enough of those anymore. Either we're just getting too busy or we've lost our focus and I think we need to get back to that."

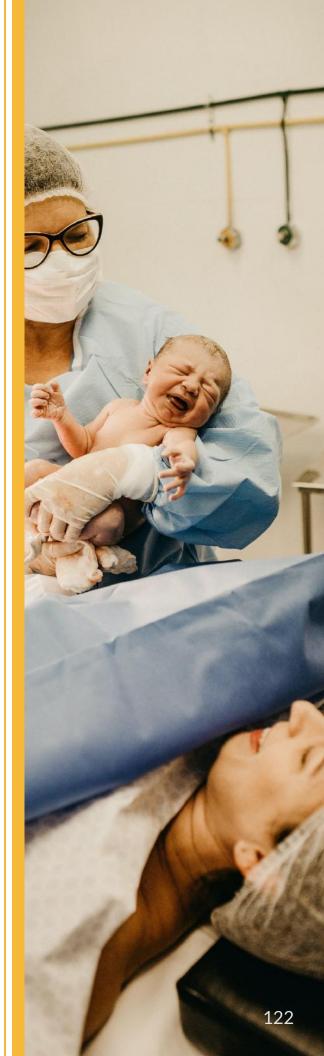
"A wraparound; a whole plan of care. And you got to remember that addiction's a brain disease, so, no, they're not going to make that appointment. Even if after they've been clean for six weeks they probably won't go and make that appointment."

Childbirth

During childbirth, participants spoke to the need for an advocate for the mother. This person could be a partner or family member but having someone trained in healthcare or social services would be helpful to aid them in navigating the process and decision making. Participants acknowledged that women are treated better when accompanied by service providers to appointments, especially when interacting with professionals in the healthcare system.

Anti-Indigenous racism and substance use discrimination were cited as a concern by both service providers and mothers with lived experience. While in the hospital, mothers need compassionate and nonjudgemental healthcare providers who are familiar with addictions and prenatal opioid exposure. Mothers also need the option to stay with their babies whenever possible, either rooming in with their babies or at least staying in the hospital. People felt strongly that providing mothers with the opportunity to stay with their babies facilitates early bonding and attachment as well as opportunities for breastfeeding, which are crucial for mothers and babies impacted by prenatal opioid exposure.

"I think education for the nurses is a huge part of reducing the judgement. But there are certain people who, no matter how much you try and teach them, they're not going to change their attitudes, and beliefs, or understanding of what happens to women, a lot of women, who live in poverty and how they have to survive. So, if they can't understand that, then they can't understand how they ended up where they're at."



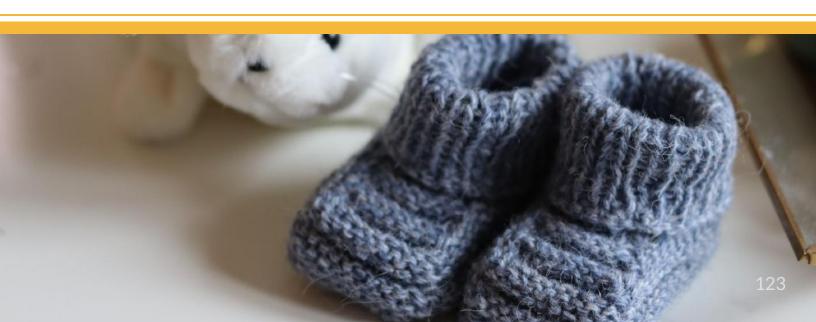
Many mothers with lived experience spoke about feeling lonely while in the hospital after having their baby. Often mothers impacted by prenatal opioid exposure are single parents and some may not have people to support them while in hospital. One mother explained how she would have liked someone to visit her at the hospital, offer congratulations, and ask how her baby was doing. Participants suggested making hospital visits a job role for a service provider. The individual would also make sure mothers had what they needed while in hospital and to take their babies home, such as a car seat and transportation. Some people indicated that this should be the standard practice for all mothers in their community.

Participants discussed that mothers who use opioids or opioid agonist therapy during pregnancy also need more attention and support in the hospital. One mother shared a story of being in a private room with her baby alone and having little support from healthcare providers. A physician did not visit her after delivery. She was given methadone treatment in the evening, but it was her pre-delivery dosage. This high dosage made her tired and she accidentally dropped her baby. The baby was seriously injured. She thought that if she had more support while in the hospital, someone to hold the baby so she could rest or someone checking in on them, that may not have happened.

"I would have liked a visit at the hospital and, 'Congratulations!' Oh, how's your baby doing?' And not just because they were born on methadone. That's just what any mother that's pregnant in the community would want."

"I would have loved if somebody were to come to the hospital after I had my baby and just give me a hug."

"The hospital staff need to be educated; properly educated about opioid addiction. Some of them just don't understand, you're in the wrong field if you don't."



Transitional housing

Participants discussed providing as much support to mothers as possible when they returned home with their babies. People often commented on the stress and challenges that all mothers experience when bringing a new baby home and explained how these stresses are amplified for a mother who is using opioids or in recovery and may have a baby with complex needs.

Participants agreed that mothers and parents need hands-on help with their babies and respite care so they can have time to themselves. Many discussed making a routine of providing mothers impacted by prenatal opioid exposure the same supports that many new mothers benefit from such as checking in on them, providing meals, and helping with childcare. It was seen as vital to ensure mothers have breaks. Respite and wraparound care were seen as very important strategies to support mothers, and were identified by participants in all communities.

"Show them support. Our clients don't have support, they don't have moms and dads, or grandparents, that they can go and help them. They're going through this struggle, they're dealing with it, but nobody's there to support them. Sometimes it's just a matter of going and holding the baby so they can do the dishes, or driving them, or giving them a food course. Like how to cook something."

"For mothers, I know that being able to have respite is important. Being a mother is overwhelming anyway. You add addiction on it, or recovery, that's tough. They need somebody to step in and be just like, okay, make appointments and you go. And I wish we had a service that provided that. What I find is like a lot of women will avoid asking for those kinds of things because they are afraid of Children's Aid becoming involved."

"Oh my God, a break would be amazing. Somebody to come into my house and say, 'Oh, why don't you go out for a walk, or go have a coffee, or I'll watch your kids for an hour. But come back! [Laughter]"

"It's hard to parent. I am a parent, and I am sober, and it's difficult. I can't imagine somebody who's trying to deal with a toddler, and they already lack coping skills, and this kid is pushing their buttons, or has needs they can't meet, or just the fact of you're trying to raise a tiny person to be a decent human being."

Mother and baby programs were also identified as strategies to support mothers impacted by prenatal opioid exposure. Programs that focused on bonding and attachment including how to engage with one's baby such as holding, touching, and kissing, were seen as valuable. This was seen as especially important for those who did not experience secure attachment with their own parents due to the intergenerational impacts of the residential school experience or a history of trauma and abuse.

"There needs to be opportunity to learn how to engage with their babies. Touching them, holding them in, and the chemistry that like when they do the skin-to-skin so much happens for both of them. But, you know, they probably don't understand that. That's why you have to hold your baby. That's why you kiss your baby. That's what you know all this stuff is important for both you and the baby."

"Often when there are issues with personal space, and body issues, and boundaries, that to have even your own baby held against your skin is too intense. If there was a place or programs that would help, to be able to work through some of their deep issues and then be ready to start that attachment and bonding experience. Once they're able to open up to that part it's such a wonderful feeling to know that you are hugging your baby because there's so much love there. Even if by the time they get there the child is a toddler or a five-year-old, you can still do it."



Ongoing educational programs on topics such as healthy child development and parenting were also thought to be helpful to mothers. Flexible programs would also give mothers an opportunity to socialize with other mothers and expand their network of support, potentially improving mental health and reducing isolation. In many communities, a program where mothers with lived experience in addiction could gather with their babies was seen as a strong strategy built upon the principles of group therapy, such as in Alcoholics Anonymous. Women with lived experience explain how they would have really appreciated spending time with other mothers who were going through the same things that they were. The challenge is getting mothers who used opioids while pregnant or who are being treated for opioid use disorder to participate because of fear of being identified or other addictions-related barriers.

"Many of these girls who have been on these opiates are quitting, and they're encouraging other young women themselves. So, it's like they're creating a support group. Because the thing is, who better than someone who's been a user at understanding the need of someone that's going through their troubled times."

"But when you quit too, you got to forget all those friends that were doing it; that were around you."

"The moms need education by somebody that's been through it. By somebody that actually lived it. Not someone that has already categorized you in her head, and then she just doesn't want to be there as it is and doesn't understand anything she's talking about. She was just schooled on it. You know what I mean? It wasn't like a real-life story would be."

"I just stay home and take care of my child, and just spend our time as a family. That's how we keep ourselves out of using anything else."



Longer-term and big picture

Safe housing for mothers was seen as a key strategy to help mothers impacted by prenatal opioid exposure. For a woman to start the journey of becoming healthy, she and her children need dependable housing. In many communities, the need for transitional housing was raised as a critical support for new mothers. People spoke about housing where mothers could transition into independent living over time with their children. Some spoke fondly about transitional programs in Ontario where mothers get apartments for up to two years and have the opportunity to select décor for their home, resulting in them feeling comfortable and having pride in their home. Some identified these homes as having house mothers, where an experienced mother lived in an apartment on site and could be called upon at any time of day or night to help. Others shared that good transitional housing included programming where mothers learned the important skills necessary for caring for their children, such as healthy cooking, budgeting, and developing healthy relationships.

"When you are in this transitional home, your child's there with you. And they're able to watch and supervise. So, when a mom is in there with her child, we know she's okay. That's our safe spot. After that, you get to move into their houses. They have a house there. They let you live there for one year rent-free to help you get on your feet. It gives you time to get a job, to get back onto life, and to find your own place."

"Transitional services. Transitional housing. Safe and supportive until we learn the skills we need to be healthy on our own. You can't learn that in five weeks."

"Transitional housing is what is needed. Nineteen days doesn't cut it. Five weeks doesn't cut it. Study after study proves that transitional housing for a young mom; for a young family to have safe housing where there's somebody that can be available. Healthy Babies in St. Thomas has a long list, but women stay there for up to two years with their children. There are groups there. There's a House Mother there. They have their own apartments. They're clean, they're nice, they're pleasing."

"And seeing it like at St. Thomas, it was so beautiful. I remember going in when they finally get their apartment and the mom said, 'Oh my God, this is the most beautiful place I've ever had.' And nice furniture. And then they can go pick out their own things; blankets, and throw pillows, and pictures, and it's a place to be proud of and you can have your friends over. But the help is there, and the groups are there, and the cooking skills, and the grocery skills, and all the things young families need."

Participants also explained the need for increased transportation services for mothers impacted by prenatal opioid exposure, as many are not able to access support and healthcare outside of the community. Others thought that life skills such as financial literacy and healthy meal preparation programs did not need to be exclusively delivered through a transitional house and that their community could provide these programs more regularly for all parents.

"Transportation is a huge thing."

"I think some of the root is job opportunities. When I was involved in that Healthy Moms Healthy Babies program, some of my girls wanted a better life, and they wanted a better life for their babies, but they were so beat down, and they had dropped out of school. Even if there was some sort of job you could've thrown their way, it would've given them hope."

