

Intervention tool

2022

Preventing Prenatal Alcohol Exposure (PAE) and Fetal Alcohol Spectrum Disorder (FASD)

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|---------------------------|--|
| Objective : | ▶ Provide up-to-date, evidence-based information on the risks associated with prenatal alcohol exposure. |
| Audience : | ▶ Health and social care professionals and stakeholders. |
| Authorship : | ▶ Direction de santé publique du CIUSSS de la Capitale-Nationale et coll. |
| Prevention Message | ▶ Before and during pregnancy, eliminate the dangers and effects of alcohol consumption It is important to talk about it so as not to suggest that it is without risk. Remember that drinking moderately or occasionally is also at risk. |

Cause

PRENATAL ALCOHOL EXPOSURE (PAE)

- ▶ **Alcohol** in all of its forms is a **teratogenic agent**^{1,2} which means it can cause **malformations**.
- ▶ **There is no known safe amount of alcohol consumption** throughout the pregnancy^{3,4,5}.
- ▶ **Binge drinking** (four or more drinks consumed on one occasion) is very risky for the fetus^{3,6}.
- ▶ Alcohol **passes directly from the mother's blood to the fetus's blood**¹, where it remains for longer and damage the placenta³.
- ▶ Among psychoactive substances, alcohol is one of the most **toxic** for the **embryo and the fetus**³.
- ▶ Alcohol **affects** several **organs**, including, most significantly, the **brain** (central nervous system)⁵.
- ▶ Damage is **permanent**⁷.



Prenatal Alcohol Exposure (PAE) is one of the **leading causes** of:

- ▶ **Childhood Developmental Disorders**⁸;
- ▶ **Intellectual disabilities**⁸;
- ▶ **Congenital defects**¹.

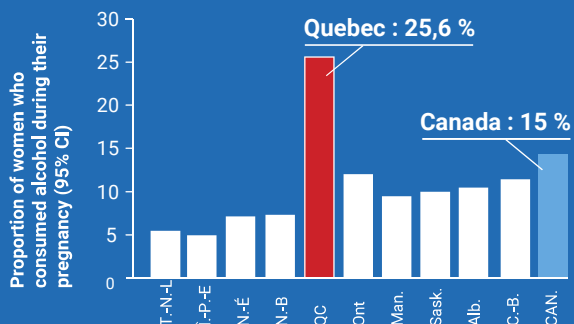
New: Fathers' alcohol consumption may also contribute to risk factors [See article on the impact of paternal alcohol consumption on sperm epigenome]

Consequences

FETAL ALCOHOL SPECTRUM DISORDER (FASD)

- ▶ FASD (neurodevelopmental disorder specific to PAE [DSM-5]) is an **invisible disability**, which makes it difficult to diagnose⁹. In fact, less of 10% of people with FASD have the **three characteristic facial features** associated with the condition¹⁰.
- ▶ **FASD** is linked to over **400 physical and mental health conditions**¹¹ of varying severity.
94% of people with FASD also experience **mental health problems**⁷.
- ▶ **Various health conditions can accompany or result from FASD:** Global developmental delay, ADHD, Tourette's syndrome, complex trauma, and other disorders such as sensory, language, hearing, opposition, learning (dyscalculia), sleep, attachment, anxiety, mood disorders, etc.¹²
- ▶ **FASD is often confused** with other diagnoses due to lack of screening.
- ▶ **Pharmacological treatments are complex:** FASD patients may be resistant to medication or experience greater side effects¹³
- ▶ **Secondary consequences of FASD can be significant**¹⁴: Immaturity, poor judgment, learning difficulties, multiple placements, abuse, neglect, truancy and dropping out of school, autonomy issues, substance abuse, job instability, over-representation in youth centres^{15,16} and prison settings¹⁷, and homelessness.
- ▶ **The involvement of a multidisciplinary team is essential**

Prevalence of alcohol use during pregnancy, by province, CANADA, 1993-2008



Source : Statistique Canada, National Longitudinal Survey of Children and Youth

In Toronto, PAE is estimated at **11%**, while FASD is estimated at **2 to 3%**

In Quebec, PAE is estimated to be **25.6%**, but the prevalence of FASD is **unknown** because it remains undocumented.

Prevalence of FASD in Canada

4%^{10,18}

Estimated prevalence of FASD is greater than ASD, cerebral palsy, and Down syndrome combined.²

OBLIGATIONS SET FORTH BY QUEBEC'S PUBLIC HEALTH ACT

Prevent diseases and social problems. Promote measures to improve the health and well-being of the population.

