

Common FASD Messaging

The purpose of this document is to assist those writing and talking about people with FASD or the issues related to the disability to use the same statistics, framing of topics, and language. The outcome over time will be an improved understanding by the reader/listener with consistently using these suggestions. This is a living document and areas will be updates as it is informed by the research.

Issue	Research Tells Us	Take-Away Message	Why This Matters
	Prevaler	nce and Statistics	
Prevalence "How many people have FASD" "What are the numbers?"	 2013 Alberta estimates → 1.4-4.4% of the general population (Thanh, 2014) 2014 US → 2.4-4.8% (May, 2014) Older estimates: 9.1/1000 (Sampson, 1997) FASD is an "invisible disability" so it is possible that these numbers under-estimate true prevalence 	Current studies suggest that up to 4% of individuals in Canada have FASD This is 1,406,069 people with FASD in Canada today.	 Significant limitations to prevalence research (e.g., discrepancies in reporting dx's, outdated research – most done before 2000s) Estimates vary by methodology, geography, and sample (e.g., high risk vs. general populations) and only exist in 10 countries Almost all Canadian research done with children
How much alcohol is "too much" during pregnancy?	 Despite extensive research, there has been no established safe level of alcohol to consume during pregnancy Even "low" levels of prenatal alcohol exposure have been shown to have negative effects on long-term 	Let's reframe the question: What do we know about alcohol and pregnancy? Experts agree that there is no safe level of drinking during pregnancy	 There are conflicting messages in the media about how much alcohol can be safely consumed by pregnant women, and these messages perpetuate controversy and confusion Terms like "low" and "moderate" are unclear and subjective

	development (Day et al., 2013) - Experts in research and prenatal health recommend that no alcohol is best	It is safest not to drink during pregnancy. How many women drink during pregnancy?	 Many women drink before they know they are pregnant. women of child-bearing age who are consuming alcohol need to ensure they are using birth control to prevent an unwanted, alcohol exposed pregnancy
Rates of FASD in various settings	 Child welfare system: >20% (Lange et al. 2013) Justice populations: 10-23% according to older research (Popova); ~17% in adult settings according to newer research (McLachlan) 	When unsupported for their disability, rates of FASD are higher in vulnerable populations, including those involved in the child welfare and justice systems	 Service providers in these professions should be knowledgeable about FASD Screening tools may be especially useful in settings where there are high rates of FASD Research is limited and it is suspected that there are higher rates of undiagnosed FASD in vulnerable populations
FASD, mental health, and substance use	 90% of people with FASD also experience mental health diagnosis (O'Connor, 2009; Pei, 2011) Most common MH comorbidities: depression, mood/anxiety, ADHD, CD, addictions, and risk of suicide Substance use has also been reported in ~22-80% of adolescents/adults with FASD (Popova, 2013) 	When unsupported, people with FASD are faced with especially high rates of mental health difficulties	
Costs to society	These are the economic costs when an individual is not well supported. We do not know the costs associated when individuals with FASD receive the	FASD is costly	- Many studies reflect different costs to society depending on what systems they measure (e.g., medical, education, social services,

	system and family supports needed. Alberta: - Long-term economic cost (predicted number of children born each year): \$130-400 million/year - Short-term economic cost (those currently living with FASD): \$48-143 million/year - Daily cost: \$105-306 thousand (Thanh, 2009) Canada: - Cost of supporting those aged 0 to 53: \$5.3 billion/year (Stade, 2009) — measured direct/indirect costs and productivity losses - 2013 costs: \$1.8 billion for health care, corrections, other direct/indirect costs (Popova, 2015) - Total costs in Canada: \$9.7 billion/year (Thanh, 2015)		corrections, prevention/research, productivity loss) Other "costs" are not measurable (e.g., productivity losses for parents, stress/guilt of mothers, etc.) Caution against framing the condition as a burden Conflicting evidence about true total cost Very little research outside of Canada Economic costs to society is mostly what has been reported on and does not include social and cultural costs.
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		ogy and Language	
"Secondary Disabilities"	Adolescents and adults with FASD	Replace the term "secondary	- Many of the items described in
	report high rates of adverse outcomes, resulting from the	disabilities" with "adverse outcomes", "challenges",	Streissguth's work are not
	combination of brain impairment	"impacts", or "risks"	disabilities (e.g., criminal activity, unemployment)
	and insufficient or inappropriate	inipacts , or risks	- Many of these items are also not
	support. These include: - Disrupted school experiences		biologically driven and should not be termed a disability (e.g.,

