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**[Oxycodone is more addictive to adolescents, mouse study finds](#)**

Adolescents are more prone to develop an addiction to the opioid painkiller oxycodone due to their increased sensitivity to its rewarding effects, finds a study with a mouse model comparing adults and adolescents. The work, published online in *Neuropsychopharmacology* this week, highlights the potential dangers of adolescent exposure to oxycodone and clarifies the biological processes underlying this addiction in young people.

Abuse of opioids like oxycodone is a growing problem in the U.S. with the onset of abuse often starting in adolescence and young adulthood. While overall illicit drug use by young people dropped 24% in recent years, abuse of the prescription medications hydrocodone and oxycodone, the active compound found in OxyContin and Percocet, has risen with 10% of high school seniors reporting recreational use. Although oxycodone abuse often starts at this young age, little is known about how the drug specifically affects adolescent brains, which are still developing.

Yong Zhang and colleagues found that adolescent mice self-administer less oxycodone than adult mice, a likely indication of increased sensitivity to the drug. Mice exposed to oxycodone during adolescence were also more sensitive to the drug after later re-exposure as adults. The findings suggest oxycodone triggered lasting functional changes in the developing adolescent brain. A better understanding of these changes leading to addiction could help to advance the development of new therapies for those suffering from oxycodone dependence.

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