"And the problems that we have for poverty. So, how are we going to be able to meet all these other aspects of their growth when they're worried about a roof over their head, or they're worried about food, and then we expect them to grow in all these other areas? It's a lot of work. It's not going to be a quick fix, and we need dedicated people to be focused on what we can do creatively. Housing is a big thing."

"There's a lot of women that just never learned how to take care of themselves. We need to learn how to cook healthy, to live healthy, to live clean, to not expose ourselves and our children to danger. Like my mother didn't know how to keep us safe and just always put us in situations that were impulsive. She's a good mother but she didn't know any better."



Treatment and addressing trauma

Treatment options offered within First Nations communities were seen as ideal so that mothers could heal and receive treatment where they lived. Most participants whose communities did not already have in-community opioid agonist treatment programs thought it would be helpful to have these to address treatment access and support. For many mothers living in First Nations communities travelling regularly, if not daily, for opioid agonist therapy was a major inconvenience that could take hours every trip. Many mothers described not being able to seek employment because they needed to go to the methadone clinic daily. Some mothers do not have childcare, so they must take their children with them, which is incredibly challenging.

Another suggestion that sparked a lot of excitement for many was creating a healing centre in their community that takes in mothers and their children. Often mothers are apprehensive about leaving their children to go into treatment. This way, mothers don't have to choose between treatment and their children. Many described an ideal treatment facility that provided a safe and comfortable environment for mothers to receive treatment and care for their children for as long as they needed. Programs for the children and the parents would be available in the centre as well. Many acknowledged the primary barrier to this was funding.

"Open a treatment centre here that would encompass, right from active addiction to aftercare, and the whole thing. So, I think we need that here because there's that time where they're ready, you know, 'Get me some help.""

"If I had a magic wand I would never have a family separate. I would want that family to go to treatment and heal together, instead of being separated and divided, and experiencing the grief and setback more into the addiction pattern. If there was like a family treatment centre where they could be together, there would be better progress in their healing. That's what I've always wished for since this hit the fan."

"A lot of people come to me, and they say that they don't want to talk to their counsellor, they don't want to talk to these non-Indigenous people who come into the community and like say, 'here's a solution' and like they can't relate with them. So, connecting with people who have experienced it. Connection is the biggest piece of it."

"We have the land. I don't think that is the barrier to having a treatment centre here. It is lack of funding."

Recovery programs that focus on encouragement, connection, and support were seen as ideal. Role models and role model programs were seen as a promising practice that should be further promoted and developed, as they provide a person to relate to who has also gone through opioid use disorder or similar challenges. Having a role model or sponsor to call at any time day or night was seen as a good strategy. Many people thought that building off the Narcotics Anonymous program but tailoring it to mothers would be helpful. Similar to this, providing healthcare and addiction services in the evenings and on weekends, when issues typically arise, was seen as another approach that would help mothers when they are most vulnerable.

Across communities, participants agreed that most women who use opioids during pregnancy have experienced some form of trauma. Identifying and addressing this trauma is critical to their recovery. Many participants spoke to the benefits of psychotherapy, mental health counselling, and addictions counselling. Building on this, some participants suggested that counselling services could be offered in less formal locations that felt more comfortable and less institutional, such as in the outdoors or in a cultural setting such as a tipi or sacred fire.

"That comes back to the question of asking what they want. I might be like these three things are the most important, but they want to do number five, so number five it is. And then we're going to build a better relationship and you're going to come back and, one day, we're hopefully going to get to one, two, or three things that are more important."

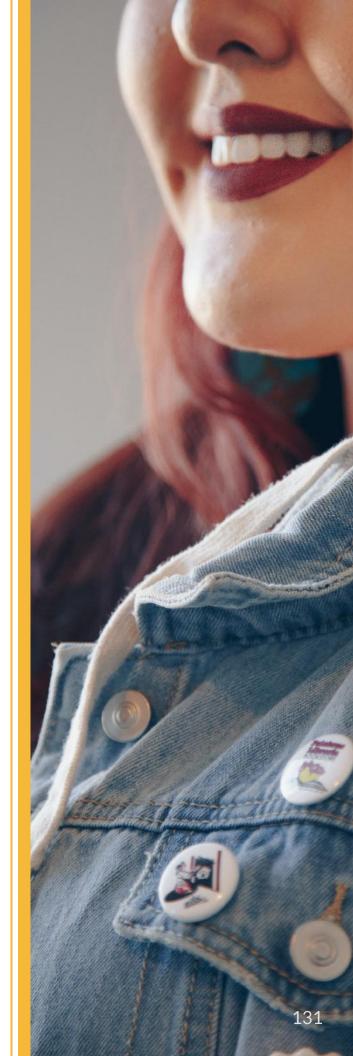
"That's what I want in our community is safety; safety without judgement, recovery without judgement, and being able to access care, and to access extra help and support without judgement, because a lot of the time people feel stigmatized. It's ridding the past generations of that idea of hiding behind our traumas."



"I think a 12-step program specifically designed for Indigenous women that they can relate to and that they go through the steps, and even work with a sponsor or somebody in the community that can help support in that way might be beneficial."

"A mentorship program, somebody who actually has the lived experience or was addicted during pregnancy or on methadone, to be with them, and hold them accountable. Literally, show up at their door, be like, 'I'm here. You're going to your appointment.' Just if they had somebody. I think people are more receptive to someone that they can relate to, who's been through something similar to them. So, if we had some sort of mentorship program, I think that would be probably really effective or beneficial."

"I don't know of too many moms that have someone to call. Like, say they went to treatment and then they came home, and they had a relapse, and they have no sponsor to call. There are no sponsors in place and there's no 24-hour service that they can call. They need to talk to somebody. Some prefer talking to people face-to-face. Some don't care if it's just texting or messaging, as long as somebody's talking to them; they're communicating with someone."



Reconnecting with culture, teachings, ceremony, and land-based programming was seen as another way to help mothers impacted by prenatal opioid exposure. Participants expressed that culture could help women maintain or regain their identity, find purpose, and develop confidence. Participants recommended engaging Elders, spiritual advisors, Medicine People, midwives, and Clan Mothers to provide spiritually and culturally based care and guidance to mothers. In many communities, women's circles were proposed to share important teachings on mothering. These circles can teach about parenting roles and responsibilities to all new mothers so that mothers who used opioids during pregnancy do not feel singled out.

While culture was seen as important to many participants, to a few it was not seen as a crucial part of recovery. A few participants had concerns with the approaches and protocols for cultural practices. Some mothers with lived experience shared that in the past they had become embarrassed at cultural events because they did not know the protocols or practices and they had been excluded. Others expressed concern with the gendered division of cultural practices. Most thought that cultural practices needed to be inclusive and educational for all people.

"For Indigenous women, a lot of our traditional teachings help us understand our meaning for living life and for understanding a lot of life lessons. I think that in a centre where the focus is on well-being and mental health, physical health, and spiritual health, then you start to heal. Just giving that person that time, not only just abstinence but the therapy in a safe place, a safe environment, because you can't get better in a contaminated environment."

"It's having access to cultural communities and events. Whether that be Rain Dance, Sun Dance, Midewin ceremonies. Because what they talk about there is teachings around that commitment to life, and you're also with others that may be going through the same process. They are life-changing experiences."



Love, support, and encouragement

Participants discussed the importance of small gestures that go a long way toward creating a more supportive and caring community for women living with addiction. Examples of these gestures include the simple act of acknowledging one another so that people feel seen and like they matter, or congratulating a mother for sticking with their opioid agonist treatment program. Service workers shared success stories where they continued to reinforce to mothers that they are good people and deserve good lives. Constant encouragement from people who truly care was seen in many communities as an important way to help mothers begin treatment and stay clean.

Some participants also discussed the importance of healthy social networks for mothers. Mothers impacted by prenatal opioid exposure often associate with are using opioids or other substances as well. Once a mother is in recovery it is important for her to have supportive relationships with people who are also healthy. Some participants shared that it is easy for a mother to slide back into opioid use if everybody around her is still using and encouraging her to use. Many mothers shared that they spend most of their time at home with their children.

"I mean, we have to have supports in place, absolutely, but I think sometimes we forget that those supports don't need to be physical things. Sometimes people just need to know that they're cared for, and that people want them to be better, and that they've got a few good supports around them to feel that they actually can. If you've got two or three people who are around you consistently who believe in you, and who support you, and love you, and care for you, than that in itself can move mountains."

"You remind someone that they're important, right? No matter what they're dealing with, they're still important and we love them. If we make that personal connection."



"I think uplifting the mom and even the dad is a helpful strategy. Positive reinforcement, you know. 'Yeah okay, that happened, this happened, but that's not who you are. Let's keep going.' Let's build on their strengths and reassure them that what happened; like not to carry that shame and that guilt because you're taking care of a newborn now. You can't do that while you're carrying that. I like to call it a bag of shit. A couple clients say, 'You can't fix yourself carrying around a bag of shit.' You got to let that shit go sometimes in order to keep moving. Letting them know that happened, but that's not who you are right now. You're here, you're looking to the future."

"When you are referring them to other services either you go with them or you do that warm handoff where they don't have to tell their story again. Or if they want help, call others in the office and advocate for them rather than send them out the door and they're on their own again; they're starting from square one, they got to retell the story. So, I try to do as much as I can from my office while they're there. Let's call together. Let's work this out. Okay you want to go next door, let me come with you, and I'll introduce you and do that warm handoff to them rather than, 'Go over there, and go over there' cause then they give up, right. But if it takes them nine times to come tell me the same thing, I'll listen nine times."



Strategies to support families and caregivers impacted by prenatal opioid exposure

Families impacted by prenatal opioid exposure need support so that they can care for their loved ones. Participants agreed that families needed to know more about opioid use, including carrying and using overdose kits such as Naloxone. Families also indicated they needed practical training on caring for children with prenatal opioid exposure because they are often the people who take in and care for the children. More education and training for service providers, families, Band staff, and community members about substance use and addiction was seen as a way to help families. In this way, people can learn how to better support family and community members, and those impacted by prenatal opioid exposure can feel the support of their family behind them on their healing journey.

"I'd like to see more support for the family members who take the kids in; more child development teaching about the nutrition, the nurturing, the skills that a child needs especially in the early years. Some kinds of classes for the grandparent or family member who's taking the child that are enjoyable, social, that give them a break from the children, and help them in doing the best for that child. And maybe a little bit more education on attachment disorder. It's trauma to a child. You're not getting that bond with the parent."

"I think the services need to be made to the whole family. It's not just the person with the addiction who's suffering, it's the whole family. It affects everyone."



Grandparents, service providers, and educators identified that there needed to be long-term plans for children being cared for by grandparents that take into consideration the age, disability, and death of the grandparent. Most who participated thought that there was a great need for more services to support grandparents and great-grandparents raising children exposed to opioids prenatally. This includes specialized funding, mental health services for themselves, respite care, and early child development education that helps them support their grandchildren with prenatal opioid exposure. According to caregivers, without respite care, there is a great risk of family breakdown and caregiver burnout. Some participants also thought that a dedicated group for caregivers could help break the isolation and bring them together to share their experiences and get support.

