Title: Non-medical use of extended release prescription stimulants: An examination of amphetamine and methylphenidate

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| **Aims:** To examine rates of nonmedical use (NMU) of prescription extended release (ER) amphetamines and ER methylphenidate, relative to availability.  

**Methods:** Prescribing data were acquired from IMS Health. Data relevant to ER amphetamine and ER methylphenidate were collected from two studies in the RADARS® (Researched Abuse, Diversion and Addiction-Related Surveillance) System (Q3 2007-Q2 2009). First, the Drug Diversion System provides a law enforcement perspective based on surveys of diversion investigators throughout the US. Second, the Poison Center System provides data on exposures to prescription drugs based on spontaneous calls. RADARS System data are presented as rates per 1,000 Unique Recipients of Dispensed Drug (URDD) to account for drug availability.

**Results:** From July 2007-June 2009, 18,315,404 prescriptions were filled for ER amphetamines, 26,674,152 for ER methylphenidate. RADARS System Drug Diversion trends nearly overlap for ER amphetamine and ER methylphenidate, relative to URDD (running average of 0.042 vs. 0.024 drug diversion reports per 1,000 URDD). Similarly, trends in RADARS System Poison Center calls are generally similar for ER amphetamine and ER methylphenidate, although ER amphetamine trends slightly lower (running average of 0.15 vs. 0.22 intentional exposures per 1,000 URDD).

**Conclusions:** Trends from the US RADARS System, which controls for utilization rates, suggest diversion and poison center call rates are similar for ER amphetamine and ER methylphenidate.

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