



Fetal Alcohol Spectrum Disorder (FASD)

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FASD Overview

The FASD Support Network describes FASD as a: disability that can occur in children, youth or adults **prenatally exposed to alcohol**. The spectrum of effects includes four categories of primary disabilities: **cognitive, behavioural, physical, and sensory**. The disabilities caused by alcohol exposure are **present from birth**, but some are not noticeable until later in life (2017, p. 4).

FASD Overview

CanFASD describes FASD as: a **diagnostic term** used to describe **impacts on the brain and body of individuals prenatally exposed to alcohol**. FASD is a **lifelong disability**. Individuals with FASD will experience some degree of challenges in their **daily living**, and need support with **motor skills, physical health, learning, memory, attention, communication, emotional regulation**, and **social skills** to reach their full potential. Each individual with FASD is **unique** and has areas of both **strengths and challenges**.

<https://canfasd.ca/topics/basic-information/>

FASD Prevalence

In Saskatchewan, it is believed that 1 in 100 people may be affected by FASD (FASD Support Network, 2017, p. 4).

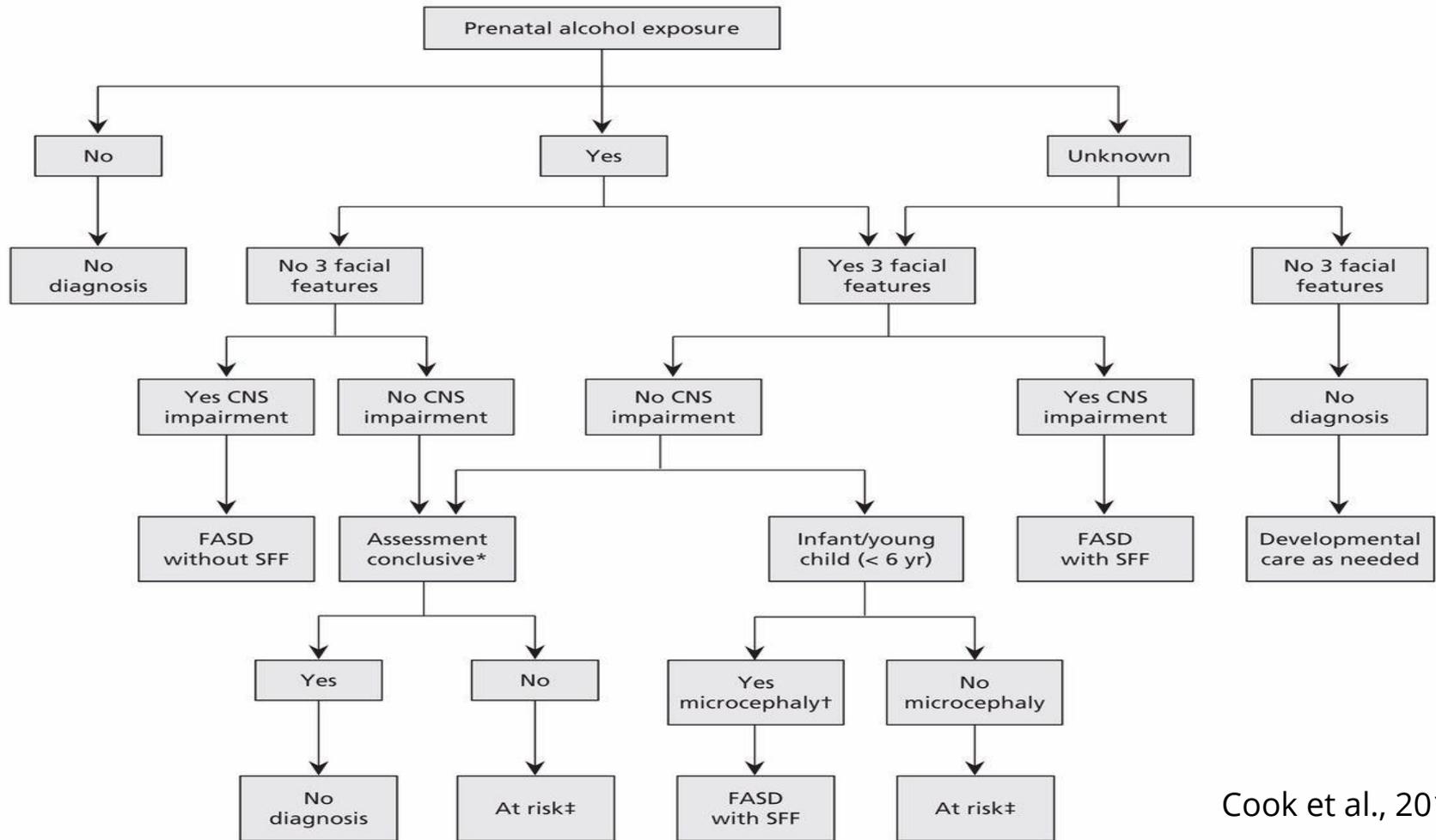
CanFASD reports that 4% or 1.4 million people in Canada have FASD.

