

# Drug-drug interactions seen in 21.4% of children with medication exposure

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More than 20% of children with two or more medication exposures experience major drug-drug interactions (DDIs) annually, according to a study published online Jan. 4 in *Pediatrics*.

Kathryn E. Kyler, M.D., from Children's Mercy Kansas City in Missouri, and colleagues conducted a cross-sectional study of [children](#) aged 0 to 18 years with one or more ambulatory encounter and two or more dispensed outpatient prescriptions to examine the prevalence of major DDI exposure and factors associated with higher DDI exposure rates among children in an outpatient setting. Data were included for 781,019 children with two or more [medication](#) exposures.

The researchers found that 21.4% of the children experienced one or more major DDI exposures. Increased odds of DDI exposure were seen in association with age and with medical and mental health complexity.

Clonidine, psychiatric medications, and asthma medications were frequently implicated drugs. Per 100 children included, the highest adverse physiologic effect exposure rate was for increased [drug concentrations](#), central nervous system depression, and heart rate-corrected QT interval prolongation (14.6, 13.6, and 9.9, respectively).

"Prescribers should consider how and when to counsel patients about the risk of adverse drug events associated with DDIs, or when to simply monitor for [adverse drug events](#) in patients knowingly exposed to DDIs when the risk/benefit balance is favorable," the authors write.

**More information:** Kathryn E. Kyler et al, Major Drug–Drug Interaction Exposure Among Medicaid-Insured Children in the Outpatient Setting, *Pediatrics* (2024). [DOI: 10.1542/peds.2023-063506](https://doi.org/10.1542/peds.2023-063506)

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