

#### 044. Synthetic Cannabinoid Exposure in Adolescents Presenting for Emergency Care

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**Objectives:** To characterize the clinical picture and management of synthetic cannabinoid exposure in a cohort of adolescents.

**Methods:** Using the 45 participating sites of the Toxicology Investigators Consortium (ToxIC) Registry, a North American database, we conducted an observational study of a prospectively collected cohort. We identified all adolescent (12–19 years) cases of synthetic cannabinoid exposure who have received medical toxicology consultation between January 2012 and December 2016. Clinical and demographic data were collected including age, sex, circumstances surrounding exposure, coingestants, clinical manifestations, treatment, disposition and outcome.

**Results:** We identified 75 adolescents who presented to the emergency department with synthetic cannabinoid exposure. Most were male (91%) and between the ages of 16–19 (66%). The most common symptoms were neuropsychiatric with 50 adolescents (67%) exhibiting central nervous system (CNS) manifestations. There was no predominant toxidrome, and nine (12%) patients required mechanical ventilation. Mainstay of treatment was supportive care. No deaths were reported.

**Conclusions:** Synthetic cannabinoid exposure in adolescents is primarily characterized by CNS manifestations, which are varied and may be life- threatening. Frontline caregivers should maintain a high index of suspicion for synthetic cannabinoids, especially in adolescents who present with unexplained CNS manifestations, as there is no specific toxidrome rapid drug screen to detect them.