

# Childhood stress linked with earlier substance use in male and female teens

June 1 2024

---



Credit: Pixabay/CC0 Public Domain

Stress during childhood is associated with earlier substance use in male and female adolescents, according to a study presented Saturday at [ENDO 2024](#), the Endocrine Society's annual meeting in Boston, Mass. Traumatic events may increase substance use risk for males, while environmental stress and early puberty may increase the risk for females, the researchers found.

Early life stress is children's experiences of abuse, neglect and conflict. Approximately 20% of adolescents in the United States have experienced early life stress at some point, and these experiences influence adolescent and adult health behavior outcomes.

"Starting [substance use](#) at an earlier age is associated with more severe substance use disorder in adulthood," said lead researcher Alexandra Donovan, Ph.D., of Charles R. Drew University of Medicine and Science in Los Angeles, Calif. "Early life stress and [early puberty](#) have both been associated with early substance use, but it wasn't clear whether these connections are the same across boys and girls."

Donovan and colleagues evaluated sex differences in the impact of puberty and stress on alcohol, nicotine and cannabis use by the age of 13. They analyzed data from 8,608 male and female participants in the Adolescent Brain Cognitive Development (ABCD) Study, who were 9 or 10 years old when the study began. The study included data from the first three years of the ABCD study.

The researchers looked at the effects of early life stress and found it increased the likelihood of earlier use of alcohol, nicotine or cannabis use across both males and females.

Early life stress increased the likelihood of earlier substance use for

males by 9–18% and for females by 13–20%. Environmental stress increased the likelihood of early use of nicotine and cannabis in females by 15–24%. Traumatic event stress increased the likelihood in males by 15-16%. Higher pubertal development scores increased the likelihood of earlier nicotine use for females while decreasing the likelihood for males.

"Our study supports the link between early life stress and teen substance use, extending our understanding of how this connection can differ across sex," Donovan said. "These findings may be used to refine [prevention programs](#) in schools, encouraging a more individualized approach."

Provided by The Endocrine Society

Citation: Childhood stress linked with earlier substance use in male and female teens (2024, June 1) retrieved 21 June 2024 from <https://medicalxpress.com/news/2024-05-childhood-stress-linked-earlier-substance.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.