Preconception Health, Parenting and Families

KEY MESSAGES:

- The birth rate for Algoma in 2022 was 7.1 live births per 1,000 people, a 19.0% decline from 2017⁽¹⁾.
- Mental health concerns during and post-pregnancy have been increasing in Algoma⁽²⁾.
- Alcohol and tobacco use during pregnancy has declined, but cannabis and drug use during pregnancy has
 risen in the last two years⁽²⁾.
- More than 90% of parents/guardians, in Algoma, reported that their neighbourhood is safe for their children to play outside⁽³⁾.

Preconception health refers to your health before becoming pregnant. Your nutrition, habits, and medication affect your baby before they are even conceived. The preconception and pregnancy stages are foundational to building healthy and resilient communities by making sure all children have the best start to life.

An infant's first 1000 days of life are a period of profound brain development. Safe, secure, and nurturing relationships, positive childhood experiences, and healthy communities support this development of a child's brain architecture, which becomes the foundation for all future learning, behaviour, and health throughout the child's life^(4, 5).

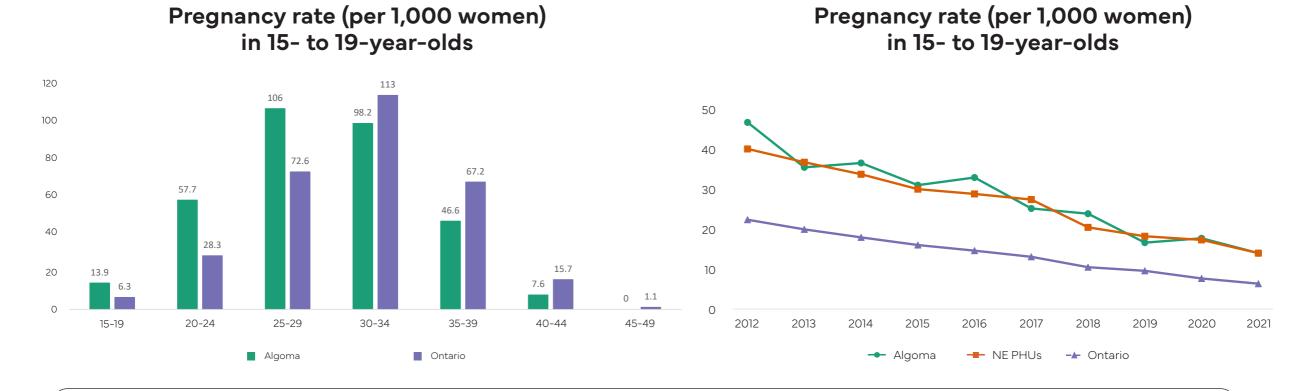
Pregnancies in Algoma

In 2021, the pregnancy rate per 1,000 women of reproductive ageⁱ in Algoma was higher than Ontario and NE PHUs⁽¹⁾.

The pregnancy rate per 1,000 women aged 15 to 19 years old in Algoma has decreased over time but as of 2021 is still more than double the Ontario rate⁽¹⁾.



Algoma NE PHUs Ontario 13.9 13.9 6.3



In Algoma, women younger than 30 years of age have significantly higher pregnancy rates, compared to Ontario⁽³⁾.

