

# Risk for drug abuse in adopted children appears influenced by family, genetics

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In a national Swedish adoption study, the risk for drug abuse appears to be increased among adopted children whose biological parents had a history of drug abuse, according to a report published Online First by *Archives of General Psychiatry*.

Drug abuse is a worldwide public health problem and much effort has gone into understanding the nature of familial factors, the authors write in their study background.

Kenneth S. Kendler, M.D., of Virginia Commonwealth University, Richmond, and colleagues evaluated the association between genetic and environmental factors and the risk of drug abuse. Their study included 18,115 adopted children born in Sweden between 1950 and 1993, as well as their biological and adoptive relatives. Researchers relied on national registries and health databases, as well as information about drug abuse from medical, legal or pharmacy records.

The adoptees, whose average age at last available information was 46.2 years, had a 4.5 percent prevalence of drug abuse (DA) compared with 2.9 percent in all of Sweden from the same birth years.

The authors suggest the risk for drug abuse among children given up for adoption by biological parents, of whom at least one had drug abuse, was 8.6 percent, which they note was "substantially and significantly elevated over that seen in children given up for adoption when neither biological parent had DA (4.2 percent)."

"Risk for DA in adopted children is increased by a history in [biological parents](#) and siblings not only of DA but also of alcoholism, major [psychiatric illness](#) and [criminal convictions](#)," the authors note. "Risk for DA in adopted children is increased by disruption in the adoptive parent-adopted child bond by death or divorce but also by a range of indices of a disturbed adoptive [home environment](#) and deviant peer influences such as such as parental alcoholism and sibling drug abuse, respectively."

Researchers also suggest a gene-environment interaction in the etiology (the study of the causes of a disease) of [drug abuse](#).

"Adopted children at high genetic risk were more sensitive to the pathogenic effects of adverse family environments than those at low genetic risk. In other words, genetic effects on DA were less potent in low-risk than high-risk environments," the authors conclude.

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