	 Inappropriate behaviours Mental health issues Substance abuse Unemployment Trouble with the law Confinement (correctional and psychiatric) (Streissguth, 2004; Rangmar, 2015) 		homelessness); they are also not specific to FASD alone - "Secondary" may insinuate that these difficulties are not as prominent or important as the primary brain deficits - More recent research suggests that mental health concerns and addictions may be a primary part of the disability
Umbrella term	Recent updates to the Canadian diagnostic guidelines have moved away from FASD as an umbrella term, and designated it as a diagnostic term in and of itself	FASD is a diagnostic term. Represents a range of abilities and impairment.	New Canadian Guidelines is now using FASD as a diagnostic term. The term FASD is understood to encompass any alcohol-related diagnoses from the past. Other acronyms will no longer be used for diagnostic purposes in Canada. International literature may use a variety of different diagnosis such as FAS; ARND (Alcohol Related Neurodevelopmental disability); Neurodevelopmental Disorder, alcohol exposed; pFAS (partial Fetal Alcohol Syndrome)
Speaking respectfully about FASD within Indigenous populations. FASD is often still viewed as only an aboriginal issue	 FASD does not only affect Indigenous populations Canadian discourse in the 1980s and 1990s perpetuated the stereotype that FASD was an "Aboriginal problem" (McKenzie, Dell, & Fornssler, 2016) and, consequently, Indigenous women and 	Use new terminology of Indigenous. All populations where alcohol is used are at risk for this disorder. The Truth and Reconciliation Recommendations in Canada	 There is a lack of consistent and high-quality research comparing rates of FASD among different ethnic groups Framing FASD as an indigenous issue perpetuates stigma and disparity in an already marginalized group

	communities have been	identified FASD in	
	continuously subjected to	Recommendation #33 and	
	stigma, stereotyping, and	#34. CanFASD along with	
	surveillance	other groups are working to	
		1 .	
	- FASD is a highly complex	develop strategies to address	
	disorder, associated with	these.	
	trauma, victimization, and other life adversities – these		
	issues can affect women from		
	all cultural groups		
	- Alcohol is an equal		
	opportunity toxin that affects		
	developing fetuses regardless		
	of economics, ethnicity,		
	religion, race, or societal		
<u></u>	status.		
"Disease," "disorder,"	Canadian diagnosticians have	Replace the terms "disease"	
"disability," "syndrome,"	moved away from using the term	and "syndrome" with	
"condition" are used	"syndrome" and now use the	"disorder"	
interchangeably	term "disorder" to refer to FASD		
Strengths-based language	Although people with FASD	People with FASD are resilient	 Language such as "victim" and
and positive outcomes	experience challenges, they also	and have many strengths to	"suffering" can further marginalize
	possess resilience, strengths, and	offer	people living with FASD. These
	potential, and offer valuable		terms should never be used and,
	contributions to society	A balanced approach that	instead, persons/individuals with
		focuses on how supports or	FASD should always be referred to
		adaptations have made good	using person-first language. The
		things possible is important.	terms "suffering", "victim", and
			"injured" perpetuate the stigma
			surrounding birth mothers and
			places blame on mothers. Birth
			mothers do not seek to harm their
			children.