RISK FACTORS OF ALCOHOL USE

- ▶ Lack of **knowledge** about adverse effects on the fetus
- ▶ Lack of **support** from **friends and family**
- ▶ Domestic **violence**
- ▶ **Personal history** of substance use
- ▶ **Relative who consume** alcohol excessively
- ▶ Social and media **pressure**

Some studies have found that wealthier and more educated women are more likely to consume alcohol and to be asked fewer questions about their alcohol consumption during pregnancy.¹⁹⁻²¹



RECOMMENDATIONS FOR WOMEN OF REPRODUCTIVE AGE

- ▶ Provide **effective contraception** :
As many as 60% of pregnancies are unplanned¹⁰
Risks start from the moment of conception³
- ▶ Inform women about the dangers of FASD

SOGC RECOMMENDATIONS

Clinical Guideline 2020

- ▶ All pregnant women should be asked about their alcohol consumption at **each clinical appointment**.
- ▶ The mother's drinking habits should be included in the child's **medical record**¹⁸.

Ask questions about alcohol consumption throughout pregnancy

- ▶ Was your **pregnancy planned**?
(Open question to assess risk of use before she knows she is pregnant)
- ▶ When did you last consume alcohol (beer, wine, cider...)?

Ask questions at each meeting and assess the mother's stress level.

DOES NOT DRINK ALCOHOL

- ▶ Good choice for your baby's health.
- ▶ **Continue** to avoid alcohol throughout your pregnancy.

HAS STOPPED DRINKING

- ▶ How many drinks of alcohol did you have **before learning that you were pregnant**?

CONSUMES ALCOHOL

- ▶ How many drinks of alcohol do you drink **per day, per week, per month**?
- ▶ Under what circumstances do you usually consume alcohol (*relaxation, stress, social pressure, habit, domestic violence, etc.*)?

What do you know about the **consequences of alcohol** consumption during pregnancy?

▶ What do you think about **eliminating alcohol consumption** during your pregnancy?

- ▶ Do you **intend to stop**?
- ▶ Who in your **support network** can help and support you?
- ▶ Would you like **suggestions** to help you relax and free help to support you in your decision*?

* CISSS and CIUSSS, rehabilitation centers that prioritize pregnant women, S.O.S domestic violence and 811 and 211 help lines, fasd-alcoholfreepregnancy.ca.



If alcohol were medication, doctors would be prohibited from prescribing it to pregnant women.

Before and during pregnancy, eliminate the dangers and effects of alcohol consumption

Author of this intervention tool, 2022

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FOR MORE INFORMATION

-Guideline No. 405: Screening and Counselling for Alcohol Consumption During Pregnancy, SOGC, 2020

[https://www.jogc.com/article/S1701-2163\(20\)30223-1/fulltext](https://www.jogc.com/article/S1701-2163(20)30223-1/fulltext)

-Portail d'information périnatale, INSPQ. Fiche sur l'alcool :

<https://www.inspq.qc.ca/information-perinatale/fiches/alcool> et Guide des bonnes pratiques en prévention clinique du MSSS

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-Information, help, and referral hotline for alcohol and drugs – Drugs, Help and Referral 1 800 265-2626, <https://www.aidedroque.ca/en/>. Services in French and English.

-Centre IMAGE: Information center for health professionals dealing with the risks associated with drug use during pregnancy and breastfeeding.

-Impacts of paternal alcohol use before pregnancy:

<https://doi.org/10.1038/s41598-022-12188-3>

TOOLS FOR SCREENING AND ASSESSING THE RISK OF ALCOHOL USE

-CRAFT+N Questionnaire (v2.1) http://craftt.org/wp-content/uploads/2020/09/CRAFTT_2.1NHONC_Self-administered_2020-09-30.pdf

-The 4P's Plus screen for substance use in pregnancy: clinical application and outcomes

<https://pubmed.ncbi.nlm.nih.gov/15703775/>

-Alcohol Use Disorders Identification Test (AUDIT) - INSPQ Centre d'expertise et de référence en santé publique <https://www.inspq.qc.ca/boite-outils-pour-la-surveillance-post-sinistre-des-im-pacts-sur-la-sante-mentale/instruments-de-mesure-standardises/questionnaires/consommation-d-alcool>

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