

Sex, Gender and Methamphetamines



Sex and gender impact the initiation of methamphetamine use, patterns of use, responses to use, access to care, and treatment outcomes. Women tend to begin methamphetamine use at an earlier age and are more dependent, but demonstrate a decreased level of toxicity, are more likely to request treatment,^[1] and report better treatment outcomes compared to men.^[2]

DEFINITIONS

Sex-related factors affect how your body reacts to substances, including how substances are metabolized, what effects they may have on your brain, and the development of tolerance and dependence. Female and male bodies have different genetic and physiological characteristics that affect these processes.

Gender-related factors affect your risks for use, exposure to marketing or exploitation, access to care and services, and the societal response to problematic use. Men, women, and gender diverse individuals experience these elements differently. In part, this is based on social roles and expectations that are dependent upon cultural context.

Data from the Canadian Tobacco, Alcohol and Drugs Survey (CTADS) show that approximately 0.2% of Canadians reported methamphetamine use during the last year,^[6] with similar reported rates of methamphetamine use among women and men in countries like the USA and a higher three-year prevalence among men in the past three years.^[7]

Key Sex-Related Factors

- Men's and women's brain structures are affected differently by methamphetamine use. The sex-specific brain alterations in female methamphetamine users are also associated with greater behavioral impulsivity.^[8]
- In a sample of non-dependent women and men, methamphetamine administration affected women's behavior, producing faster reaction times in women but no effect in men. Both men and women reported subjective effects when methamphetamine was administered and greater ratings of vigor and reduced sedation in women as compared with men.^[9]
- While men are more likely to report work problems and high blood pressure due to methamphetamine use, women are more likely to report skin problems.^[10]
- In a sample of methamphetamine dependent participants screening for a pharmacotherapy clinical trial, women reported significantly more days with methamphetamine use in the 30 days before treatment than men. Pretreatment days of methamphetamine use is an important predictor of behavioural therapy and pharmacotherapy treatment outcomes.^[11]

Key Gender-Related Factors

- Compared to men, women dependent on methamphetamines reported greater: psychological burden, use of emotional-coping strategies, and childhood emotional and sexual trauma.^[12]
- Although methamphetamine use is often associated with unprotected sex and sexually transmitted and blood borne infections among female users,^[13,14] qualitative findings suggest that women focus on desire, pleasure, disinhibition and the feelings of power and agency related to sexual behaviors while under the effects of methamphetamine.^[13]

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Studies that examine the role of sex- and gender-related factors in relation to methamphetamine use illustrate their impact on patterns of use, risk factors, biological mechanisms and health effects. Exploring these and other features of methamphetamine use is urgently needed, in order to create effective prevention messages, brief interventions, treatments and harm reduction strategies that are informed by and tailored to, sex- and gender-related factors. Despite emerging interest in examining intervention options for methamphetamine dependence,^[3-5] the findings are not sex- or gender-informed.

- Women often become regular methamphetamine users within one week of initiation^[15] and more often work and live in marginalized public spaces.^[16]
- Women are more likely than men to experience their first injection in the presence of a sexual partner^[15] and having an intimate partner who procures drugs for them increases the odds of crystal methamphetamine use.^[16]
- Childhood abuse was associated with initiating crystal methamphetamine injection among female sex workers.^[17]
- Among men who have sex with men (MSM), the co-occurrence of trauma and stimulant use has negative implications for HIV/AIDS prevention.^[18]
- Although both men and women report that they use methamphetamine for sexual enhancement^[19] more women than men use methamphetamine pills for energy and to lose weight.^[10] Weight control might be an important risk factor of initiating methamphetamine use among college women who start using drugs.^[20]
- Transgender individuals are more likely to use both cocaine and methamphetamine in their lifetime compared to their non-transgender peers.^[21]

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