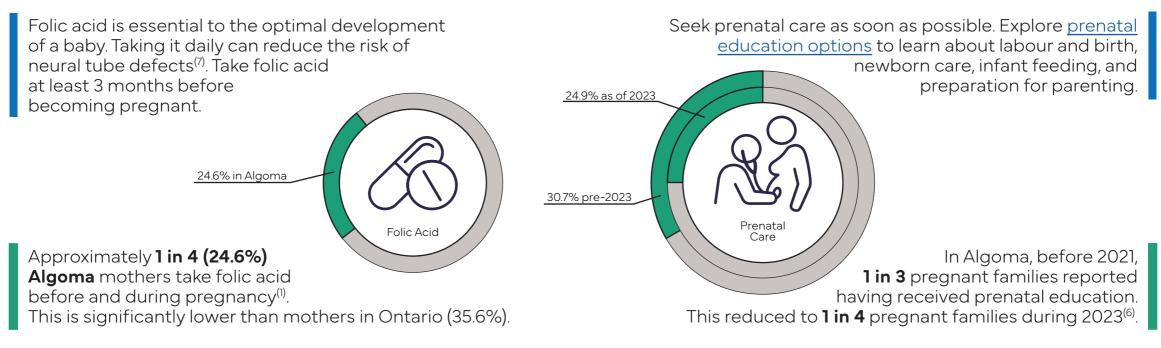
Who does a resident in Algoma see for prenatal care? On average (between 2017 - 2023), pregnant families in Algoma:

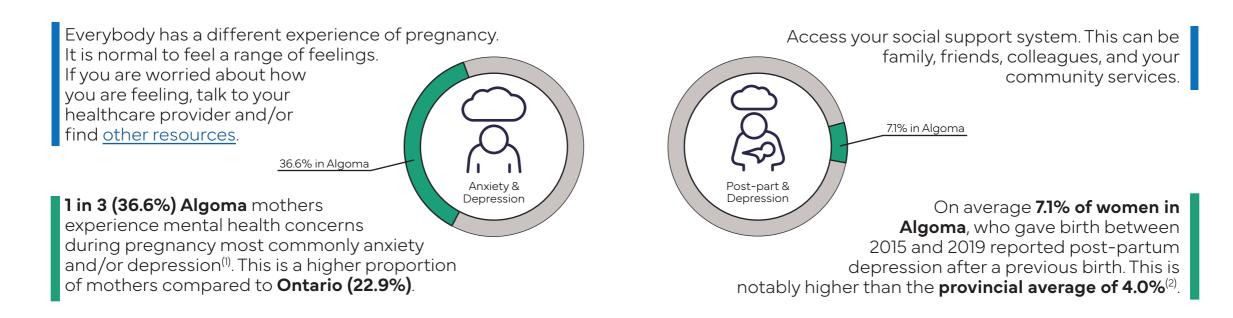
saw an obstetrician. This is a *decrease* by 16.1%⁽⁶⁾ **60%**

46.6% saw a midwife. This rate has *doubled* over this period⁽⁶⁾

4.1% saw a family physician. This is a *decrease* by 8.7%⁽⁶⁾

Healthy Pregnancy - Tips & Local statistics





Substance use during pregnancy

When a person is pregnant, the placenta physically connects the fetus to the pregnant person and facilitates the exchange of substances. The structural properties of the placenta allow for selective transfer of different substances while providing some protection for the fetus. Most drugs, from all classes, will cross the placental barrier⁽⁸⁾.

An infant's exposure to substances in the womb may lead to growth restrictions, poor fetal development, preterm labour, and other harms. Immediate complications after birth include Neonatal Abstinence Syndrome (NAS) causing withdrawal symptoms in a newborn.

For the health of the newborn, it is strongly recommended to abstain from, or at least reduce use of substances during pregancy.

Substance use among women in Algoma while pregnant (2021)



- Almost 6% lower than 2015
- 3X more than Ontario (4.8%)
- 2X more than Ontario (4.2%)

■ 10X more than Ontario (1.0%)

9.4%

(1 in 10)

Drug & Substance

Almost the same as Ontario (1.8%)