"You can't be your best. They're not gonna be able to be their best for their children if they're waiting 'til their breaking point before they're getting respite."

"I just think that maybe helping the family members that are taking the child in, offering more to them. Some of them are working so they aren't able to take it. If they could have a support person just for them; to come and talk to them and discuss things. If they had questions about how to do this, or where I should go, and how long am I gonna have this child?"

"Having family education programs so we all know how to support each other in our families, and in the community. I think that would help a lot. I think people — moms, dads, babies — they'd be able to know that if they were to stop using, there would be somebody to catch them, and help them, and bring them back into health."



When speaking about men, including fathers of children exposed to opioids prenatally, some participants considered the number of services available for women compared to men inequitable. In some communities, participants identified many more services and treatment centres for women. Some service providers were at a loss as to where to send men. Some identified the need for more men's shelters and treatment centres within and outside the community. Many participants shared that if men were going to be good fathers and partners, then they need to be well and have access to services to address their trauma and addiction. Some participants stressed the importance, when appropriate, of including fathers in conversations about issues such as prenatal opioid exposure and fostering children with prenatal opioid exposure. For the situation to change, men needed to be seen as parents, caregivers, and central figures or potential male role models in children's lives. And while not always easy to bring fathers into family circles if there are issues pertaining to safety or relationship issues, participants pointed out that it can often be important to the children to make the efforts to engage with them.

"It's hard with men too. When it comes to social services, men really get the short end of the stick. You often see men being kind of pushed to the side over the mothers. Even when it comes to addiction facilities. You bring me a woman that's got severe trauma I can think of five, off the top of my head, that will take them. And if they're pregnant they'll take them now; immediately, there's a bed saved for them. When it comes to men it can take months. These guys could be dead in months."

"Support the fathers also. He might be still an addict, or he needs to learn to support the partner and the new life that's coming. So not only the mom, the male or the partner's going to need some kind of counselling also to help her along, support her when she needs it. They're thinking they're the breadwinners, and they're feeling like failures because there are no jobs in our communities."



Strategies to support service providers impacted by prenatal opioid exposure

Health and social service providers shared that they experience many challenges in their work, but also quickly identified strategies that could help them be at their best. All types of providers identified a need for more up-to-date information and training on prenatal opioid exposure. For example, what signs to look for, programs and services that exist or they can implement in the community, and how to use naloxone kits.

Fatigue and burnout are experienced by most service providers due to the all-consuming, crisis nature of their work supporting families impacted by prenatal opioid exposure. Some service providers shared that they did not always get support or respect from people, including parents, for the work that they do. Service providers are often in highly stressful and sometimes dangerous situations. Some participants explained that no matter how much they do for a child they cannot change the home environment that the child is in, and this causes them great sadness. Taken together, these job stressors can cause poor health amongst providers and high staff turnover.

"You never know what's going to happen on any given day. Sometimes we have clients or community members who are really angry. And then we have to be with those people. But there is really nothing that takes care of us when we are having a really stressful day like that. So, something built into the programs would be really helpful. Whether it's bringing in a counsellor, in-house counsel, that we could sit with when we needed to. Something like that."

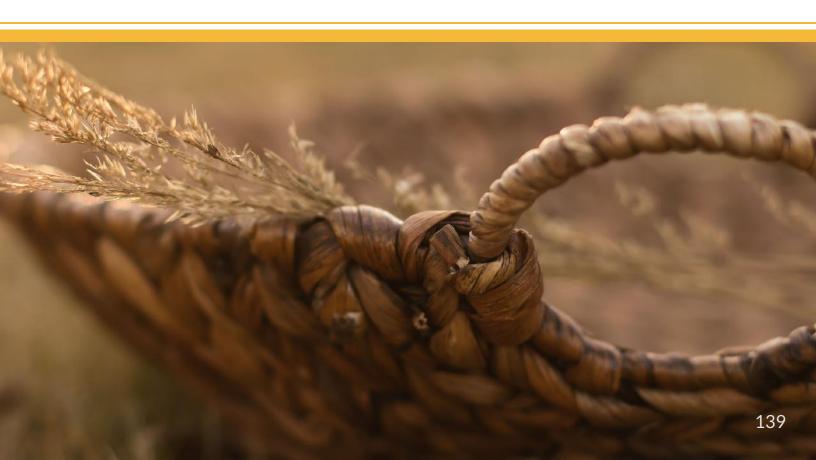
"We were always trying to search for training just for our programs, for our prenatal programming. And we've yet to find training on prenatal opioid exposure anywhere. That would be very beneficial for us."

"I got home to my kids and my partner, and they were like, 'You need to leave that job because it's sucking all your parent skills out.' And again, for the longest time I never really paid attention to it or thought it was true, but then your kids get old enough to start talking to you and you're like, 'Oh my God, it is true, the burnout from work impacts you at home."

"There's times when we as workers, we take on way too much and we think that we can help everybody and, in reality, we can't. And that's when we feel burnout. Because you feel like you've failed. But bringing the group together like this, and having that debrief, and it may be once a month or every three months, can help that."

"We just need to have more information about prenatal opioid exposure because we need to be up-to-date on the information, and what to expect, and what kind of things to look for. What are the signs? What are the red flags? Also, what services and programs exist?"

"We need in-house training for all the staff. Like even the use of naloxone kits. We don't know anything about using them."



To get through these challenges, participants shared that they needed to be a strong, united team, that trusts one another. Participants said that they often feel isolated and either do not have time to connect with co-workers or are afraid to share difficult experiences. Building trust and taking time to work on their relationships was seen as a strategy to increase service provider team cohesion.

People expressed that they wanted to set aside more time for planning and development. Dedicating more time for planning sessions and inter-departmental meetings was seen as a strategy to address working in silos. Some service providers commented that having regular debriefing meetings would be helpful. After a particularly challenging day, it is important that service providers have the time to talk with a colleague or another trusted person at work to process their experiences and feelings. By doing this, people thought they were better able to go home and look after their own families, where many are also dealing with challenging issues.

"I see all the workers are very busy. There are lots of things going on all the time and then, before you know it, it's Friday afternoon. So maybe even hiring a manager, even to help us organize ourselves into getting that circle of care going and having better communication between all the different departments would be good."

"Cause sometimes we do feel isolated. And I know I've felt that way at times and I tend to internalize, which I know I shouldn't do."

"I think that support amongst ourselves will strengthen each other but also strengthen people that we come in contact because we'll be united and people will say, "Okay, look at those guys, they get along. I can go there, I feel good." Then from that, it goes outside of this office, it goes to everybody else. That's where we'll build the strength within just this building."

"Debriefing with each other can make a big difference."



In almost all communities, service providers thought that they needed to be both more knowledgeable about and better connected with other programs and departments in the community as well as programs, services, and healthcare outside of the community. A program fair was suggested as way to increase awareness and share information. Many service providers spoke to the need for regularly scheduled meetings that included people from all departments that support those impacted by prenatal opioid exposure. In some communities, service providers wanted to get back to regularly consulting with the community on services and needs. Increasing outreach would better ensure the services they provide match the needs of the community.

"It would be nice to do more collaboration. We have a lot of people that come in with addictions, and so it would be nice to have other departments come over and work with us."

"I think for us too as a health team, we keep saying it but we never do it, is breaking down the silos."

"I think around this circle I've heard that we need to get more educated. So having more in-services. And I've also heard that we need to network more and become more unified in how we're going to approach things."

"We need more service providers."



Many service providers shared stories of times when clients, people from the community, or leaders provided them with words of encouragement and thanked them for their hard work. They said that these moments and words were what kept them going on their darker days. The impact of recognition and appreciation was strong. Many workers remarked that the ultimate reward was seeing a client do well.

Many service providers spoke to the importance of self-care. Examples of self-care included prayer, smudging, and finding ways to release the emotional weight they are carrying. People shared that if they were not well with themselves, then they could not provide the best care to clients and their families. Participants thought that self-care should be supported by supervisors and become part of the culture of service provision.

While many of these strategies can help service providers, the reality that many shared was that they need more people to do this work. Participants explained that it is crucial that they get more specialized service providers and a bigger circle of care to better meet the many needs and requests of families, and to address the growing opioid crises in their communities. For this to happen, some thought it was critical that leadership, supervisors, administrators, and program managers understand the history of the community, concepts of wellness, and be more supportive of strategies that promote the staff well-being.

"There's a lot of high points and low points. I think about how to lead or how to role model; how to do all of these things that can help. But there are gonna be always those different people that will judge, or criticize, and sometimes that's the only thing you really hear, and that's when it goes down to that low point. For me anyway, there's always somebody that ends up coming and saying, 'You're doing a good job,' you know, and just getting that reassurance and that motivation to keep going and we're not all perfect."

"I have to keep myself in a good frame of mind. I have to keep myself in a good space. And so, what I do for self-care is I pray, I smudge, and I release those things so that I'm not carrying them."

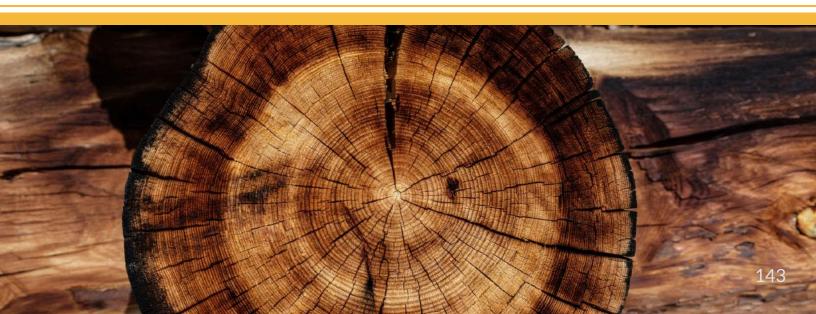


Strategies for prevention and reduction of prenatal opioid exposure

In all communities, prevention of prenatal opioid exposure was seen as a high priority, coupled with reducing the use of, and addiction to, opioids and other substances.

Addressing trauma was raised as an essential part of any strategy to prevent opioid use and prenatal opioid exposure. Addiction workers noted that trauma is always behind addiction. The link between opioid use and the intergenerational impact of the residential schools was one of the biggest and most central topics of discussion related to the prevention of prenatal opioid exposure. Participants spoke to the large number of community members who are struggling with grief, abuse, and trauma, and how vital it is to encourage each other — young and old, and across genders — to talk about and understand one's traumas and to share information on where to find help. As such, the need to adopt a trauma-informed approach to all aspects of care and treatment was seen as critical. More professional training for staff on trauma-informed care and the impact of opioids would help service providers and educators better support children and families affected by prenatal opioid exposure. Education and healing regarding intergenerational trauma and its impacts were also seen as important.

"I'm a first-generation survivor. In my family, I'm the first one not to go to residential school. And for me to say that, that's a big deal. My father's a residential school survivor. A lot of people don't understand that intergeneration trauma and we carry it in our DNA. Being colonized as a First Nations people we carry so much trauma because we've had so much happen to us within the last 500 years. And now we're seeing the result of that. We need to break that cycle."

