School Nurse Meeting

Marijuana Related Exposure Cases
January 19, 2023





Agenda

Products, Potency & Labeling Poison control data & Delta 8 THC Rady's data Drug interactions Resources

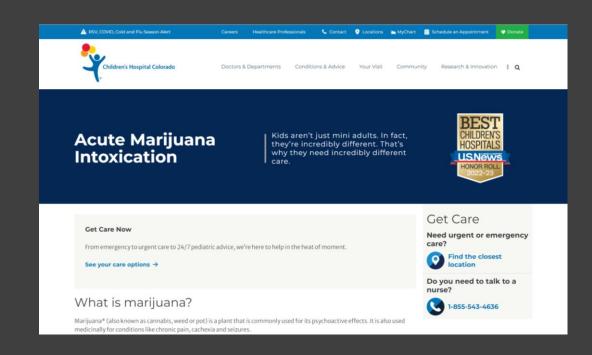


Children's Hospital Colorado

• The most common overdose incidents in children occur when the drug has been combined with food in an "edible" form of marijuana. This is because marijuana ingested in this manner can have a stronger and prolonged effect, especially in children under the age of 12 years old.

In these instances, kids mistake "edible" marijuana (like gummy bears, brownies, lollipops, etc.) for regular food and eat it unknowingly.

• Small children are at higher risk based on their size and weight. Because edible products have very high amounts of marijuana, the symptoms are more severe on a small child. Many young children who consume marijuana edibles require hospital admission due to the severity of their symptoms.



Number of young children who accidentally ate cannabis edibles jumped 1,375% in five years, study finds



By Jen Christensen and Sandee LaMotte, CNN Published 12:02 AM EST, Tue January 3, 2023









More people use weed than tobacco in the US, new poll reveals

☐ Video Ad Feedback

(CNN) - In just five years, the number of small children in the US exposed to cannabis after accidentally eating an edible rose 1,375%, a new study says.

There were more than 7,040 exposures to edible cannabis in kids under 6 between 2017 and 2021, according to an analysis of records from the National Poison Data System, a central repository for data from America's Poison Centers.

| JAMA Network ⁻ | | | |
|----------------------------------|------------|---|-------------------|
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Viewpoint

October 10, 2022

The Continued Rise of Unintentional Ingestion of **Edible Cannabis in Toddlers—A Growing Public Health Concern**

Alexandra Van Oyen, DO^{1,2}; Elise Perlman, MD³; Mark K. Su, MD, MPH^{2,4}

» Author Affiliations

JAMA Pediatr. 2022;176(11):1068-1069. doi:10.1001/jamapediatrics.2022.3530

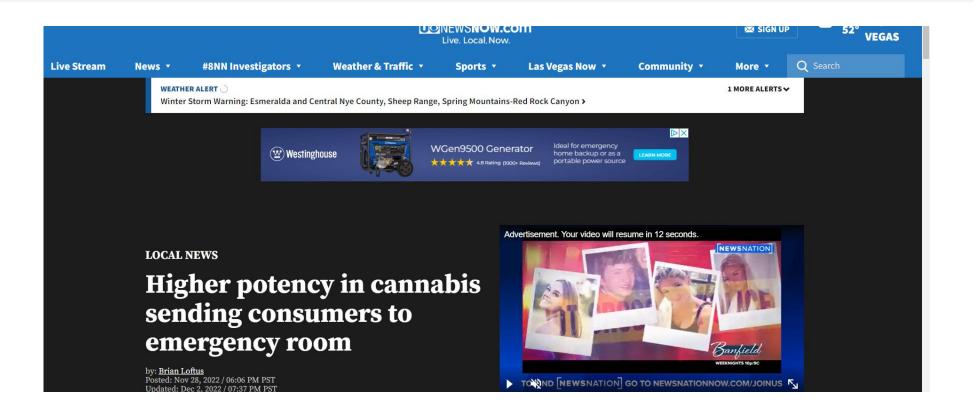


A 2-year-old boy presents to the pediatric emergency department (ED) for altered mental status. Prior to arrival, he was with his babysitter in a normal state of health. After questioning, the babysitter mentions rewarding him with a gummy candy for good behavior. The parents admit they have edible cannabis stored in the cupboard that looks exactly like his favorite treats, gummy bears.

Almost a decade after the first states legalized the use of recreational marijuana and cannabis, health care professionals have treated countless cases of children who unintentionally ingested edible cannabis products that were not stored safely. Cannabis is the third most commonly used psychoactive substance worldwide, with use continuously rising in the US adult population. In 2019, 18% of individuals in the US reported having used cannabis products at least once. As use of cannabis continues to be decriminalized and legalized across the US for adults aged 21 years and older, there has been a concurrent increase in unintentional ingestion of cannabis edibles among children, which raises a significant public health concern. The increase in these unintentional in-

More psychoactive

- Bud upwards of 30%THC
- Edibles and Vapes 90% THC
- Many dispensaries do not sell products less than 50% THC



Adult use of edibles

- Can take longer to feel the effects.
- Edibles generally contain higher amounts of THC.
- In some cases, users report highs from 8 hours to a day.
- Can interact with driving and prescription meds.