Alcohol

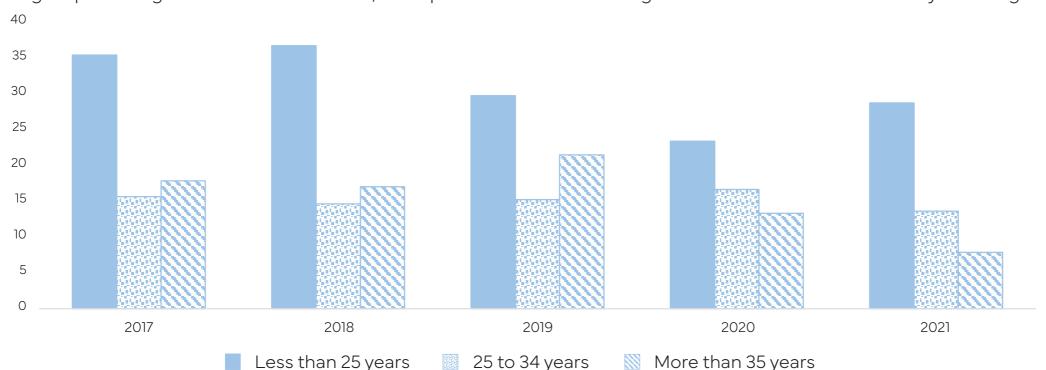
2.9%

(1 in 30)

What does this mean?

During 2020, the rate of hospitalizations due to neonatal withdrawal symptoms from mothers' use of substances was observed at a record high of **26 infants per 1,000 live births in Algoma**. This declined to **17.8 infants per 1,000 live births in 2021**⁽⁹⁾.

Long term impacts of prenatal substance exposure have also been found, such as learning delays, difficulties self-regulating, and development of risky behaviour as the child grows⁽¹⁰⁾.



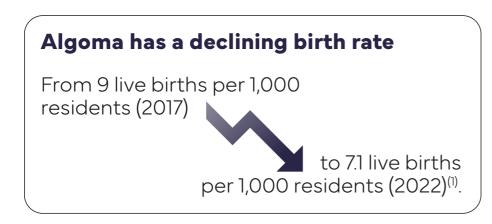
Percentage of pregnant women in Algoma that reported smoking during pregnancy, by age group

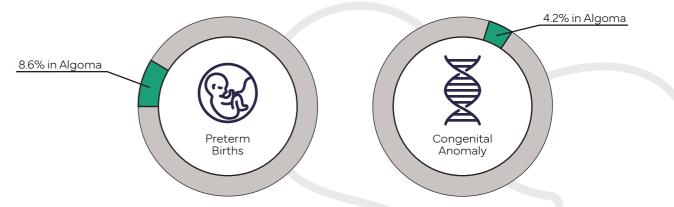
A higher percentage of mothers who smoke, are exposed to cannabis or drug and substances are less than 25 years of age⁽¹⁾.

Births in Algoma

The average age of Algoma womenⁱⁱ at birth of their first infant is 28.2 years old. This is similar to NE PHUs (27.9 years old), and significantly younger compared to Ontario (30.4 years old)⁽¹⁾.

Between 2018 and 2022, an average of 870 babies were born each year in Algoma⁽¹²⁾.





In 2022, there were 73 pretermⁱⁱⁱ live births in Algoma, with a preterm live birth rate of 8.6 per 100 live births^(4,12). 4.2%⁽⁶⁾ of total births in Algoma are affected by a congenital anomaly^{iv}, this is similar to the national average of 4%⁽⁶⁾ births.

 The term women used in this section is in keeping with data source language and unfortunately does not capture everyone's experience in a fully inclusive way.
 Number of live births that occur between 20 and 36 weeks of gestation.

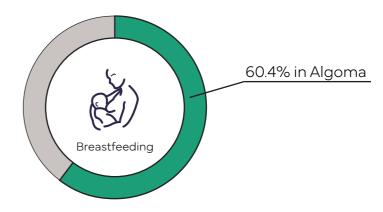
^{iv} According to the World Health Organizations, congenital disorders, also called birth defects, can be defined as structural or functional anomalies that occur during intrauterine life.

Feeding for a healthy start^{*}

New parents spend approximately 1800 hours feeding in the first year. This time can be one of the most rewarding experiences for a parent, as they build a strong attachment with their baby through focused feeding.

