

ACMT Position Statement: Addressing Pediatric Cannabis Exposure

Background

In recent years, the use of medicinal cannabis has expanded, and cannabis has been decriminalized or legalized in many states. In addition to these changes in cannabis policy, there has been significant increase in the types, number, and potency of available products. Due to these changes in policy and availability, inadvertent cannabis exposures in children have been on the rise, leading to significant adverse events. ACMT believes stakeholders should implement measures to prevent pediatric cannabis poisonings.

For the purposes of this statement, we consider children to be individuals <12 years of age. This position statement is not intended to address either the intentional use of cannabis by adolescents or prescription cannabidiol. We consider "exposure" to be contact between a person and a cannabis product. We characterize any adverse event due to exposure as "poisoning."

Cannabis is the most commonly used illicit drug in the United States.¹ In recent years, many states have allowed for the use of cannabis for medicinal purposes, and some states have decriminalized or legalized recreational use of the drug by adults.² (The existence of different regulations from state to state presents a challenge to any effort to address cannabis legislation.) At the same time, there has been an increase in cannabis use and cannabis-related emergency department visits.^{1,3}

In addition to changes in cannabis policy, there has also been a change in the characteristics and potency of available products. There has been an expansion in availability of edible cannabis products, including tinctures, oils, and foods that contain cannabis or cannabis derivatives (such as cannabis oil). Like traditional products, "edibles" often contain high concentrations of psychoactive cannabinoids. Because edible cannabis products are not regulated as drugs by the Food and Drug Administration, the concentration of active cannabinoids can differ dramatically among similar-appearing products.²

The changing landscape of cannabis policy has had unintended consequences, particularly in children. Expanded access to medical cannabis as well as decriminalization of adult-use cannabis has led to an increase in childhood exposures.^{4,5}

Among children, the most commonly reported and consequential route of exposure is ingestion. This typically involves edible products including cannabis-infused baked goods and candies, which are particularly appealing to young children. Children may also ingest intact or partially-consumed marijuana cigarettes, oils, tinctures, resins, or plants. Several case reports,

case series, and systematic reviews have described poisoning by oral cannabis products in children.⁴⁻¹⁰ The most common manifestations were neurologic, particularly lethargy and ataxia. Tachycardia, mydriasis, respiratory depression, and hypotonia are also reported.⁴⁻¹⁰ In a systematic review of children <12 years of age presenting to the hospital with unintentional cannabis ingestion, 8% were admitted to the intensive care unit and 6% were intubated. The mean length of stay in hospital was 27.1 hours.⁹ There is no specific antidote for cannabis poisoning, and care is largely supportive.

Because of the potential for adverse events to children following cannabis exposures, ACMT calls upon stakeholders to implement measures to prevent cannabis exposure in children.

Methods

We performed a literature search for articles relevant to pediatric cannabis exposures. We searched PubMed using the terms "pediatric cannabis toxicity," "pediatric cannabis poisoning," and "pediatric cannabis exposures." Only articles written in English were reviewed. We reviewed the relevant articles, and any applicable references in their bibliographies.

We convened a group of experts to propose recommendations using the Delphi Method (DM).¹¹ The process was managed by a moderator who was a member of the study team but not a member of the expert panel. We enlisted committee members from the ACMT Position Statement and Guidelines Committee, all of whom are board certified, clinically-active medical toxicologists. Committee members were asked to nominate participants for the panel. The final panel was composed of 9 medical toxicologists. We invited panel members to submit recommendations to prevent pediatric cannabis exposures. Our panel produced recommendations and concluded that policies should be reevaluated at regular intervals. This document was then reviewed and approved by the ACMT Position Statement and Guidelines Committee, was sent to the ACMT Board of Directors, and then sent to the entire College membership for review. After revision by the committee, final approval was made by the ACMT Board of Directors. Recommendations are included in the Table.

Disclaimer

While individual practitioners may differ, these are the positions of the American College of Medical Toxicology (ACMT) at the time written, after a review of the issue and pertinent literature.

TABLE

Preventing Pediatric Cannabis Exposure ACMT Recommendations

Packaging and Labeling

- Implement child-resistant packaging requirements consistent with the Poison Prevention Packaging Act. Child-resistant packaging has been demonstrated to limit exploratory ingestions of other xenobiotics in children.
- 2. Prohibit labeling and advertising that might appeal to children. Cannabis product labeling rules should be at least as strict as those for tobacco and alcohol products.
- 3. Affix clear warning labels including hazard pictograms and precautionary statements. These relatively low-cost practices should promote awareness and understanding of hazards.
- 4. Require tetrahydrocannabinol (THC) concentration, total THC content, recommended serving size, and THC per serving to be listed on edible cannabis product packaging. Confusion about the size of a dose in edible cannabis products has led to poisoning in adults. Although we do not expect young children to read these labels, understanding about the cannabis concentration of the edible may promote better understanding of the danger present in small quantities of product and improve poisoning prevention.
- 5. Include the poison center national phone number (1-800-222-1222) and 911 on package labeling. Poison center, medical toxicology, and emergency services should be readily accessible in the event of a childhood exposure.

Home

- 6. Individuals should not use cannabis products when visible to children. Children learn from watching adults that products are safe to eat.
- 7. Store cannabis products, including edibles, and home-prepared products in a secure place (e.g., a lockbox). Proper storage can prevent exploratory pediatric ingestion.
- 8. Call the poison center or seek medical care (including calling 911 if necessary) for suspected exposures. Poison centers provide recommendations regarding decontamination and need for urgent medical evaluation.
- 9. Parents should not administer cannabis products to children without medical oversight and authorization. Any possible therapeutic benefit of cannabis for certain conditions must be weighed against the potential for adverse effects on the brain and development.¹²
- 10. Women should not use cannabis during pregnancy or breastfeeding. THC is lipid soluble and concentrates in breast milk.¹³

Surveillance

11. Policymakers and public health agencies should monitor poisoning databases such as the National Poison Data System and the Toxicology Investigators Consortium (ToxIC) Registry. Poisoning databases can provide data on epidemiology, safety, and toxicity in

order to highlight vulnerable groups, improve patient care, suggest risk reduction strategies, and inform policy.

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