FASD as a permanent disability	There is no "cure" for FASD, but early identification and intervention are shown to foster more positive outcomes for people with FASD (Streissguth, 2004) - FASD is a life long condition - FASD can impact the entire body including the brain and is considered a whole body disorder.	Although FASD is a spectrum, research shows us that early and appropriate supports can make a positive impact on the lives of those with the disability and improve outcomes.	 Highlighting strengths is more conducive to reducing stigma and supporting positive outcomes. A continual focus on the challenges associated with FASD continues to put forth the message that these are the main attributes of individuals with FASD. Focusing on the permanence of FASD can often undercut the fact that intervention is important and beneficial The use of the word "treatment" can imply that the effects of FASD are reversible We have moved away from the medical model to recognize that individuals with FASD may develop differently but they still develop.
Issue	Research Tells Us	Take-Away Message	Why This Matters
	Le	egal Issues	-
Handling questions related to incarcerated or charged individuals with FASD	 Not all individuals with FASD end up in legal trouble There is very little funding for FASD assessments and judges may not be able to mandate assessment (especially for adults) Individuals with FASD also find themselves involved in civil, and family law. Individuals with FASD are also victims of crime. 	People with FASD are over- represented and vulnerable in both youth and adult justice settings because of the lack of resources to support them in the community.	FASD is not the only disability relevant among offenders; there are high rates of other conditions (e.g., learning disabilities, intellectual disability, psychiatric diagnoses) in justice populations More research and data is required in the corrections and legal systems to better understand this population and their specific needs.

Violent crimes and portrayal of FASD in the media Alternative justice practices	- There is no research to suggest that offenders with FASD commit more violent crimes than offenders without FASD – in fact, several studies suggest that offenders with FASD are no more likely to commit violent crimes than offenders without FASD but may be more likely to show a "mixed" pattern of offending, with both violent and nonviolent crimes (McLachlan, MacPherson) There are several initiatives across the country to better address FASD in the justice system (e.g., restorative justice, diversion programs, conditional or alternative sentencing, mental health courts) but very little research has been done to examine long term outcomes of such programs	There is no consistent pattern of criminal behaviour that has been identified for offenders with FASD Alternative justice practices may be promising for working with some offenders with FASD, but more research is needed.	 The media often reports stories in which people with FASD are involved in violent crimes specifically, giving FASD a violent connotation These stories tend to be sensationalized and can serve to misrepresent offenders with FASD Many gaps in services can lead to individuals with FASD and their families being unsupported which can lead to negative outcomes. Need more information to tell the whole story The justice system is not adequately "set up" to manage offenders with FASD Research is needed to assess the long-term impact of alternative practices More research is required.
Issue	Research Tells Us	Take-Away Message	Why This Matters
		ging Research	
If a man drinks, will the sperm cause FASD	Alcohol consumption by male partners during the preconception or prenatal period does not directly <i>cause</i> FASD, but it has been associated with:	Fathers' drinking behaviours have an important influence on both maternal prenatal alcohol consumption and the healthy development of their babies	- Fathers play a very important role in supporting partners to stay healthy during the pregnancy

	 Higher levels of maternal alcohol consumption during pregnancy Lower levels of success (i.e., live births) in IVF and GIFT Lower infant birth weight and gestational age Higher rates of ventrical malformations and abnormal situs in infants (McBride & Johnson, 2016) 	Fathers' drinking does not cause FASD	
How should the role of the NeuroDevelopmental Disorder, Alcohol Exposed in the DSM-5 be described vs the Canadian Diagnostic guidelines	 The DSM-5 defines ND-PAE as a condition characterized by confirmed PAE along with impairment in neurocognition, self-regulation, and adaptive functioning Researchers recommend a comprehensive assessment conducted by a multidisciplinary team be used with both the DSM-5 or Canadian guideline approach (Doyle & Mattson, 2015) 	In Canada, the 2015 Canadian FASD diagnostic guidelines are primarily used to diagnose individuals prenatally exposed to alcohol. The Canadian Guidelines support a multidisciplinary approach to diagnosis which is important for a full understanding of the neurocognitive impairments and the required interventions and supports.	-More research is needed in comparing and contrasting the different diagnostic systems in the world. - We encourage practitioners and clinicians to receive training on the Canadian FASD diagnostic guidelines.
FASD and Autism Spectrum Disorder get compared because they are both "spectrum" disorders	 Although FASD and ASD are both neurodevelopmental disorders, their etiologies are different; there is a known cause of FASD, while the cause of ASD remains unclear Despite some symptom overlap (e.g., social and communication difficulties), 	FASD and ASD are both neurodevelopmental disorders and while there can be overlapping symptoms, they are managed differently.	Some emerging epigenetic research explores the link between FASD and ASD, but little is known about the association between the two disorders