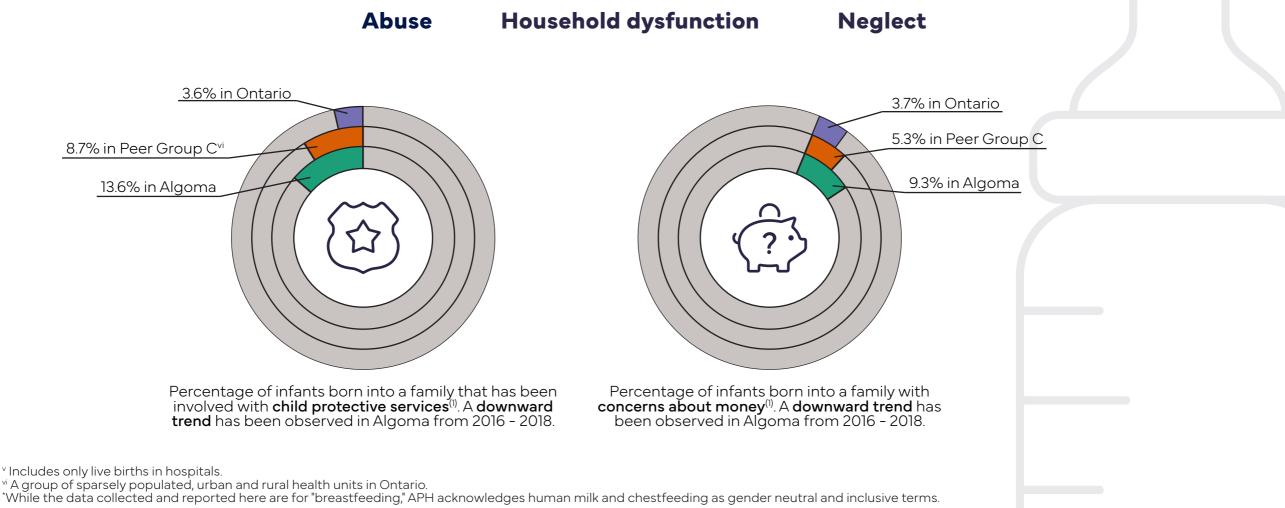
Breastmilk protects babies against illness, provides optimal nutrition, is cost-effective, and has lasting health benefits. Any amount of breastmilk provided offers protective antibodies and nutrients for your baby⁽¹³⁾. Cue-based feeding is important, regardless of the method of feeding. Learning to recognize the baby's signs of hunger and fullness, ensures the baby is getting just the right amount.

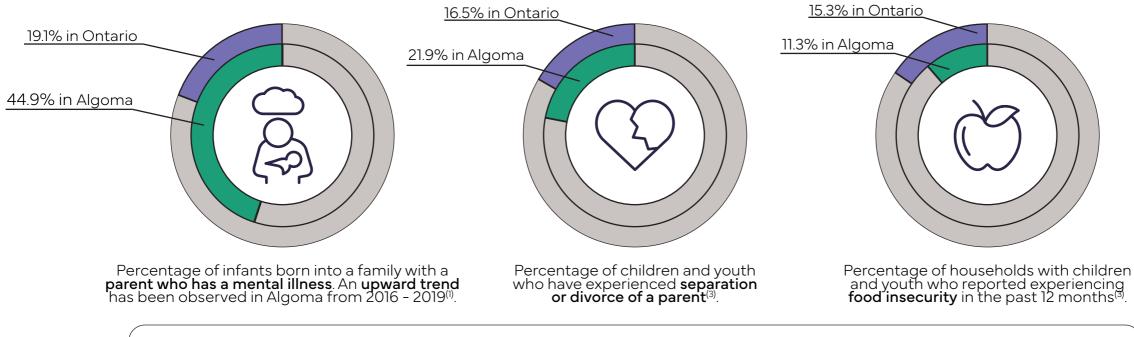
During 2021, **60.4% of Algoma** infants were exclusively breastfed after birth⁽¹⁾. This is significantly higher than 52.8% of infants in Ontario overall.