However, many individuals go undiagnosed and others are misdiagnosed due to it being an “invisible disability.”

Behaviors may overlap with ADHD, ASD, Bipolar Disorder, Reactive Attachment Disorder, Depression, ODD, trauma, sensory concerns, etc. (FASD Support Network, 2017, p. 9).

FASD Diagnostic Terms

FASD with sentinel facial findings (past: FAS, pFAS)	FASD without sentinel facial findings (past: ARND)	At Risk for neurodevelopmental disorder and FASD (included as designation)
<ul style="list-style-type: none">➤ Prenatal exposure to alcohol confirmation is not required➤ Three facial features➤ Three domains of impairment	<ul style="list-style-type: none">➤ Prenatal exposure to alcohol confirmed➤ No facial features required➤ Three domains of impairment	<ul style="list-style-type: none">➤ Prenatal exposure to alcohol confirmed➤ OR must have all three facial features➤ Clinical concern about development



FASD Diagnosis

Requires a **multidisciplinary team**, including a specially trained physician (FASD Support Network, 2017, p. 5).

After a referral is made, information about the client's history (and prenatal alcohol exposure) is derived through interviews with multiple sources and file reviews (birth records, cumulative file, etc.).

Psychological tests are also administered (Coons-Harding et al., 2019) and the child will be observed. Direct measures are recommended.

Barriers to services: long waiting lists, services targeting certain age groups only, lack of trained professionals, remote/rural access difficulties, stigma, lack of education, social inequalities, caregivers lack of understanding (Chamberlain et al., 2016)

FASD Diagnosis - Saskatchewan

Child and Youth Diagnosis and Assessment Services:

- Northern Saskatchewan - Prince Albert at Parkland Child and Youth Development Clinic (306-765-6055)
- Central Saskatchewan - Saskatoon at Alvin Buckwold Child Development Program (306-655-1070)
- Southern Saskatchewan - Regina at Qu'Appelle Child and Youth Services (306-766-6700)

Adult Diagnosis and Assessment Services:

- Northern and Central Saskatchewan by Dr. Gerald Block (306-373-3110)
- Southern Saskatchewan - Regina at Child and Youth Services (306-766-6700)
- Physicians can also refer patients to the Saskatoon Genetics/Teratology Clinic, Royal University Hospital in Saskatoon (306-966-8112).

Diagnostic Instruments

See: [Assessing for FASD: Alberta Survey](#)

Best Practice: Support Network Recommendations

- **Memory:** additional time; consistent messages; repeat instructions in multiple ways; re-teach rules in each setting; visual charts; aware of tone and pace of speech; organization tools; time reminders
- **Confabulation:** ask only what is needed in the moment; get them to tell you in a different way; social stories; probe only if dangerous story
- **Cause and Effect:** clear, concrete words in a calm voice; limit distractions; consequences immediate and relevant; positive reinforcement; visual reminders of expectations; decision mapping; social stories
- **Time:** digital clocks; calendars and schedules posted; predictability and routine; timers; phone reminders
- **Transitions:** predictable, visual schedule; forewarning and prior practice; prompts; natural transitions with timers/activity ends

(FASD Support Network, 2017, p. 17-20)

Best Practice: Support Network Recommendations

- **Ownership:** label items; practice borrowing; consequences for taking items
- **Impulse Control:** role-playing scripts; cues and reminders; model impulse control out loud; perspective-taking activities; supervision as needed
- **Social Skills:** build off strengths/interests; expectations based on developmental age; model good behavior and role play social situations; social activities and mentorship; examples of positive/healthy friendships; open conversation about sex and sexuality
- **Sensory:** environmental accommodations and sensory considerations - ex. limit distractions; body breaks, alternative seating, and fidgets; calm down area
- **Sleep:** calming sleep routine - no technology before bed or sugar after 6 p.m.; relaxing music; warm baths; consider sensory factors for sleeping and room; talk to doctor as needed

(FASD Support Network, 2017, p. 17-20)

Best Practices: Guide and Evaluation Toolkit (2018)