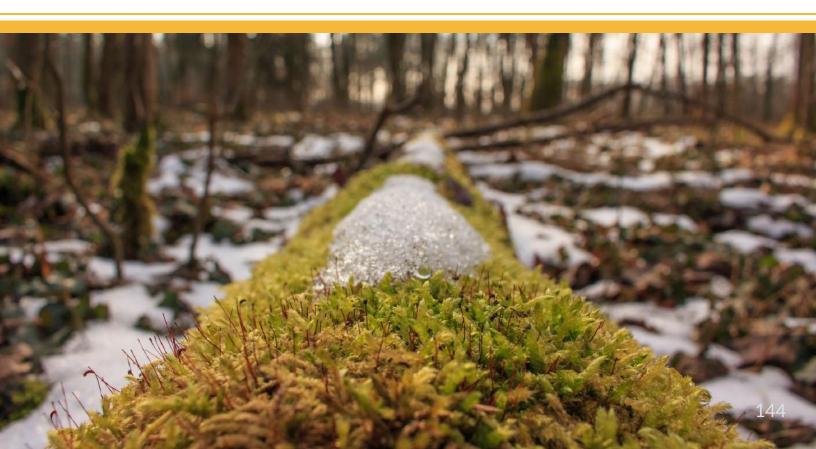


"When people in the community stand up and talk about addiction and trauma more, and let out our stories more, then people start coming out more. They're feeling comfortable with talking. See, at one point, you weren't able to cry. You weren't able to talk about your feelings, you know; we were so shut down. And then now, everyone's talking."

"The message used to be, 'Alcohol's bad; everybody stop drinking." Well, they did stop drinking. Then start using other things, right? So, let's address the real issue. Why do people drink? Why do people drug? There are more issues underneath, and we need to address those. People have got to stop numbing themselves."

"Anytime she was having a workshop, she'd make a personal phone call to everybody and say, 'I would like you to come to the workshop.' So, you felt almost obligated to go. I think that personal contact is so important. I think that's what's lacking in the community too."

"We got to get rid of things like lateral violence, and harassment, and those things that exist in this community that will prevent us from working together to prevent prenatal opioid exposure".



Participants agreed that education and awareness about opioids is needed for all community members. Community members need more guidance on how to recognize and support family members who have substance use disorders. Most thought that education should start in schools from a very young age because some children are living in homes where people are using drugs and witnessing drug use in the community. Some youth are also using drugs and becoming sexually active earlier. People thought that education in schools should focus on the painful reality of opioid addiction including overdose and death, the high rate of addiction to opioids, how to abstain from opioid use in social settings, and the impact of opioids on pregnancy and children. Many people said that they do not want children left guessing or fearing the unknown, they want to give them information to help them make smart decisions.

"Teaching about healthy living and what it can mean for your children or future children. That's very obvious to us but, at the same time, it's maybe not to some."

"Showing youth what each drug is about and what it can do to you. Maybe not too graphic videos explaining what it can do to development or your brain, your health."

"Because they have all the peer pressure out there, the social media. You can have a family that doesn't use, but then their children will use. So, providing that education is crucial."



Community-level education on opioids was also seen as an important strategy to prevent prenatal opioid exposure. Participants thought that all community members needed to know more about drug use and addiction so they would know what to look for. It could also go a long way toward decreasing shame and stigma, and increasing understanding, compassion, and support for those who are impacted by substance use and addiction. Many participants discussed launching an education and awareness campaign in their community. People suggested short educational videos that could be shared on social media, as well as posters and banners that could be put up around their community that speak to the impacts of prenatal opioid exposure on children and families. Some also discussed sharing success stories through these mediums, such as stories of mothers who overcame addiction and went on to have healthy lives with their children. Engaging people with lived experience was seen as critical to increasing the credibility and effectiveness of these messages. Many recognized it was important to tailor and target their education programs to specific groups of people, for example, mothers, teens, and elders, to ensure the messaging matches the issue.

"Educating people on opioid use. If you could start somewhere; I would think the Band Office staff. Even if they had a quick education seminar. You know, that's hitting a lot of people because they're aware of it and they could teach their families."

"I think education for people who aren't pregnant is important. You could talk about all the harms of using while pregnant. Each week you could have a program where there's like an educational teacher coming in and there's like an incentive for it like food or gift cards."

"We could go in schools; we could do more like education towards opioid use. You know, aware of what the dangers are, that there are no good amount of drugs, so they don't start in the first place or even entertain the idea of it."



Many people discussed healthy homes and good parenting being the primary prevention for opioid use. Most participants thought that self-confidence and belonging were important buffers against opioid use for youth, and healthy families were the best way to raise young people who are confident in who they are. Supporting family health can look different based on situations and scenarios. But simple things such as encouraging or incentivizing parents to spend more time with their children was seen as beneficial. Some people suggested a campaign that educates all parents on the benefits of family meals together and other positive parenting strategies. Others thought that offering family recreation nights on weekends in the community would give families a healthy place to gather with other families that did not include substance use. Some suggested offering pizza, prizes, kids' activities, or other incentives to get people to come.

Changing the social norm around drug use was also seen as an important prevention strategy. In many communities, people told us how widely accepted it is to use opioids. Participants discussed that drug use needed to be seen as unacceptable by community members. If they could change the social norm people might feel less comfortable using drugs or offering them to others.

"There's not a lot of work put into building self-esteem in the young people in communities, so when they lose their self-esteem, they start seeking things, or just not thinking things through, and then they begin engaging in drugs."

"Parents need to spend more time with their kids. More time with family where they stick together, eat together, and do stuff together."



"That's what they should focus on is the children, from toddler, to adolescent, to young adults. And that's why kids start doing drugs because they don't have either a positive role model at home or any kind of role model. A lot of kids grow up without their parents, or they grow up with their grandparents and their grandparents are too old to be doing stuff that their parents should be doing with them. So, that's one of the things that should be focused on is the children."

"Empowering girls. I think we do a pretty decent job around here. But maybe getting that point across that they have a lot of choices. They don't want to get stuck with a drug addiction and a baby before they've gotten a chance to do stuff with their lives."

"There is a lot of peer pressure, whether they're doing opioids in the party, or after the party, or at home."

"Have family things happen whether like have a New Year's Eve powwow so they don't have to go party. More family engagement. A lot of times, the community will say it and it's true, "They don't come. You do it, and they don't come.' Maybe sometime if they do their personal touch to it, they will come."



Participants in all communities said that recreation opportunities for youth are important. Investing in youth was seen as a large priority in each community. Showing young people that they matter, and the community is invested in them, was a way to increase their confidence and sense of belonging. In many communities, people spoke about the importance of activities, such as sports, in keeping young people on the path of good health.

"In terms of primary prevention, I think making sure that kids have access to team sports, that they're encouraged to come out to community events, that they're encouraged to build strong social networks. Because there's evidence saying that kids who are involved in team sports or are active are far less likely to get involved in drugs or become pregnant at a young age. So, making sure that as service providers too, we're doing our part to try and encourage family-oriented programs. Help support children in different sports or whatever their passions are at a young age, and try and cultivate that, so that they're less likely to become involved in drugs in the first place."

"Youth get bored, they go looking for other things to do, and they end up getting in trouble, or they end up in jail, and then that leads to drugs. That's a problem I had when I was younger. I didn't have a lot of programs when I was growing up."

"If we could get more youth working because if you have something to do, you are preventing. Or other activities like recreational sports or even crafts, cooking classes, anything where you're engaged rather than sitting around with nothing to do. Because I feel sitting around doing nothing is really a big problem. I think a lot of people have way too much time."

"They need more for the kids. Sure, they have culture camp for one week, but I mean have art camp, dance camp, and film camp. Baseball, football, soccer."



Participants spoke of the power of culture to keep people healthy and away from opioids. Many heeded that people in their community could benefit from reconnecting to language, culture, and ceremony. People spoke of providing introductory nights or programs that encouraged people with no experience with cultural programming to attend. Others thought that increasing cultural programming and embedding Indigeneity within the schools and daycares was crucial. Holding culture camps, during the summer or on school breaks, was suggested to keep young people doing healthy activities when they are most at risk for experimenting with unhealthy behaviours such as drug use. Some people mentioned that they do need to work on making culture camps and other cultural activities for youth more attractive. As one participant put it, "There are only so many times you can take teens out to set up a teepee before they get bored and stop coming."

"Once we begin to start educating and bringing back our way of life, we will see benefits. There is something about the culture that grips a child. Like if we teach the child the language as soon as they're born, it's the language that will bring them through. It's the language that gives healing."

"There's this huge lack of a cultural approach to try to help prevent drug use and some young people feel there's no hope. They're really affected by how depressed their peers are. One step above that they are having babies and addiction because of the emotional pain that they don't know how to address. Nobody talks about it. A lot of them don't feel they have a voice; the younger generation."

"For the children and for the adults that go into the circle and start talking about what is bothering them so we can heal. There's a healing process that goes on in the circle."

"The thing is that children are self-selecting into our cultural programs and there are very few boys participating in male youth cultural programming. It should almost be like kids have to go rotate through and find out that they actually like it."



Participants thought that the support of Chief and Council and administration was critical to a community overcoming the opioid epidemic. Many discussed the need for leadership to publicly acknowledge the issue, and work with people who have lived experience and service providers across all departments to come up with a comprehensive strategy to reduce opioid use in their communities. In general, people also thought that more funding needed to be allocated to the prevention of substance use and addiction. Some participants thought leadership and law enforcement needed to take a stronger stance on stopping the illegal drug trade and reducing the accessibility of drugs in their community. For example, policies could be enacted by Chief and Council in collaboration with pertinent departments to prohibit or reduce the use of opioids in the community or replace doctors who are overprescribing prescription opioids.

Participants also thought that healthcare providers that serve First Nations communities need to become more holistic and integrated in their approach to treating pain and trauma. Many indicated that they recognized that physicians are prescribing fewer opioids now than in years past, but they still thought there was a high level of opioid prescribing to First Nations people that needed to be addressed.

"A lot of people are hurting from their childhood, from whatever's gone on in their life, and if a lot of them could get therapy instead of their doctor's saying, 'Oh, let's put you on this,' and then getting them hooked. Instead of prescribing the drug, why don't they prescribe therapy?"

"It would have to come from the Chief and Council because they're the governing body. The policy could state something about no opiate use. It's getting the whole community involved. It's not just the health department, it's not just the drug and alcohol counsellor, it's also leadership."

"It's being ignored because it costs money. But addiction costs money. It's costing money down the road in the penal system, it's costing lives, it's costing money through the next generation falling. It just seems like we're putting the money in the wrong place and for the wrong reasons. Education is paramount and we're not putting the money there."



Lastly, participants discussed the need to love one another as community members and step out of their homes and shells to reach out and help people, even when it is difficult to do so. People need to become comfortable talking about opioid addiction and trauma. In all, participants agreed that ending the opioid crisis in their communities would require everyone acknowledging the issue and coming together to heal and address it.

"We have to lift each other up. We have to look at what values we have in our community to be able to pick ourselves up. There's enormous potential in our community. There's a lot of things that we have to make ourselves proud of."