Adverse childhood experiences and toxic stress

In 2022, a total of 790 screens^v were completed as part of the Healthy Babies Healthy Children program⁽⁶⁾. Adverse Childhood Experiences (ACEs) are stressful or potentially traumatic events that occur within the first 18 years of life⁽¹⁴⁾. The number of ACEs an individual has directly influences the likelihood and severity of negative outcome. Examples of ACEs include:





Healthy child development

Infant and Early Childhood Mental Health (IECMH), is defined as the "developing capacity of the child from birth to five years of age to form close and secure adult and peer relationships, experience, manage and express a full range of emotions, and explore the environment and learn – all in the context of family, community, and culture."⁽¹⁶⁾

If a child experiences many ACEs without a supportive relationship with an adult serving as a protective factor, the experiences of ACEs will trigger the toxic stress response.

The toxic stress response occurs when a child experiences frequent and/or prolonged adversity which can have a wear-and-tear effect on the $body^{(17)}$.

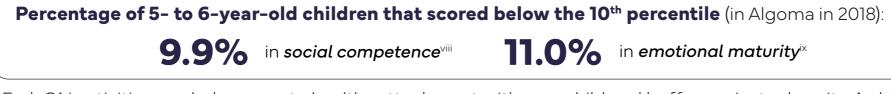
Positive childhood experiences are protective factors

Parents can reduce the impacts of ACEs by introducing Positive Childhood Experiences (PCEs). A PCE can be found in both the individual and community environments.



Healthy attachment

A responsive relationship between a parent^{vi} and child is important to a child's development and well-being. Healthy brain development is built through safe, secure, nurturing relationships with a caring adult.



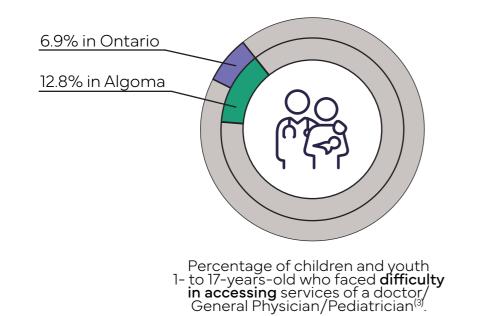
Participating in EarlyON activities can help promote healthy attachment with your child and buffer against adversity. A child's social-emotional development is the foundation to healthy attachment, which is built through responsive relationships with a caregiver/adult. Approximately 40% of children aged 0 to 5 living in the Algoma District attended an EarlyON site located in Algoma District at least once in 2023^(18, 19).



Safe neighbourhoods

While 91.9% of parents in Algoma with children 1- to 17-years-old reported that their neighbourhood was very safe or reasonably safe for their children to play outside, 8.1% reported it being unsafe for their children⁽³⁾.

Access to healthcare and early intervention services



2015 (Pre-pandemic)	2017 (Pre-pandemic)	2020 (Pandemic)
Algoma 57.8%	Algoma 51.6%	Algoma 50.4%
Ontario 72.9%	Ontario 72.0%	Ontario 66.6%

The proportion of children who received any type of 18-month well-child visit has decreased over the years and is noticeably lower than the provincial average⁽²⁰⁾.

vii Any adult in a caregiving role

^{viii} Includes curiosity about the world, eagerness to try new experiences, knowledge of standards of acceptable public behaviour, ability to control own behaviour, appropriate respect for adult authority, cooperation with others, and ability to play & work with children.

^{ix} Includes the ability to think before acting, a balance between too fearful and too impulsive, an ability to deal with feelings at the age-appropriate level, and empathetic response to other people's feelings.

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Public Health Standards:

Healthy Growth & Development

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