	FASD and ASD are heterogeneous with distinct presentations in both clinical and day-to-day settings There are also differences in the experiences of families living with the two disabilities (Watson, Hayes, Coons, & Radford-Paz, 2013; Watson, Hayes, Radford-Paz, & Coons, 2013)		
Issue	Research Tells Us	Take-Away Message	Why This Matters
	Ot	her Issues	
Developmental age versus chronological age	 People with FASD often function at a level younger than their chronological age Functioning may also be uneven with high levels in some areas but low in others With increasing age, societal expectations of autonomy and independence may be particularly problematic for those with FASD 	Individuals with FASD have strengths as well as challenges.	- Moving away from age descriptors, although this can be helpful in describing an individuals' situation.
Peer pressure and FASD	 People with FASD tend to have difficulty with social functioning and peer interactions that persist into adulthood (Kully-Martens et al., 2012) Research has shown that poor social competence and peer rejection can lead to delinquent and criminal 	People with FASD may have characteristics that increase their vulnerability to environmental influences or external pressures.	 In media portrayals of crimes committed by people with FASD, peer pressure is often named as a contributor to the crime More research is needed to explore this relationship

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	behaviour, but this	
	relationship has not been	
	explored in the FASD	
	population specifically	

Other recommendations:

Images

- Refrain from using pregnant bellies without heads in photo's
- Refrain from using the statement that FASD is "100% preventable" as this statement greatly oversimplifies the issue

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If you have comments or suggestions, please send them to Audrey.McFarlane@canfasd.ca

References

- Day NL, Helsel A, Sonon K, Goldschmidt L. (2013). The association between prenatal alcohol exposure and behavior at 22 years of age. Alcoholism: Clinical and Experimental Research, 37(7), 1171-1178.
- Doyle, L. R., & Mattson, S. N. (2015). Neurobehavioral Disorder Associated with Prenatal Alcohol Exposure (ND-PAE): Review of Evidence and Guidelines for Assessment. *Current Developmental Disorders Reports*, 2(3), 175–186. http://doi.org.ezproxy.library.ubc.ca/10.1007/s40474-015-0054-6
- Kobor, M.S., & Weinberg, J. (2011). Focus on: Epigenetics and fetal alcohol spectrum disorders. *Alcohol Research & Health, 34*(1), 29-37. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3860549/
- Kully-Martens, K., Denys, K., Treit, S., Tamana, S., & Rasmussen, C. (2012). A Review of Social Skills Deficits in Individuals with Fetal Alcohol Spectrum Disorders and Prenatal Alcohol Exposure: Profiles, Mechanisms, and Interventions. *Alcoholism-Clinical and Experimental Research*, *36*(4), 568-576. doi:10.1111/j.1530-0277.2011.01661.x
- May, P. A., Baete, A., Russo, J., Elliott, A. J., Blankenship, J., Kalberg, W. O., . . . Hoyme, H. E. (2014). Prevalence and Characteristics of Fetal Alcohol Spectrum Disorders. *Pediatrics*, *134*(5), 855-866. doi:10.1542/peds.2013-3319
- McBride, N., & Johnson, S. (2016). Fathers' Role in Alcohol-Exposed Pregnancies: Systematic Review of Human Studies. *Am J Prev Med*, *51*(2), 240-248. doi:10.1016/j.amepre.2016.02.009
- McKenzie, H. A., Dell, C. A., & Fornssler, B. (2016). Understanding addictions among Indigenous people through social determinants of health frameworks and strength-based approaches: A review of the research literature from 2013 to 2016. *Current Addiction Reports, 3,* 378-386. doi:10.1007/s40429-016-0116-9
- McLachlan, K. E. An Examination of the Abilities, Risks, and Needs of Adolescents and Young Adults with Fetal Alcohol Spectrum Disorder (FASD) in the Criminal Justice System. (AAINS22533). Retrieved from http://ezproxy.library.ubc.ca/login?url=http://search.proquest.com/docview/1641423302?accountid=14656
- McLachlan prevalence study not published yet, but preliminary results reported here: http://www.gov.yk.ca/news/16-154.html#.WFNEBKIrL-Y
- O'Connor, M. J., & Paley, B. (2009). Psychiatric conditions associated with prenatal alcohol exposure. *Dev Disabil Res Rev, 15*(3), 225-234. doi:10.1002/ddrr.74 Pei, J., Denys, K., Hughes, J., & Rasmussen, C. (2011). Mental health issues in fetal alcohol spectrum disorder. *Journal of Mental Health, 20*(5), 473-483.
- doi:10.3109/09638237.2011.577113
- Popova, S., Lange, S., Bekmuradov, D., Mihic, A., & Rehm, J. (2011). Fetal alcohol spectrum disorder prevalence estimates in correctional systems: a systematic literature review. *Can J Public Health*, *102*(5), 336-340.
- Popova, S., Lange, S., Burd, L., Urbanoski, K., & Rehm, J. (2013). Cost of specialized addiction treatment of clients with fetal alcohol spectrum disorder in Canada. *BMC Public Health*, 13. doi:10.1186/1471-2458-13-570
- Portales-Casamar, E., Lussier, A. A., Jones, M. J., MacIsaac, J. L., Edgar, R. D., Mah, S. M., . . . Kobor, M. S. (2016). DNA methylation signature of human fetal alcohol spectrum disorder. *Epigenetics & Chromatin*, *9*, 25. doi:10.1186/s13072-016-0074-4
- Rangmar, J., Hjern, A., Vinnerljung, B., Stromland, K., Aronson, M., & Fahlke, C. (2015). Psychosocial outcomes of fetal alcohol syndrome in adulthood. *Pediatrics*, *135*(1), e52-58. doi:10.1542/peds.2014-1915
- Roozen, S., Peters, G. J. Y., Kok, G., Townend, D., Nijhuis, J., & Curfs, L. (2016). Worldwide Prevalence of Fetal Alcohol Spectrum Disorders: A Systematic Literature Review Including Meta-Analysis. *Alcoholism-Clinical and Experimental Research*, 40(1), 18-32. doi:10.1111/acer.12939
- Sampson, P. D., Streissguth, A. P., Bookstein, F. L., Little, R. E., Clarren, S. K., Dehaene, P., . . . Graham, J. M., Jr. (1997). Incidence of fetal alcohol syndrome and prevalence of alcohol-related neurodevelopmental disorder. *Teratology*, *56*(5), 317-326. doi:10.1002/(sici)1096-9926(199711)56:5<317::aid-tera5>3.0.co;2-u
- Stade, B., Ali, A., Bennett, D., Campbell, D., Johnston, M., Lens, C., . . . Koren, G. (2009). The burden of prenatal exposure to alcohol: revised measurement of