"I think we've lost that community togetherness. You know, something is different. I remember before, everybody used to be able to walk around, and talk, and everything like that. But now, people don't feel comfortable doing that and I think that's where we need to get back to that community life."

"I just hope that sitting here and thinking about all this, there's positive to come from it, you know. And I hope that the healing catches like wildfire, I really do."



Summary

Local Indigenous knowledges and practices are crucial to reducing the harms associated with prenatal opioid exposure. The qualitative findings shared in this report are reflective of local First Nations knowledge, experiences, and perspectives on prenatal opioid exposure in the 13 communities that participated in this research. The quantitative findings illustrate the prevalence of prenatal opioid exposure and related health issues in the 13 participating communities.

The findings of this study showed that prenatal opioid exposure and neonatal abstinence syndrome are higher among the participating 13 First Nations than in Ontario overall, but rates have not continued to increase over time. In recent years, rates of prenatal opioid exposure have gone down for most of the participating communities. Participants described the high rates in their communities and the impacts. Mothers, children, families, health and social service providers, and educators have been impacted by prenatal opioid exposure. Participants also shared the broader impact on communities' identities, finances, and the social and familial bonds that knitted them together.

Many of the exposures arose from prescribed treatment of opioid agonist therapy for opioid use disorder. Participants shared diverse perspectives on opioid agonist therapies, such as methadone. Some thought it was an important part of harm reduction while others thought it was another form of addiction with harms not all that different than from other opioids. Many participants explained that it was more cost-effective to provide First Nations people with opioid agonist therapy than other types of treatment, such as counselling, to address the root causes of addiction.

Babies exposed to opioids prenatally were more likely to need higher levels of newborn care, stay in the hospital longer, and be removed from their mother's care at birth. Participants shared experiences of these outcome impacts, including disrupted attachment of mothers and their babies, high stress and fear over child apprehension for mothers resulting in poorer maternal health, and the continuation of intergenerational trauma for mothers and children.

Members of the communities shared the many innovative and evidence-based strategies they had employed to help address prenatal opioid exposure. Participants discussed tailored strategies to support the diverse needs of those impacted by prenatal opioid exposure, while also providing wraparound services to families, recognizing that supporting all people affected was important.

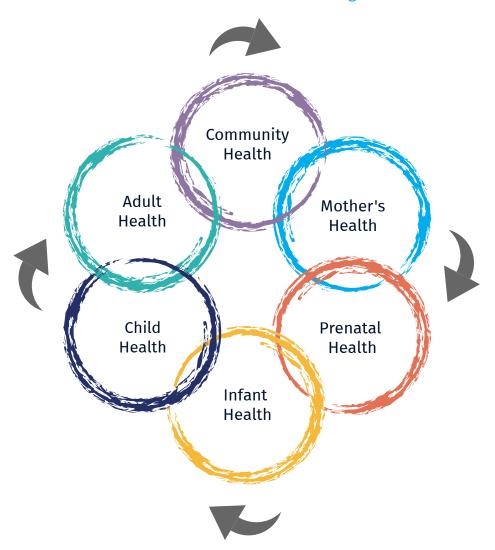
In all communities, people identified prevention as a critical priority. To prevent prenatal opioid exposure community members shared that addressing intergenerational trauma was pivotal. Changing social norms, increasing recreation opportunities for youth, educating young people on opioids and other substances, reducing criminal activity, and the continuation of the integration of culture into community life were all strategies identified to prevent prenatal opioid exposure.

Bringing together the qualitative and quantitative data has provided a rich and comprehensive understanding of prenatal opioid exposure in 13 First Nations communities in Ontario. While the data indicate that prenatal opioid exposure is a challenge for these First Nations communities, they also reveal the resiliency and strength in communities, families, and individuals who are working to overcome it.



The information gathered for this project illustrates that addressing prenatal opioid exposure requires supporting community health at all life stages. The origins of good health arise long before conception and the seeds of adult health are sown in early childhood (1). At each life stage experiences and exposures impact the physical, emotional, mental, and spiritual aspects of health. The experiences a person has at each life stage build on past experiences and influence future health. To fully address prenatal opioid exposure in First Nations communities, the health and well-being of all community members at each stage of life needs to be supported, as depicted in the diagram below. While the health of mothers is critical and specifically highlighted below, the health and wellness of fathers is also important and often overlooked. In addition, grandparents and other family members can play an important role in supporting the health of mothers and children through this life cycle. When community members in each of the life stages maintain or regain balance in their physical, mental, spiritual, social, and emotional health, cycles of trauma can be broken, leading to intergenerational healing and the reduction of prenatal opioid exposure.

Addressing prenatal opioid exposure through supporting community member health at all life stages



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Prenatal Opioid Exposure and Neonatal Abstinence Syndrome: A Research Project with 13 First Nations Communities in Ontario

13 First Nations

Detailed Quantitative Appendix





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Key terms

Discharge to social services at birth: When a newborn is discharged from hospital into the temporary care of the Children's Aid Society due to concerns about the baby's safety.

Hospital care: When an individual receives care in the emergency department or is assigned a hospital bed.

Live birth: When a baby is born alive.

Median Length of Stay: The midpoint in the number of days baby stayed in the hospital from birth to discharge. For example, if three babies stayed in the hospital for 4, 7, and 9 days after birth, the median length of stay would be 7 days.

Neonatal abstinence syndrome (also referred to as neonatal opioid withdrawal syndrome or NOWS): A withdrawal syndrome that is sometimes seen in babies of mothers who used opioids or were treated for opioid use disorder during pregnancy. For this analysis, babies with neonatal abstinence syndrome include those with a diagnosis of neonatal abstinence syndrome on their hospital birth record or a readmission to hospital within the first 14 days of life.

Opioid: A drug that is primarily used to treat pain. Examples of prescribed opioids include codeine, morphine, hydromorphone, oxycodone (OxyContin), and the fentanyl patch. Illegally produced or obtained opioids include street heroin and fentanyl.

Opioid agonist therapy: Therapy used to treat opioid use disorder using drugs such as methadone or buprenorphine.

Buprenorphine: Opioid analgesic and partial agonist used to treat individuals with opioid use disorder. Examples of prescribed buprenorphine are Subutex and Suboxone, the latter also contains naloxone.

Methadone: Synthetic opioid agonist used to treat individuals with opioid use disorder as well as chronic pain. Examples of prescribed methadone are Methadose and Metadol-D.

Opioid use disorder: A pattern of opioid use which leads to significant impairment, with a range of severity from dependence to addiction.

Prenatal opioid exposure: When babies are exposed to opioids in utero because their mothers use opioids or are treated for opioid use disorder during pregnancy. For this analysis, prenatal opioid exposure included the following types of exposure:

- Opioid agonist therapy such as methadone or buprenorphine.
- Significant opioid use for pain control. Opioid prescriptions with a duration of use totalling more than 10 days were included; prescriptions for cough medication containing opioids or very short-term prescriptions were not included.
- Information indicating the likely use of illegally produced or obtained opioids, including:
 - Babies born with neonatal abstinence syndrome whose mothers were not prescribed opioids or opioid agonist therapy.
 - Mothers who received opioid-related hospital care (emergency or inpatient) during pregnancy but did not fill a prescription for an opioid or opioid agonist therapy during pregnancy.

Preterm birth: When a baby is born early, before 37 weeks of pregnancy.

Our approach

Information we gathered

We set out to learn more about the impact of prenatal opioid exposure and neonatal abstinence syndrome. This is the information all 13 First Nations indicated would help support their efforts to address prenatal opioid exposure.



POE and NAS



Characteristics of mother



Characteristics of baby

Prenatal opioid exposure:

- Overall (2013–2019)
- By time period
- By geography
- By type of prenatal opioid exposure
- By type of opioid agonist therapy among those receiving opioid agonist therapy

Neonatal abstinence syndrome:

- Overall (2003–2019)
- By time period
- By geography

Opioid use in the year before pregnancy:

- Prescription opioids for pain control
- · Opioid agonist therapy

Use of other drugs during pregnancy that can result in symptoms of withdrawal related to neonatal abstinence syndrome:

• Benzodiazepines (e.g., Ativan, Valium)

Opioid use in the year after delivery:

- Prescription opioids for pain control
- Opioid agonist therapy

Average age at delivery

Average number of previous live births

Hospital care in the two years before delivery:

- Substance use or addictions
- Mental health–related for conditions other than substance use or addictions

Transfer to another hospital after delivery

Death in the year after delivery

Preterm birth

Average birth weight

Transfer to neonatal intensive care unit

Median length of stay in hospital

Discharged to social services

Discharged home with a medication to treat opioid withdrawal (i.e., a prescription for an opioid or benzodiazepine)

Readmission to hospital in the first year of life

Death in the first year of life

Where we got the information

To learn about the information listed above, we used data from the following sources:*

pe of information	
Discharge Abstract Database Information on hospitalizations, including reason and length of stay.	
emographic and administrative information on all registered or status First Nations people ring within and outside their communities.	
Information on records of in-hospital births in Ontario. Each record corresponds to a mother-baby pair.	
formation on dispensed prescriptions for narcotics, controlled substances, and other point or drugs, regardless of whether the prescriptions were paid for by a publicly funded or private insurance, or cash.	
formation on patient visits to the emergency department.	
formation about claims for prescription drugs received under the Ontario Drug Benefit ogram. This generally includes people of any age receiving social assistance and those ed 65 years or older.	
tient-level information for outpatient physician services provided to eligible Ontario sidents. Also includes details of services provided and associated diagnoses.	
formation on patients aged 16 years or older in designated hospital mental health beds.	
ormation on postal codes linked to Census neighbourhood data.	
emographic information, such as age, sex, postal code, date of birth, and date of death, all residents covered under the Ontario Health Insurance Plan.	

^{*}We would like to thank the Chiefs of Ontario for allowing the use of the Indian Register. Parts of this report are based on data and information compiled and provided by the Canadian Institute for Health Information and the Ontario Ministry of Health. The analyses, conclusions, opinions, and statements expressed herein are solely those of the authors and do not reflect those of the data sources; no endorsement is intended or should be inferred. Geographical data are adapted from Statistics Canada, Postal Code Conversation File + 2011 (Version 6D) and 2016 (Version 7B). This does not constitute endorsement by Statistics Canada of this project. We thank IQVIA Solutions Canada Inc. for use of their Drug Information File.

Some limitations to what we found

These are some limitations to the findings we have presented.

First Nations registration status

At the time of this analysis, data from the federal Indian Register were available at ICES up to 2014. When we looked for First Nations members in the register, we examined the registration status of the mother and the baby. This means:

- Babies born after 2014 are included only if their mothers were registered in or before 2014 or lived within the community.
- Babies whose fathers were registered but neither the baby nor the mother were registered or lived within the community are not included in the analysis.

Illegally obtained opioid use

Some mothers who used illegally obtained opioids were identified when their baby was diagnosed with neonatal abstinence syndrome *or* when the mother received opioid-related hospital care during pregnancy but did not have a record of an opioid prescription in pregnancy. Mothers using illegally obtained opioids who did not go to the hospital during pregnancy or whose baby was not diagnosed with neonatal abstinence syndrome when born would not be included in this category, which could lead to an underestimate of the number of babies born with prenatal opioid exposure.

