NEWSLETTER

Winter Newsletter | February 2024

PROJECT UPDATE

- 4,971 records as of February 2024
- Two more clinics have joined the database!
- The past few months have seen several data access requests from various teams to use the database for research purposes. We look forward to giving you updates on projects related to FASD and wellness, FASD and aging, and unique characteristics of the NW Ontario population as the research projects evolve.
- The team is working with researchers from Saskatchewan to plan a summer student project. Stay tuned for updates!

WELCOME THE NEW DATABASE RESEARCH ASSISTANT CELISSE BIBR

Please welcome Celisse Bibr, the CanFASD Research Assistant taking over database duties. Andrew will be leaving CanFASD on March 15, 2024.

Celisse is a PhD candidate at Laurentian University, currently studying stigma and what "effectiveness" really means when it comes to FASD prevention campaigns. Celisse has been working with CanFASD as a research assistant and coordinator for the housing project, which aims to explore the barriers and enablers to safe and stable housing for individuals with FASD.

Celisse will be your main contact for "all things database" in the future. Please reach out to Celisse at celisse.bibr@canfasd.ca, and cc Andrew (andrew.wrath@canfasd.ca) on all communications through March 15, 2024.

Data Update

New records entered into the database give our data more power than ever, as we continue to learn about FASD, the strengths and challenges of individuals with prenatal alcohol exposure across sexes and ages. Some exciting results are featured below.

The Sample

- 30 clinics from 8 provinces/territories entering data
- Average age = 19.7
- 91% have confirmed PAE; 96% of those with FASD
- 74% have FASD

Individuals with FASD

- Average number of brain domains significantly impaired = 5
    - Average is 1 in those without FASD
- 8.4% have FASD with SFF
- 10.8% are At Risk
- 7.4% have growth restriction

Age Group	Number of Records			
	FASD	At Risk	No FASD	TOTAL
0-3	26	41	36	103
4-7	262	138	188	588
8-12	671	137	279	1,087
13-16	409	37	191	637
17-21	335	12	99	446
22+	490	8	92	590
Missing Data	8	0	10	18
Total	**2,201**	**373**	**895**	**3,469**

Data Update Continued

Mental Health Across Ages in Individuals with FASD
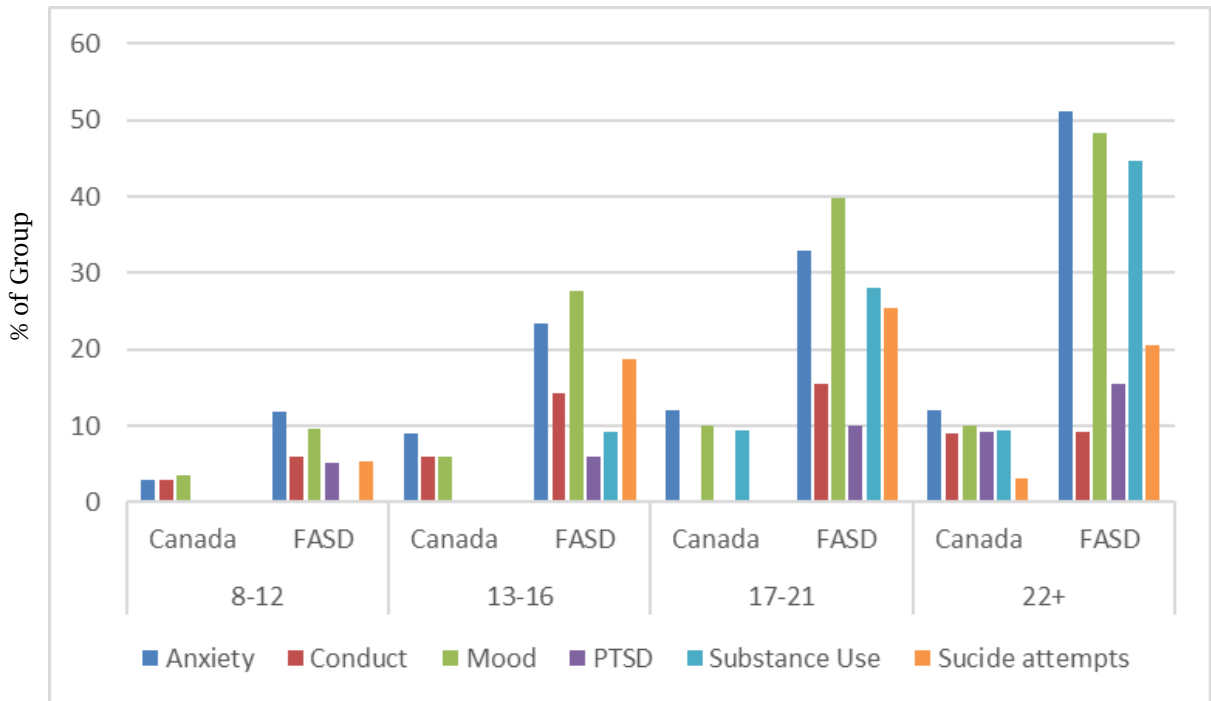
The prevalence of certain mental health disorders experienced by individuals with FASD appears to vary with age. Trends in this data indicate that the prevalence of mental health conditions in individuals with FASD increases over the lifespan. In addition, individuals with FASD often have higher rates of common mental health concerns relative to the general population in Canada.

