Aims: Stimulant use, beyond prescribed use, is documented in school-aged persons for performance enhancement. The purpose was to examine trends in stimulant use for high school and college age persons, comparing typical summer and in-school months. The hypothesis was stimulant use would be higher during the school year as some students use stimulants as academic performance enhancers.

Methods: Data from the Poison Center program of the Researched Abuse, Diversion and Addiction-Related (RADARS®) System involving Intentional Misuse and Abuse cases from July 2007 to June 2012 were included in the analysis. Methylphenidate and amphetamines were analyzed separately. Models were performed as rates per 100,000 population and per 1,000 Unique Recipient of Dispensed Drug (URDD). Age groups compared were 14-18 years, representing high school students, and 18-25 years, representing college students. Also compared were summer months (June, July) to in-school months, August through May.

Results: For both age groups and stimulant classes, URDD and population rates in school months were significantly higher compared to summer months. URDD rates were 22.8% [p<0.0001] higher and population rates were 26.7% [p<0.0001] higher. Population and URDD rates for methylphenidate were higher for high school age persons, 31.0% [p<0.0001] and 31.2% [p≤0.0002], respectively. Population and URDD rates for amphetamines were higher for college age persons, 35.5% [p<0.0001] and 35.6% [p<0.0001], respectively.

Conclusions: Results show seasonal trends for stimulant use: for both high school and college age groups, Intentional Misuse and Abuse rates were 25% higher in school months compared to summer months. Also, rates for two classes of stimulants were different; college age showed higher rates of amphetamine use, while high school age showed higher rates of methylphenidate use.

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