Live births

Only live births occurring in a hospital were included. Stillbirths and a very small number of births that occurred at home or at a birthing centre were not included.

Opioid agonist therapy

Some opioid agonist therapy is dispensed directly by physicians (including Subutex) and so is not included in the Narcotics Monitoring System. These mothers may still be identified through physician billing codes for opioid maintenance therapy but the specific type of opioid agonist therapy would not be described. This limitation may also underestimate the overall rates of opioid agonist therapy in pregnancy.

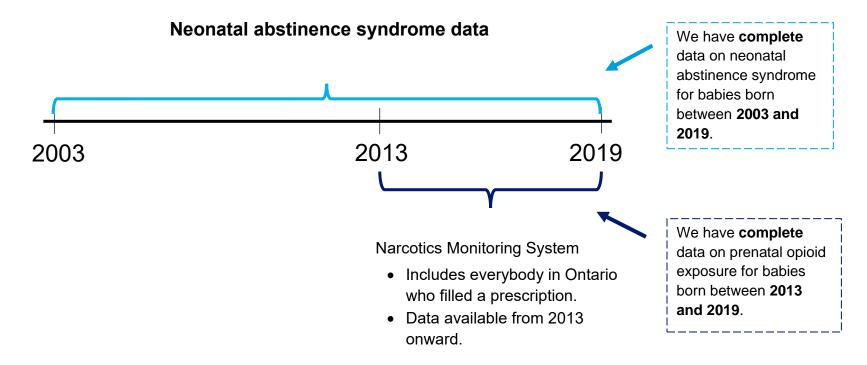
Postal codes

In some communities, shared postal codes were used to identify people living within the First Nations community. This means that residents who were not a member of the First Nation might be included, leading to an overestimate in the number of live births per year.

Time period

We mainly gathered information from 2013 to 2019 because the database that tracks opioid prescriptions filled in Ontario pharmacies (the Narcotics Monitoring System) was created in 2012. This means that we only have data related to prenatal opioid exposure for births starting in 2013. However, we have data related to neonatal abstinence syndrome from 2003 to 2019 because this is listed on the babies' birth records.

FIGURE 1 Availability of data on prenatal opioid exposure and neonatal abstinence syndrome in Ontario between 2003 and 2019



Prenatal opioid exposure data

(from the Narcotics Monitoring System unless otherwise specified)

In this analysis, the 13 First Nations included all registered members of the participating First Nations living in Ontario as well as people living within these communities who were not registered.

- We used unique three-digit band numbers for all thirteen First Nations to find registered members in the Indian Register.
- We used postal codes and residence codes* identified by the thirteen First Nations to:
 - o Determine whether members lived within or outside of their respective First Nations community
 - Identify people living in a First Nations community who were not registered

Shared postal codes may include people who are not from a First Nations community, potentially overestimating the number of live births per year.

Based on this definition, many of the findings are displayed in a way that compares people who lived in a First Nations community ("living within community") with those who lived outside of their First Nations community ("living outside community").

^{*}A unique number for each municipality and populated Indian Reserve or Settlement in Ontario. This code is assigned based on a person's address whenever they are admitted to hospital or visit an emergency department.

Sometimes, comparing groups can make statistics more meaningful. We compared the 13 First Nations findings with all of Ontario ("Ontario overall").

Calculating the findings

We analyzed the data by calculating percentages. This means we determined how many people had a specific characteristic within a larger group.

For example:

Number of babies Number of babies Percent of babies Percent of babies born with POE born with NAS x100 x100 born with prenatal born with neonatal Total number of abstinence syndrome Total number of opioid exposure babies born babies born

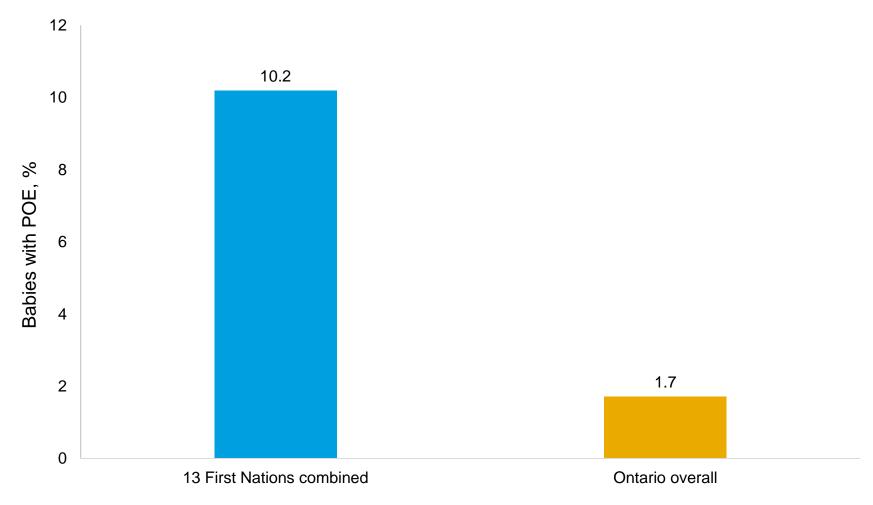
What we learned

Graphs

Notes

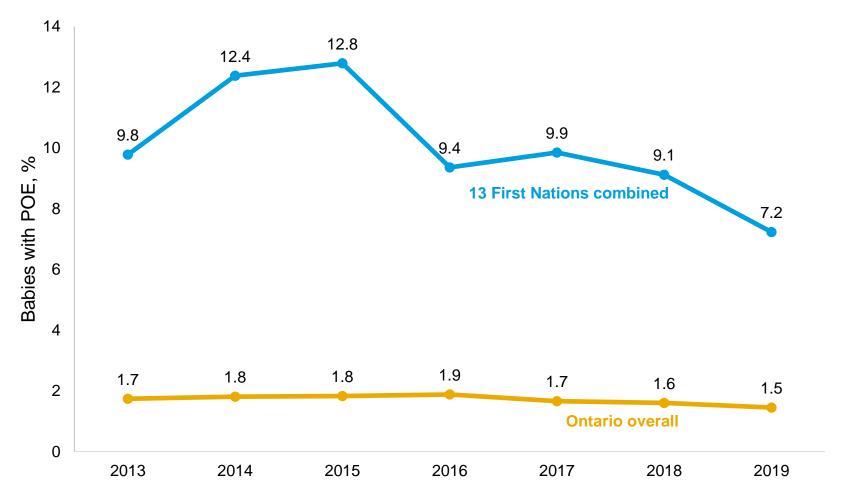
- Refer to the graph title, date range, and summary for key information.
- A value for the "13 First Nations combined" is an average of all 13 participating First Nations.
- A value for "Ontario overall" includes all the 13 participating First Nations.

GRAPH 1 Percentage of babies born between 2013 and 2019 with prenatal opioid exposure



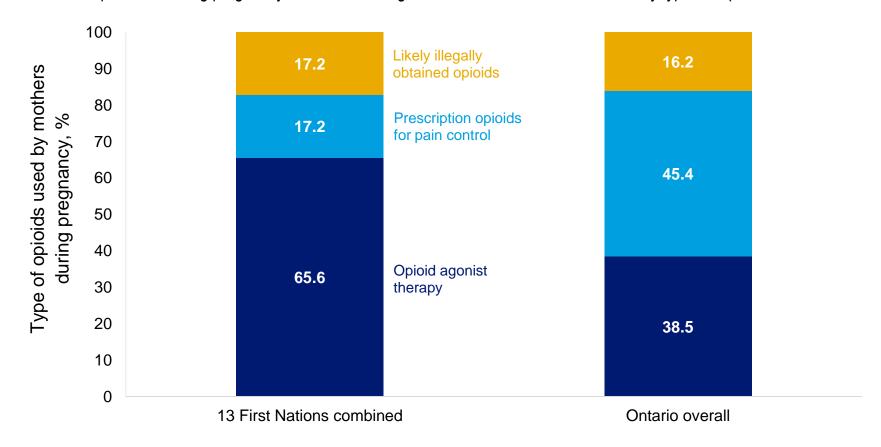
SUMMARY: For the 13 First Nations, 10.2% of babies born between 2013 and 2019 had prenatal opioid exposure, which was **6 times higher** than for Ontario.

GRAPH 2 Percentage of babies born between 2013 and 2019 with prenatal opioid exposure, over time



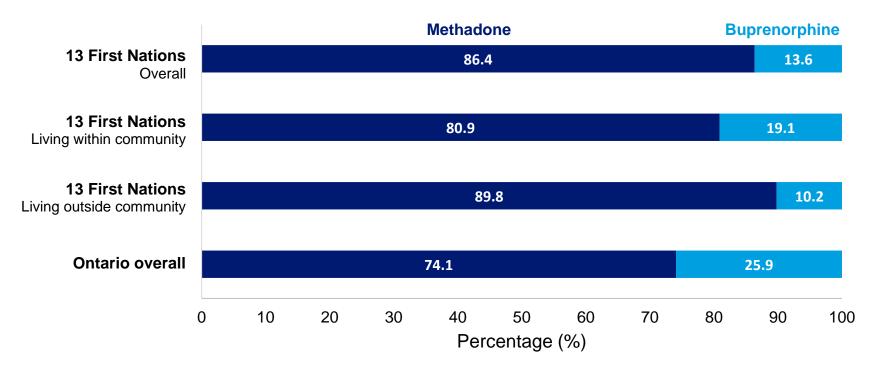
SUMMARY: For the 13 First Nations, the percentage of babies with prenatal opioid exposure peaked in 2015 and declined thereafter. The percentage of babies with prenatal opioid exposure remained relatively stable for Ontario overall between 2013 and 2019.

GRAPH 3 Opioid use during pregnancy of mothers who gave birth between 2013 and 2019, by type of exposure



SUMMARY: The profile of opioid use during pregnancy between 2013 and 2019 for the 13 First Nations combined is very different than for Ontario overall. For the 13 First Nations, 65.6% of opioid use among mothers during pregnancy was in the form of opioid agonist therapy, which was nearly **2 times higher** than for Ontario overall. The percentage of opioids prescribed for pain control during pregnancy for the 13 First Nations combined was **2.6 times lower** than for Ontario. The percentage of likely illegally obtained opioid use during pregnancy was **similar** for the 13 First Nations combined and Ontario.