Expert Consensus

- Transition-focused supports
- Trained staff (up-to-date on research and complex case management)
- Support/education about trauma
- Interpersonal and work skills of staff
- Age-appropriate services
- Interdependence focused
- Consistency/structure
- Functional Assessment (FBA/eIIP)
- Preventative medical and mental health care
- Supported recreational activities
- Managing sexually exploitative situations and risky behaviors
- Person-centered employment opportunities
- Future planning
- Financial aid/access supports
- Support with justice system

Good Evidence

- Early diagnosis
- Caregiver well being focus
- Stability of home environment
- Consistency, collaboration, responsiveness, and proactivity

[\(Pei et al., 2018\)](#)

Best Practices: Guide and Evaluation Toolkit (2018)

Moderate Evidence	Some Evidence
<ul style="list-style-type: none">➤ Awareness and support for sensory processing issues➤ Utilize unique learning profile➤ Parent-assisted adaptive functioning training➤ Parental education resources➤ Parenting training strategies (caregiver attitude focus)	<ul style="list-style-type: none">➤ Individual support➤ Agency collaboration➤ Strengths-based approach➤ Secure and safe housing <p data-bbox="1591 980 1866 1016"><u>(Pei et al., 2018)</u></p>

Best Practices: Other

- Pregnancy screeners (Premji et al., 2009)
- Disclose evidence/facts in a compassionate, patient-centered way (Zizzo et al., 2017)
- *Community-Based Participatory Research* (CBPR) for prevention (Hanson et al., 2018)
- *Children's Friendship Training* (CFT) (Olson, 2016)
- *Project Step Up* - harm reduction for youths with FASD using substances (O'Conner et al., 2016; Olson, 2016)
- *Parents Under Pressure* (PuP) - focuses on self-regulatory process through the parent-child relationship (Reid et al., 2017)
- *Math Interactive Learning Experience* (MILE) - addresses academic and behavioral problems (Kable et al., 2014; Kully-Martens et al., 2017)
- *GoFAR* - improving self-regulation (Kable et al., 2016)
- *Step-by-Step* - mentors parents affected by FASD (Denys et al., 2009)
- *CHOICES* - intervention in preventing prenatal alcohol exposure (Hanson et al., 2017)
- *Caribbean Quest* computer program - games target attention/ working memory (MacSween et al., 2015)
- Medications targeting specific, comorbid symptoms (Brown et al., 2012; Nash et al., 2017)
- *Project TrEAT* - prevention with non-pregnant women (include partners) (Osterman, 2011)
- *Motivational Interviewing* (MI) with pregnant women to reduce alcohol use (Osterman, 2011)
- *Screen, Brief Intervention, Referral, and Treatment* model with pregnant women (Osterman, 2011)

FASD Supports - Saskatchewan

- [Best Practices for Serving Individuals with Complex Needs Guide](#)
- [FASD Prevention Framework 2014](#)
- [FASD Services on Government of Saskatchewan website](#)
- Manitoba's Looking After Each Other Project
- Raising Hope/Street Workers Advocacy Project
- Regina Community Clinic
- Saskatchewan Prevention Institute
- The Addictions Program
- The FASD Family Support Program
- The FASD Support Network of Saskatchewan

References

- Brown, N., Connor, P., Adler, R., & Langton, C. (2012). Conduct-disordered adolescents with fetal alcohol spectrum disorder: Intervention in secure treatment settings. *Criminal Justice and Behavior*, 39(6), 770-793.
- CanFASD: Canada FASD Research Network. *Diagnosis*. Retrieved from: <https://canfasd.ca/topics/diagnosis/>
- Chamberlain, K., Reid, N., Warner, J., Shelton, D., & Dawe, S. (2017). A qualitative evaluation of caregivers' experiences, understanding and outcomes following diagnosis of FASD. *Research in Developmental Disabilities*, 63(C), 99-106.
- Cook, J. L., Green, C. R., Lilley, C. M., Anderson, S. M., Baldwin, M. E., Chudley, A. E.,... Rosales, T. (2016). Fetal alcohol spectrum disorder: A guideline for diagnosis across the lifespan. *Canada Fetal Alcohol Spectrum Disorder Research Network*, 188(3), 191-7.
- Coons-Harding, K., Flannigan, K., Burns, C., Rajani, H., & Symens, B. (2019). Assessing for fetal alcohol spectrum disorder: A survey of assessment measures used in Alberta, Canada. *Journal of Population Therapeutics and Clinical Pharmacology*, 26(1), 39-55.
- Denys, K., Rasmussen, C., & Henneveld, D. (2011). The effectiveness of a community-based intervention for parents with FASD. *Community Mental Health Journal*, 47(2), 209-219.
- FASD Network of Saskatchewan Inc. (2017). *Fetal alcohol spectrum disorder: A guide to awareness and understanding*.

