Marijuana Candy: Poisoning and Lack of Protection for Children

Roneet Lev, MD FACEP

Timmy's eyes were rolling side to side in his head as his floppy body did not respond to his mother's calling. He was rushed to the hospital and admitted to the ICU. The 4-year-old ate one of his mother’s Cannabis Infused Rainbow Sherbet flavored gummies and ended up with marijuana poisoning and coma. There is no anti-dote to THC, the psychoactive chemical in cannabis, so Timmy had to wait and detoxify over the next couple of days.

Timmy is one of 7043 children under the age of 6 exposed to cannabis in the United States between 2017-2021. According to the National Poison Data System pediatric exposures increased 1375% during that time. Diagnosis data from Children's Hospitals found 15% of marijuana related hospital encounters required hospitalization and 4% required mechanical ventilation.

Fruity Candy was responsible for 73% of the pediatric poisoning according to preliminary data from Rady Children's Hospital in San Diego from 2014-2022. This was followed by chocolate 12%, brownies 9%, and cookies 3%.

Increased marijuana poisoning in children follows increased availability and increased potency. The percent of THC in cannabis samples seized by the DEA increased from 4% in 1995 to 15.3% in 2021. But that data is misleading, visit any cannabis store in person or on-line and you will find concentrates at over 90% THC. High potency THC can behave like a hard drug, like methamphetamine.

In December 2022 four kids at a California middle school ingested an unknown substance. Three of them were rushed to the hospital for a possible overdose of what doctors feared was fentanyl. While they were relieved it was not fentanyl, "just" marijuana-infused gummies, these kids were poisoned while at school and suffered serious reactions.

Dosing in children is a major concern. One gummy of 10 mg THC for an adult can cause psychosis. For a child it can cause altered mental status, encephalopathy, or delirium. Perhaps more disturbing is that children are susceptible to exposure based on their cognitive development. Babies go through a stage where everything goes in the mouth indiscriminately. Children are naturally attracted to candy, sweet flavors, and pretty packaging. They do not have the developmental capacity to smoke of vape, so it is not surprising that they are poisoned by edibles.

Another problem with edibles is that they deliver a dose much more slowly than smoking. It takes longer for edibles to take effect, 30 - 60 minutes, because THC, just like most oral drugs, must pass through the stomach and liver and get into the blood before reaching the brain. This
delay can cause children to consume more gummies before symptoms take effect. It also takes longer to metabolize edible verses smoked products.

The symptoms of cannabis poisoning in children show up as effects on the brain. THC is a *lipophilic* drug, meaning it is attracted to the fatty part of the brain, and one of the fattest organs is the brain. Children can have change in consciousness, seizures, lack of coordination, lethargy, irritability, or excess sleep.

Tanner Clements, a 4-year-old boy ate his mother's THC delta 8 gummies on May 6. His mother called poison control, but it was too late. Tanner was placed on life support and died two days later. Delta-8 THC and a host of hemp derived psychoactive cannabinoids were declared *legal*, despite lack of safety. Hemp seeds on salad or hemp fabric is one thing but making psychotic drugs available in candy form on Amazon makes our legislative system guilty of child abuse.

Brain development can be altered by cannabis exposure. We also know that the human brain continues to grow until age 25, and it *starts growing at the third week of gestation*. A longitudinal study of Adolescent Brain Cognitive Development (ABCD) showed an increased *mental health burden* with prenatal cannabis exposure that persists from childhood to early adolescence. This follows the evidence that cannabis has *genotoxic effects* on sperm and human development.

THC is an established *risk factor* for mental health risk, just like tobacco is a risk factor for lung cancer and heart disease. That is why the U.S. Surgeon General published an *Advisory on Marijuana Use and the Developing Brain*.

We learned from tobacco that if kids start young, they are more likely to continue using as adults. During those developing years addiction is up to *7 times more likely* than in an adult brain. Getting kids hooked young creates lifelong consumers.

The FDA was proud to propose a *rule prohibiting favored* cigars and menthol cigarettes to prevent youth initiation. California passed a *law banning* flavored tobacco products. Where is the protection for kids with flavored and candied pot?

In Quebec, Canada, child poisonings of marijuana edibles *did not spike* when they introduced child protection laws with THC potency caps and no legal edibles.

Why does the world Wheetos that look like Cheetos, Stoney Patch that looks like Sour Patch, Stoneo that looks like Oreos, or cute colorful gummy bears? If adults want to use recreational drugs, they can do so without jeopardizing children. They don't need lollipops. There are plenty of other ways for adults to get their THC.

As a society we need to protect our children and having psychotropic “candy” lying around is a guaranteed recipe for trouble.

To protect children, The International Academy on the Science and Impact of Cannabis, *IASIC* recommends:
1. Child proof packaging, not just child resistant, but child proof. **Child proofing medication** was initiated because of pediatric poisoning, just like what is happening now with cannabis products.

2. Limiting THC potency.

3. Banning cannabis candies, flavors, and packaging attractive to kids

4. Ban Delta-8 THC and related psychoactive cannabinoids.