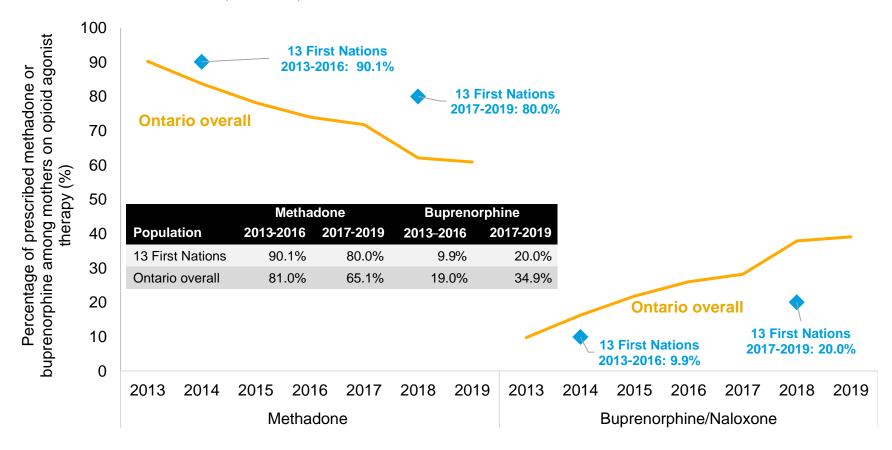
GRAPH 4 Percentage of prescribed methadone or buprenorphine* among mothers on opioid agonist therapy during pregnancy, 2013 to 2019



SUMMARY: For the 13 First Nations, among mothers who were prescribed opioid agonist therapy during pregnancy, a higher percent were prescribed methadone compared to buprenorphine (86.4% and 13.6% respectively). The percent of mothers in the 13 First Nations whose opioid agonist therapy in pregnancy was methadone was higher compared to Ontario overall (86.4% and 74.1%, respectively). Of mothers in the 13 First Nations prescribed opioid agonist therapy during pregnancy and living outside their community, a higher percent were prescribed methadone (89.8%) and a lower percent prescribed buprenorphine (10.2%) compared to mothers prescribed opioid agonist therapy during pregnancy and living within their community (80.9% and 19.1%).

^{*} includes only buprenorphine/naloxone

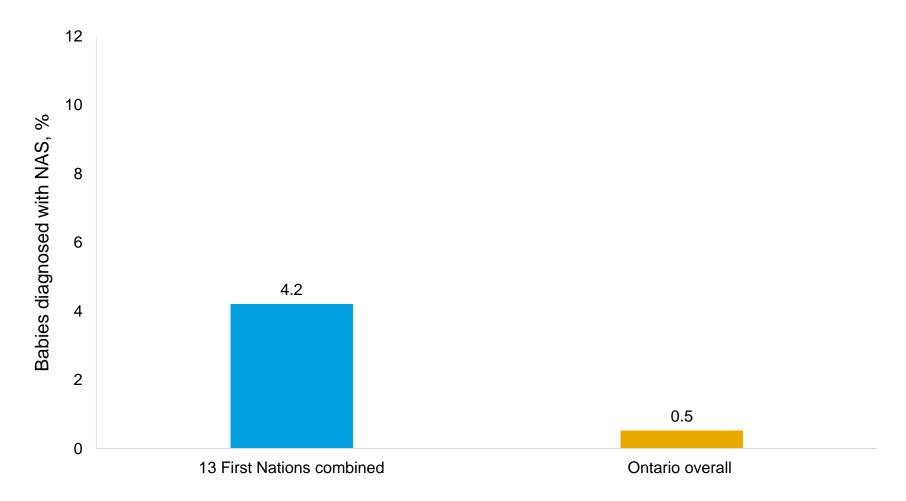
GRAPH 5 Percentage of prescribed methadone or buprenorphine* among mothers on opioid agonist therapy during pregnancy in 13 First Nations and Ontario, over time, 2013 to 2019



SUMMARY: For the 13 First Nations, among mothers who were prescribed opioid agonist therapy during pregnancy, the percentage who were prescribed methadone between 2013 and 2016 and between 2017 and 2019 decreased (from 90.1% to 80.0%). Over the two time periods, the percent of prescribed buprenorphine increased among the 13 First Nations from 9.9% to 20.0%. Between 2017 and 2019, the percent of mothers in the 13 First Nations who were prescribed methadone was considerably higher than for Ontario overall (80.0% compared to 65.1%), and those who were prescribed buprenorphine was considerably lower (20.0% compared to 34.9%).

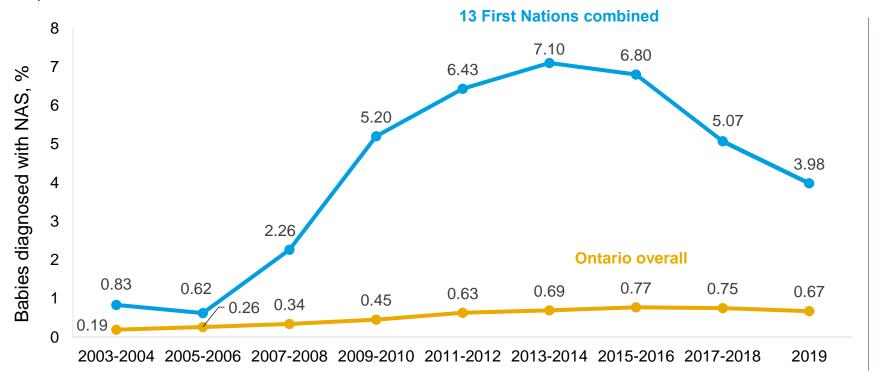
^{*} includes only buprenorphine/naloxone

GRAPH 6 Percentage of babies born between 2003 and 2019 who were diagnosed with neonatal abstinence syndrome



SUMMARY: For the 13 First Nations, 4.2% of babies born between 2003 and 2019 were diagnosed with neonatal abstinence syndrome, which was more than **8 times higher** than for Ontario.

GRAPH 7 Percentage of babies born between 2003 and 2019 who were diagnosed with neonatal abstinence syndrome, over time periods*



SUMMARY: For the 13 First Nations combined, the percentage of babies who were diagnosed with neonatal abstinence syndrome **increased by almost 12 times** between 2005 and 2014 and **decreased considerably** thereafter. The peak number of babies diagnosed with neonatal abstinence syndrome was in 2013-2014. In comparison, the percentage of babies diagnosed with neonatal abstinence syndrome increased steadily for Ontario between 2003 and 2019.

^{*}We combined data in two-year increments to avoid the potential identification of individual people.

Tables

Notes

- Refer to the table title, date range, and summary for key findings.
- The tables in the following section contain information that enable comparisons between:
 - Mothers who used opioids during pregnancy and those who did not
 - o Babies with and without prenatal opioid exposure
 - o Mothers and babies living within the 13 First Nations and outside the community
- Column titles:
 - Columns labelled "Living within community" (or "Living within communities") include anyone who lived in the
 13 First Nations at the time of this analysis, regardless of their registration status.
 - Columns labelled "Living outside community" (or "Living outside communities") include only registered members who lived outside of the 13 First Nations and within Ontario.

1. What we learned about prenatal opioid exposure and neonatal abstinence syndrome

TABLE 1a Number and percentage (%) of babies born between 2013 and 2019, by prenatal opioid exposure

	13 First Nations combined		
	Overall	Living within communities (registered and nonregistered)	Living outside communities (registered)
All babies	2,737	1,095	1,642
Babies with POE	279 (10.2%)	111 (10.1%)	168 (10.2%)
Babies without POE	2,458 (89.8%)	984 (89.9%)	1,474 (89.8%)

13 First Nations overall

• Of the 2,737 babies born between 2013 and 2019, 279 (10.2%) had prenatal opioid exposure.

13 First Nations: Living within community compared to living outside community

• The percentage of babies with prenatal opioid exposure was **similar** for babies who lived within the 13 First Nations (10.1%) and for those who lived outside their community (10.2%).

TABLE 1b Number and percentage (%) of babies born between 2003 and 2019, by neonatal abstinence syndrome

	13 First Nations combined		
	Overall	Living within communities (registered and nonregistered)	Living outside communities (registered)
All babies	8,026	3,376	4,650
Babies with NAS	337 (4.2%)	140 (4.1%)	197 (4.2%)
Babies without NAS	7,689 (95.8%)	3,236 (95.9%)	4453 (95.8%)

13 First Nations overall

• Of the 8,026 babies born between 2003 and 2019, 337 (4.2%) were diagnosed with neonatal abstinence syndrome.

13 First Nations: Living within community compared to living outside community

• The percentage of babies who were diagnosed with neonatal abstinence syndrome was **similar** for babies who lived within the 13 First Nations (4.1%) and for those who lived outside their community (4.2%).

	13 First Nations Detailed Quantitative Appendix 27
2. What we learned about mothers	

	13 First Nations combined		
	Overall Living within communities (registered and nonregistered) Living outside communities (registered)		
Mothers who used opioids during pregnancy	16.8	18.0	16.1
Mothers who did not use opioids during pregnancy	1.7	1.0	2.2

13 First Nations overall

• Among mothers who used opioids during pregnancy, 16.8% were prescribed opioids for pain control in the year before pregnancy.

13 First Nations: Mothers who used opioids during pregnancy compared to those who did not

• The percentage of mothers who were prescribed opioids for pain control in the year before pregnancy was **9.9 times higher** for mothers who used opioids during pregnancy than for those who did not (16.8% and 1.7%, respectively).

13 First Nations: Living within community compared to living outside community

• Among mothers who used opioids during pregnancy, the percentage who were prescribed opioids for pain control in the year before pregnancy was **slightly higher** for mothers who lived within the 13 First Nations (18.0%) than for those who lived outside their community (16.1%).

	13 First Nations combined		
	Overall Living within communities (registered and nonregistered) Living outside communities (registered)		
Mothers who used opioids during pregnancy	55.6	54.1	56.5
Mothers who did not use opioids during pregnancy	0.7	1.1	0.4

13 First Nations overall

• Among mothers who used opioids during pregnancy, 55.6% were prescribed opioid agonist therapy in the year before pregnancy.

13 First Nations: Mothers who used opioids during pregnancy compared to those who did not

• The percentage of mothers who were prescribed opioid agonist therapy in the year before pregnancy was **79 times higher** for mothers who used opioids during pregnancy than for those who did not (55.6% and 0.7%, respectively).

13 First Nations: Living within community compared to living outside community

Among mothers who used opioids during pregnancy, the percentage who were prescribed opioid agonist therapy in the
year before pregnancy was similar for mothers who lived within the 13 First Nations (54.1%) and for those who lived
outside their community (56.5%).

TABLE 2c Percentage (%) of mothers who gave birth between 2013 and 2019 and were prescribed benzodiazepines during pregnancy, by opioid use during pregnancy

	13 First Nations combined		
	Overall Living within communities (registered and nonregistered) Living outside communities (registered)		
Mothers who used opioids during pregnancy	8.6	7.2	9.5
Mothers who did not use opioids during pregnancy	2.0	1.4	2.3

13 First Nations overall

• Among mothers who used opioids during pregnancy, 8.6% were prescribed benzodiazepines during pregnancy.

13 First Nations: Mothers who used opioids during pregnancy compared to those who did not

• The percentage of mothers who were prescribed benzodiazepines in the year before pregnancy was **4.3 times higher** for mothers who used opioids during pregnancy than for those who did not (8.6% and 2.0%, respectively).

13 First Nations: Living within community compared to living outside community

• Among mothers who used opioids during pregnancy, the percentage who were prescribed benzodiazepines in the year before pregnancy was **lower** for mothers who lived within the 13 First Nations (7.2%) than for those who lived outside their community (9.5%).

	13 First Nations combined		
	Overall Living within communities (registered and nonregistered) Living outside communities (registered)		
Mothers who used opioids during pregnancy	22.9	22.5	23.2
Mothers who did not use opioids during pregnancy	2.4	2.1	2.6

13 First Nations overall

 Among mothers who used opioids during pregnancy, 22.9% were prescribed opioids for pain control in the year after delivery.