References

Government of Saskatchewan. *Fetal alcohol spectrum disorder services*. Retrieved from:

<https://www.saskatchewan.ca/residents/health/accessing-health-care-services/health-services-for-people-with-disabilities/fetal-alcohol-spectrum-disorder-services#fasd-diagnosis-and-assessment-services>

Griffin, M., & Copeland, S. (2018). Effects of a self-management intervention to improve behaviors of a child with fetal alcohol spectrum disorder. *Education and Training in Autism and Developmental Disabilities, 53*(4), 405-414.

Hanson, J., & Weber, T. (2018). Commentary on Montag et al. (2017): The importance of CBPR in FASD prevention with American Indian communities. *Alcoholism: Clinical and Experimental Research, 42*(1), 6-8.

Hanson, J., Nelson, M., Jensen, J., Willman, A., Jacobs-Knight, J., & Ingersoll, K. (2017). Impact of the CHOICES intervention in preventing alcohol-exposed pregnancies in American Indian women. *Alcoholism: Clinical and Experimental Research, 41*(4), 828-835.

Kable, J., Taddeo, E., Strickland, D., & Coles, C. (2016). Improving FASD children's self-regulation: Piloting phase 1 of the GoFAR intervention. *Child & Family Behavior Therapy, 38*(2), 124-141.

Kable, J. A., Taddeo, E., Strickland, D., & Coles, C. (2015). Community translation of the math interactive learning experience program for children with FASD. *Research in Developmental Disabilities, 39*, 1-11.

References

Kully-Martens, K., Pei, J., Kable, J., Coles, C., Andrew, G., & Rasmussen, C. (2018). Mathematics intervention for children with fetal alcohol spectrum disorder: A replication and extension of the math interactive learning experience (MILE) program. *Research in Developmental Disabilities, 78*, 55-65.

Macswen, J., Kerns, Macoun, Pei, Hutchinson, Rasmussen, & Bartle. (2015). Investigating the efficacy of computerized cognitive intervention for children with FASD and ASD. *International Journal of Developmental Neuroscience, 47*, 13.

Nash, A., & Davies, L. (2017). Fetal alcohol spectrum disorders: What pediatric providers need to know. *Journal of Pediatric Health Care, 31*(5), 594-60.

O'Connor, M., Quattlebaum, J., Castañeda, M., & Dipple, K. (2016). Alcohol intervention for adolescents with fetal alcohol spectrum disorders: Project step up, a treatment development study. *Alcoholism: Clinical and Experimental Research, 40*(8), 1744-1751.

Olson, H. (2016). A renewed call to action: The need for systematic research on interventions for FASD. *Alcoholism: Clinical and Experimental Research, 40*(9), 1817-1821.

Osterman, R. (2011). Decreasing women's alcohol use during pregnancy. *Alcoholism Treatment Quarterly, 29*(4), 436-452.

Pei, J., Tremblay, M., Poth, C., Hassar, B. E., & Ricioppo, S. (2018). *Best Practices for Serving Individuals with Complex Needs: Guide and Evaluation Toolkit*. PolicyWise for Children and Families in collaboration with the University of Alberta.

References

- Premji, S., & Semenic, S. (2009). Do Canadian prenatal record forms integrate evidence-based guidelines for the diagnosis of a FASD? *Canadian Journal of Public Health, 100*(4), 274-280.
- Reid, N., Dawe, S., Harnett, P., Shelton, D., Hutton, L., & O'Callaghan, F. (2017). Feasibility study of a family-focused intervention to improve outcomes for children with FASD. *Research in Developmental Disabilities, 67*, 34-46.
- Rutman, D., & Hubberstey, C. (2019). National evaluation of Canadian multi-service FASD prevention programs: Interim findings from the co-creating evidence study. *International Journal of Environmental Research and Public Health, 16*(10), 1767.
- Saskatchewan Prevention Institute. *Fetal alcohol spectrum disorder (FASD) prevention framework (2014)*. Government of Saskatchewan.
- Walker, D. S., Edwards, W. E., & Herrington, C. (2016). Fetal alcohol spectrum disorders: Prevention, identification, and intervention. *The Nurse Practitioner, 41*(8), 28-34.
- Wincott, L. (n.d.) Determining prenatal alcohol exposure for fetal alcohol spectrum disorder (FASD) diagnostic clinic. CanFASD research network.
- Zizzo, N., & Racine, E. (2017). Ethical challenges in FASD prevention: Scientific uncertainty, stigma, and respect for women's autonomy. *Canadian Journal of Public Health, 108*(4), 414-417.