- cost. Can J Clin Pharmacol, 16(1), e91-102.
- Streissguth, A. P., Bookstein, F. L., Barr, H. M., Sampson, P. D., O'Malley, K., & Young, J. K. (2004). Risk Factors for Adverse Life Outcomes in Fetal Alcohol Syndrome and Fetal Alcohol Effects. *Journal of Developmental and Behavioral Pediatrics*, 25(4), 228-238. doi:10.1097/00004703-200408000-00002
- Thanh, N. X., & Jonsson, E. (2015). Costs of Fetal Alcohol Spectrum Disorder in the Canadian Criminal Justice System. *J Popul Ther Clin Pharmacol*, 22(1), e125-131.
- Thanh, N. X., Jonsson, E., Salmon, A., & Sebastianski, M. (2014). Incidence and prevalence of fetal alcohol spectrum disorder by sex and age group in Alberta, Canada. *J Popul Ther Clin Pharmacol*, 21(3), e395-404.
- Watson, S.L., Hayes, S.A., Coons, K.D., & Radford-Paz, E. (2013). Autism and fetal alcohol spectrum disorder part II: A qualitative comparison of parenting stress. *Journal of Intellectual and Developmental Disability*, *38*(2), 105-113. doi: 10.3109/13668250.2013.788137
- Watson, S., Hayes, S., Radford-Paz, E., & Coons, K. (2013). "I'm hoping, I'm hoping...": Thoughts about the future from families of children with autism or FASD. Journal on Developmental Disabilities, 19(3), 76-93. http://www.oadd.org/docs/41014_JoDD_19-3_FASD_76-93_Watson_et_al.pdf