Sample Characteristics in Canadian and Australian Children with FASD

Canada and Australia have many commonalities in our populations as well as our health systems. We worked with researchers Elizabeth Elliott and Tracy Tsang from the University of Sydney to compare characteristics of school-aged children with FASD in our national databases.

The samples did not differ significantly in any of the characteristics analyzed, and prevalence of functional impairments were also similar.

These findings emphasize the ubiquitous power of alcohol as a neurobehavioural teratogen, as well as commonalities in populations of school-aged children being assessed for diagnosis on two different continents.

	Australia (N=578)	Canada (N=651)
Age (Mean Yrs)	9.2	9.5
Sex=Male (%)	65%	59%
Sex=Female (%)	35%	41%
Indigenous (%)	55%	49%
Diagnosis:		
FASD (3SFF)	14%	8%
FASD (<3SFF)	84%	86%
Brain domains severely impaired:		
Mean (#)	4.8	4.9
Range (#)	1 to 10	1 to 10

THE NATIONAL FASD DATABASE

CanFASD
CANADA FASD RESEARCH NETWORK

Database Publication Summary

Summary: Previous research on sex-based differences related to prenatal alcohol exposure (PAE) in humans is limited. Recently, Flannigan et al. (2023) explored differences between males and females with PAE assessed for FASD in the National FASD Database, and several notable findings were reported. Below is a summary of **significant differences in clinical presentation and life experiences** between males and females assessed for FASD in Canada. See the article in TEAMS for similarities in males and females, which are equally informative.

2574 records from the National FASD Database were analyzed as part of this project. 58.3% of the sample were male at birth. 23 records were excluded because individuals' sex at birth was different than their gender identity at the time of assessment. 66.7% of the total sample had an FASD diagnosis and no sex-based differences were found in terms of FASD diagnostic outcomes.
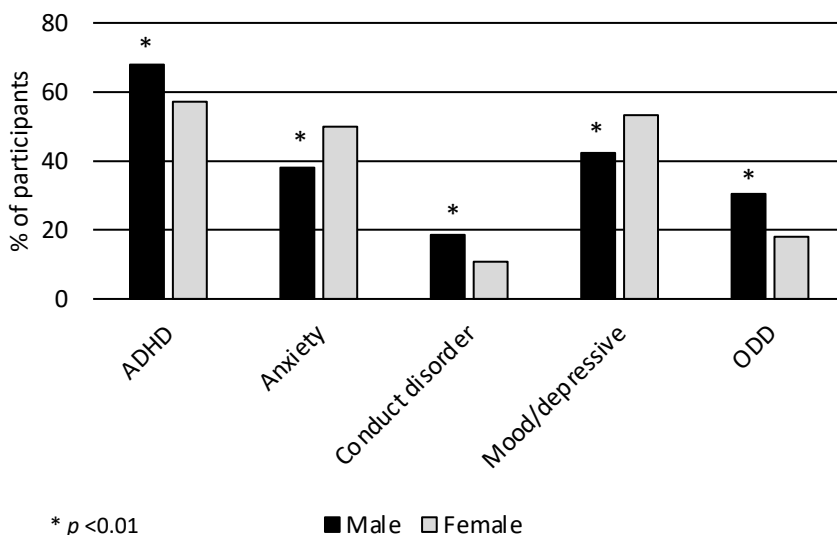