13 First Nations: Mothers who used opioids during pregnancy compared to those who did not

• The percentage of mothers who were prescribed opioids for pain control in the year after delivery was **9.5 times higher** for mothers who used opioids during pregnancy than for those who did not (22.9% and 2.4%, respectively).

13 First Nations: Living within community compared to living outside community

Among mothers who used opioids during pregnancy, the percentage who were prescribed opioids for pain control in the
year after delivery was similar for mothers who lived within the 13 First Nations (22.5%) and for those who lived outside
their community (23.2%).

	13 First Nations combined		
	Overall Living within communities (registered and nonregistered) Living outside communities (registered)		
Mothers who used opioids during pregnancy	62.4	62.2	62.5
Mothers who did not use opioids during pregnancy	1.0	1.5	0.6

13 First Nations overall

• Among mothers who used opioids during pregnancy, 62.4% were prescribed opioid agonist therapy in the year after delivery.

13 First Nations: Mothers who used opioids during pregnancy compared to those who did not

• The percentage of mothers who were prescribed opioids agonist therapy in the year after delivery was **62 times higher** for mothers who used opioids during pregnancy than for those who did not (62.4% and 1.0%, respectively).

13 First Nations: Living within community compared to living outside community

Among mothers who used opioids during pregnancy, the percentage who were prescribed opioid agonist therapy in the
year after delivery was similar for mothers who lived within the 13 First Nations (62.2%) and for those who lived outside
their community (62.5%).

	13 First Nations combined		
	Overall Living within communities (registered and nonregistered) Living outside communities (registered)		
Mothers who used opioids during pregnancy	27.7	27.6	27.7
Mothers who did not use opioids during pregnancy	27.0	27.2	26.9

13 First Nations overall

• The average age at delivery of mothers who used opioids during pregnancy was 27.7 years.

13 First Nations: Mothers who used opioids during pregnancy compared to those who did not

• The average age at delivery was **similar** for mothers who used opioids during pregnancy (27.7 years) and for those who did not (27.0 years).

13 First Nations: Living within community compared to living outside community

• Among mothers who used opioids during pregnancy, the average age at delivery was **very similar** for mothers who lived within the 13 First Nations (27.6 years) and for those who lived outside their community (27.7 years).

	13 First Nations combined		
	Overall Living within communities (registered and nonregistered) Living outside communities (registered)		
Mothers who used opioids during pregnancy	1.9	2.0	1.9
Mothers who did not use opioids during pregnancy	1.3	1.2	1.3

13 First Nations overall

• Mothers who used opioids during pregnancy had an average of 1.9 previous children.

13 First Nations: Mothers who used opioids during pregnancy compared to those who did not

• The average number of previous live births was **higher** for mothers who used opioids during pregnancy (1.9) than for those who did not (1.3).

13 First Nations: Living within community compared to living outside community

• Among mothers who used opioids during pregnancy, the average number of previous live births was the **similar** for mothers who lived within the 13 First Nations (2.0) and for those who lived outside their community (1.9).

	13 First Nations combined		
	Overall Living within communities (registered and nonregistered) Living outside communitie (registered		
Mothers who used opioids during pregnancy	11.5	13.5	10.1
Mothers who did not use opioids during pregnancy	2.4	1.6	2.9

13 First Nations overall

• Among mothers who used opioids during pregnancy, 11.5% received hospital care for substance use or addictions in the two years before delivery.

13 First Nations: Mothers who used opioids during pregnancy compared to those who did not

• The percentage of mothers who received hospital care for substance use or addictions in the two years before delivery was **4.8 times higher** for mothers who used opioids during pregnancy than for those who did not (11.5% and 2.4%, respectively).

13 First Nations: Living within community compared to living outside community

• Among mothers who used opioids during pregnancy, the percentage who received hospital care for substance use or addictions in the two years before delivery was **higher** for mothers who lived within the 13 First Nations (13.5%) than for those who lived outside their community (10.1%).

	13 First Nations combined		
	Overall Living within communities (registered and nonregistered) Living outside communities (registered)		
Mothers who used opioids during pregnancy	10.4	9.9	10.7
Mothers who did not use opioids during pregnancy	6.1	4.9	6.9

13 First Nations overall

• Among mothers who used opioids during pregnancy, 10.4% received mental health–related hospital care for conditions other than substance use or addictions in the two years before delivery.

13 First Nations: Mothers who used opioids during pregnancy compared to those who did not

• The percentage of mothers who received mental health–related hospital care for conditions other than substance use or addictions in the two years before delivery was **higher** for mothers who used opioids during pregnancy (10.4%) than for those who did not (6.1%).

13 First Nations: Living within community compared to living outside community

• Among mothers who used opioids during pregnancy, the percentage who received mental health–related hospital care for conditions other than substance use or addictions in the two years before delivery was **slightly lower** for mothers who lived within the 13 First Nations (9.9%) than for those who lived outside their community (10.7%).

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3. What we learned about babies			

TABLE 3a Percentage (%) of babies born between 2013 and 2019 who were preterm, by prenatal opioid exposure

	13 First Nations combined		
	Overall	Living within communities (registered and nonregistered)	Living outside communities (registered)
Babies with POE	19.0	16.2	20.8
Babies without POE	7.8	7.1	8.3

13 First Nations overall

• Among babies with prenatal opioid exposure, 19.0% were born preterm.

13 First Nations: Babies with POE compared to those without POE

• The percentage of babies who were born preterm was **2.4 times higher** for babies with prenatal opioid exposure than for those without prenatal opioid exposure (19.0% and 7.8%, respectively).

13 First Nations: Living within community compared to living outside community

• The percentage of babies with prenatal opioid exposure who were born preterm was **lower** for babies who lived within the 13 First Nations (16.2%) than for those who lived outside their community (20.8%).

TABLE 3b Average birth weight (in grams) of babies born between 2013 and 2019, by prenatal opioid exposure

	13 First Nations combined		
	Overall	Living within communities (registered and nonregistered)	Living outside communities (registered)
Babies with POE	3,196	3,328	3,109
Babies without POE	3,528	3,555	3,509

13 First Nations overall

• Babies with prenatal opioid exposure weighed an average of 3,196 grams (or 7.0 pounds) at birth.

13 First Nations: Babies with POE compared to those without POE

• The average birth weight was **lower** for babies with prenatal opioid exposure (3,196 grams or 7.0 pounds) than for those without prenatal opioid exposure (3,528 grams or 7.8 pounds).

13 First Nations: Living within community compared to living outside community

• The average birth weight of babies with prenatal opioid exposure was **higher** for babies who lived within the 13 First Nations (3,328 grams or 7.3 pounds) than for those who lived outside their community (3,109 grams or 6.7 pounds).

TABLE 3c Percentage (%) of babies born between 2013 and 2019 who were transferred to a neonatal intensive care unit, by prenatal opioid exposure

	13 First Nations combined		
	Overall	Living within communities (registered and nonregistered)	Living outside communities (registered)
Babies with POE	49.8	44.1	53.6
Babies without POE	14.4	13.5	15.0

13 First Nations overall

• Among babies with prenatal opioid exposure, 49.8% were transferred to a neonatal intensive care unit.

13 First Nations: Babies with POE to those without POE

• The percentage of babies who were transferred to a neonatal intensive care unit was **3.5 times higher** for babies with prenatal opioid exposure than for those without prenatal opioid exposure (49.8% and 14.4%, respectively).

13 First Nations: Living within community compared to living outside community

• The percentage of babies with prenatal opioid exposure who were transferred to a neonatal intensive care unit was **lower** for babies who lived within the 13 First Nations (44.1%) than for those who lived outside their community (53.6%).

TABLE 3d Median length of stay* in hospital of babies born between 2013 and 2019, by prenatal opioid exposure

	13 First Nations combined		
	Overall	Living within communities (registered and nonregistered)	Living outside communities (registered)
Babies with POE	6.0	6.0	6.0
Babies without POE	3.0	3.0	3.0

13 First Nations overall

• Babies with prenatal opioid exposure spent a median of 6 days in hospital after birth.

13 First Nations: Babies with POE compared to those without POE

• The median length of stay in hospital after birth was **3 days longer** for babies with prenatal opioid exposure than for those without prenatal opioid exposure (6 days and 3 days, respectively).

13 First Nations: Living within community compared to living outside community

• Among babies with prenatal opioid exposure, the median length of stay in hospital after birth was the **same** for babies who lived within the 13 First Nations and those who lived outside their community (6 days).

^{*}The midpoint in the number of days babies stayed in hospital from birth to discharge. For example, if three babies stayed 4, 7, and 9 days in hospital after birth, the median length of stay would be 7 days. Some babies may have very long hospital stays; the median does not reflect these outliers.

	13 First Nations combined		
	Overall	Living within communities (registered and nonregistered)	Living outside communities (registered)
Babies with POE	8.2	S	S
Babies without POE	0.6	0.6	0.5

13 First Nations overall

• Among babies born with prenatal opioid exposure, 8.2% were discharged to social services at birth.

13 First Nations: Babies with POE compared to those without POE

• The percentage of babies with prenatal opioid exposure who were discharged to social services was **14 times higher** for babies with prenatal opioid exposure than for those without prenatal opioid exposure (8.2% and 0.6%, respectively).

	13 First Nations combined		
	Overall	Living within communities (registered and nonregistered)	Living outside communities (registered)
Babies with POE	7.5	5.4	8.9
Babies without POE	0	0	0

13 First Nations overall

• Among babies born with prenatal opioid exposure, 7.5% were discharged home from hospital with a medication to treat opioid withdrawal.

13 First Nations: Living within community compared to living outside community

• Among babies with prenatal opioid exposure, the percentage who were discharged home from hospital with a medication to treat opioid withdrawal was **lower** for babies who lived within the 13 First Nations (5.4%) than for those who lived outside their community (8.9%).

TABLE 3g Percentage (%) of babies born between 2013 and 2019 who were readmitted to hospital in the first year of life, by prenatal opioid exposure

	13 First Nations combined		
	Overall	Living within communities (registered and nonregistered)	Living outside communities (registered)
Babies with POE	15.4	18.9	13.1
Babies without POE	13.5	15.9	11.9

13 First Nations overall

• Among babies with prenatal opioid exposure, 15.4% were readmitted to hospital in the first year of life.

13 First Nations: Babies with POE compared to those without POE

• The percentage of babies who were readmitted to hospital in the first year of life was **higher** for babies with prenatal opioid exposure (15.4%) than for those without prenatal opioid exposure (13.5%).

13 First Nations: Living within community compared to those living outside

• Among babies with prenatal opioid exposure, the percentage who were readmitted to hospital in the first year of life was **higher** for babies who lived within the 13 First Nations (18.9%) than for those who lived outside their community (13.1%).

4. Suppressed mother and baby characteristics

For 13 First Nations combined, the values for the following mother and baby characteristics were between 1 and 5 and suppressed to avoid the potential identification of individual people:

- Mother's transfer to another hospital after delivery
- Mother's death in the year after delivery
- Baby's death in the first year of life

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