Impaired Brain Domains
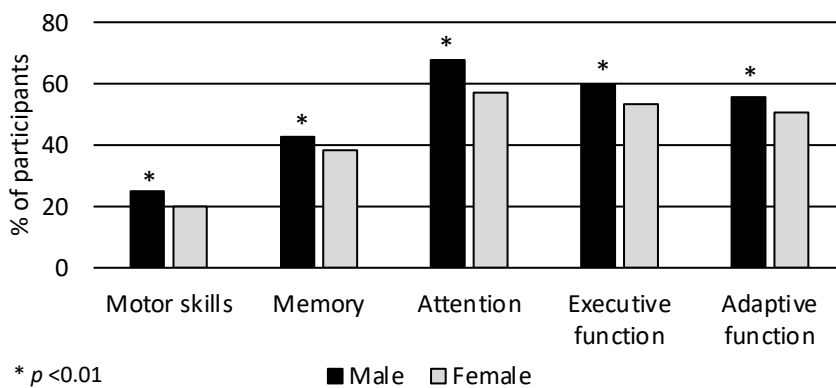
Male participants had higher rates of impairment in:

- Motor skills
- Memory
- Attention
- Executive functioning
- Adaptive function

* *p* <0.01 ■ Male ☐ Female

Differences were also found with respect to neurodevelopmental and mental health concerns

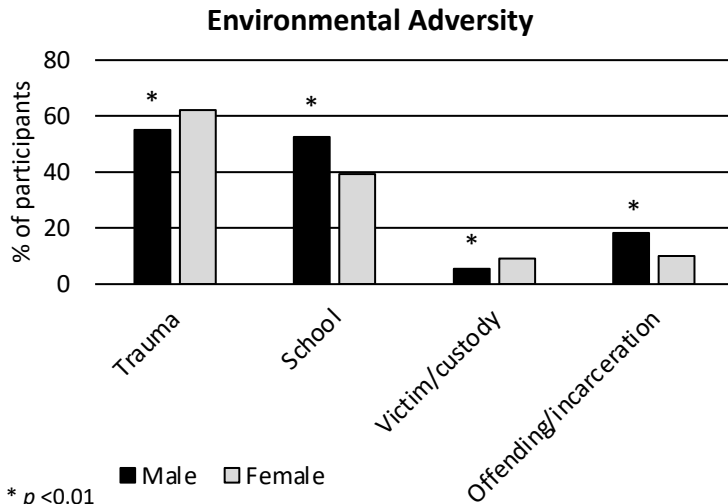**Neurodevelopmental and Mental Health Concerns**

Male participants had higher rates of:

- ADHD
- Conduct disorder
- Oppositional defiant disorder

Female participants had higher rates of:

- Anxiety disorders
- Mood/depressive disorders

* *p* <0.01 ■ Male ☐ Female

Database Publication Summary

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Environmental Adversity

Male participants had higher rates of:

- Difficulties in school
- Offending and incarceration

Female participants had higher rates of:

- Experiences of trauma, especially physical/sexual abuse
- Victimization/custody issues

The research team also examined sex-related differences across the lifespan, looking at five age groups: preschool, school-aged, adolescents, transition-aged youth, and adults. There were no significant sex-based differences in preschoolers. Differences in older age groups were identified. Based on these lifespan trends, the authors proposed that sex differences may interact with how gender roles, expectations, and relations affect clinical and institutional responses to males and females with FASD. That is, once individuals with FASD begin interacting with social systems, whether educational, legal, or health-related, their neurodevelopmental differences, mental health, and behavioral challenges may increasingly conflict with institutional expectations and responses. Please refer to the article for more details!

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CONGRATULATIONS!

Eastern Door received the Canadian Social Paediatrics Award for Advancing RICHER Interprofessional and Intersectoral Partnerships. This award is granted to teams that work to further children's health and well-being through interdisciplinary and intersectoral work. Congratulations to Lori Cox and the team at Eastern Door!

THE NATIONAL FASD DATABASE

COMPASS UPDATE

CanFASD Research Leads have been funded by the Kids Brain Health Network and CanFASD to improve our understanding and clinical activities related to intervention planning after an FASD diagnostic assessment. The team developed a pilot version of COMPASS, a resource tool that contains plans for each client, based on evidence and tailored to their specific strengths and challenges.

The project is based on analyzing data from the National FASD Database in order to determine if specific groups of characteristics and/or behaviours and experiences of individuals with prenatal alcohol exposure, together, were associated with particular outcomes. The findings can be used to ensure that the interventions, supports and services recommended for clients with prenatal alcohol exposure align with their individual needs, taking into account age, sex, brain impairment, health and experiences. To learn more about the COMPASS project, please read Dr. Kaitlyn McLachlan's paper entitled *Latent classes of neurodevelopmental profiles and needs in children and adolescents with prenatal alcohol exposure* here.

Thank you to the four Canadian FASD clinics who helped us to understand how they deliver recommendations to clients and/or their families. Mapping this information onto the Towards Healthy Outcomes model created a working framework for the COMPASS resource and identified knowledge mobilization resources that should be included as a part of the COMPASS tool. The ultimate goal is to work with individuals and families to set goals and identify interventions that best support success.

DATABASE CLINIC WEBINARS

The Database Team is committed to making sure that our clinics have opportunities to learn about what's happening around the world, including new tools and resources that you may be able to use in your clinics!

SCREENING TOOLS FOR FASD: BRAIN ONLINE AND THE E-TREE
In January 2024, we hosted Dr. Sarah Mattson from San Diego State University and the Collaborative Initiate on FASD on a webinar to share information about two screening tools for FASD to Brain online and the e-tree. Please click HERE for a summary of the screening tools and HERE to see the published literature. Please contact Dr. Cook (jcook@SOGC.com) to learn more about how to use the tools in your clinic – it's an exciting opportunity to learn how they would work with our Canadian population!

FASD DIAGNOSIS IN AUSTRALIA: A LITERATURE REVIEW
On February 28th, **Dr. Natasha Reid** (University of Queensland) spoke to us about her literature review and meta-analysis as it relates to prenatal exposure and FASD diagnostic criteria.

NEXT WEBINAR
Dr. Edward Riley (San Diego State University) will demonstrate the MorpheusQ app, which is a tool to assist with measuring the sentinel facial features associated with FASD.

WINTER LEARNING

COURSE ALERT: Substance Use and Treatment in FASD Level II is now available through the CanFASD e-learning platform: https://elearning.canfasd.ca/courses/substance-use-and-treatment-in-fasd/. For more information on FASD-informed substance use treatment, check out the document Moving Towards FASD-Informed Care in Substance Use Treatment.

MENTAL HEALTH TOOLKIT: In collaboration with the Canada Northwest FASD Partnership, CanFASD released a menta health toolkit geared towards frontline mental health counsellors/therapists, prevention mentors, crisis workers, community mental health providers and those who work directly with individuals with FASD. The toolkit is free, each section comes with a downloadable summary, and can be accessed here.

PUBLICATION UPDATES

A paper on FASD Assessment and Diagnosis in Northeastern Ontario has been published. The paper can be found here. CanFASD released **six** Issue Papers and Gap Analyses in 2023. Follow the hyperlinks to the papers! Paper topics include diagnostic assessment of preschoolers with PAE, neurodiversity and FASD, importance of FASD diagnostic assessment, strategies for successful employment, human trafficking and FASD, and FASD and sexual orientation, gender identity and gender expression.

THE NATIONAL FASD DATABASE
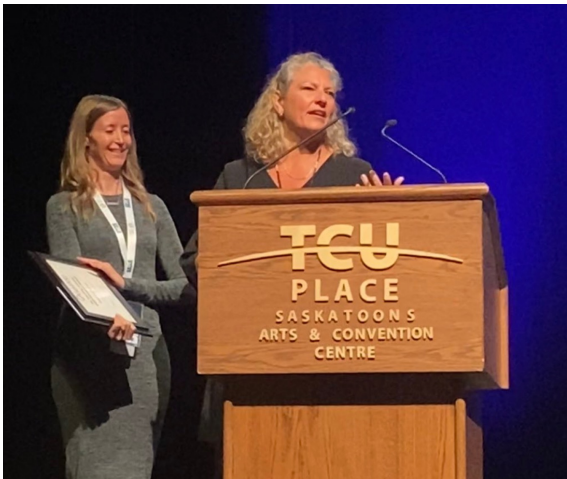
Conference Photos

We hope that many of you were able to attend the conference in November. Here are some highlights for those who were unable to attend.

Day 2 Keynote: Collaborative action in FASD Prevention

One of the 117 presentations given by 169 presenters over two and a half days

Dr. Cook presents the Sterling Clarren Research Award to the 2023 winner, Danielle Johnston

Myles Himmelreich closes the conference with his best MJ tribute performance.

Thank you!
We are looking forward to a GREAT 2024!