Mouthing for babies

- Babies feel things with lips and tongue, texture, taste, shapes
- Relieving pain of teething
- Explore the world
- Self soothing







What happens when children eat THC products?

- Children are drawn to sweet cookies, candies and baked goods.
- Once out of the package no way of knowing what is inside.

Increasing poison control calls and ER visits, the result of allowing food products to be marketed and sold with harmful unseen chemicals inside.



THC poisonings have variety of symptoms.

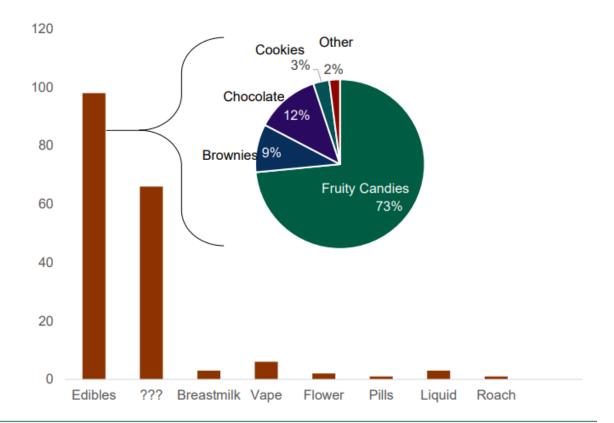
- Seizures
- Sleepiness
- Confusion/Panic
- Heart issues
- Upset stomach
- Mistaken for other illicit drugs

What products are driving the increase?

- Fruit candies
- Chocolates
- Vape/juice

Analysis of THC Positive Urine at RCHSD from 2014-2022 Preliminary Data and Trends Alexandra Dubinin and Dr. Natalie Laub

Reported THC Formulation Among THC+ Utox Patients at RCHSD (2014 – 2022)









Marijuana can be infused in any food, lotion or drink.

The gummies and other colorful candies are driving the cases of unintentional poisonings locally.

This is for <u>legal and tested</u> products from licensed businesses!

- CA symbol for recreational product.
- The label must list the cannabinoid content in percentages (e.g. THC: 18%; CBD: 1.5%). All products must include the THC and CBD content per package. Edibles and concentrates with designated serving sizes must also list the THC and CBD content per serving.

For more info - https://www.gaiaca.com/california -cannabis-labeling-requirements/







Recreational Use: A retailer may sell up to 1 ounce of marijuana flower, or 8 grams of concentrate, or 800-milligram servings of edible product, or more than 6 seeds in a day to a customer.

Black Market products

Does the label match the contents?



CALIFORNIA

California's legal weed industry can't compete with illicit market

Local government opposition, high taxes and competition from unlicensed businesses are complicating the state's push to build a thriving legal market.



California's cannabis law lets local officials decide whether to open the door to cannabis or slam it shut. So far, most are opting for the latter. | Justin Sullivan/Getty Images

By ALEXANDER NIEVES 10/23/2021 07:00 AM EDT









The illegal market that never goes away!

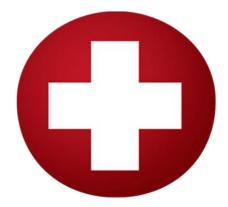




5 Reasons for marijuana related hospital visits

- Drug Interactions
- Accidents/Injury
- Cannabis Hyperemesis
- Mental Health
- Poisonings

Local ER visits

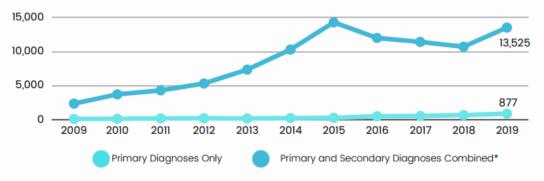


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ER visits a day in San Diego County hospitals related to marijuana.

Marijuana-Related Emergency Department Discharges

Number of Emergency Department (ED) Discharges for Marijuana-Related Diagnoses in San Diego County, 2009-2019



690% increase

in ED discharges with marijuana listed as a **primary diagnosis**, from 111 in 2009 to 877 in 2019.



473% increase

in ED discharges with marijuana as a primary or secondary diagnosis combined, from 2,362 in 2009 to 13,525 in 2019.

*Indicates cases where either the primary or secondary diagnosis upon discharge was marijuanarelated. For most secondary cases, individuals came into the ER for something else (e.g., broken arm, injury, flu, etc.) and cannabis use was added as a secondary diagnosis. In these cases, the drug use may or may not have contributed to the reason for the ER visit

CA Poison Control

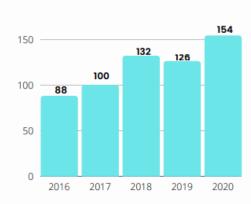
- 75% Increase in marijuana poison control cases in SD County since 2016 (Prop 64).
- 242% increase since 2011.

San Diego County Poison Control Data

The below graph displays the number of unduplicated cases handled by the California Poison Control Center for calls related to marijuana exposure from persons living in San Diego County. Each year displayed includes all persons of any age and dispositions/outcomes for the cases, including cases "resolved on-site" (i.e., from the location of the call), "treated/released from health care facility," and "admitted to health care facility."

Number of Marijuana Human Exposure Cases for San Diego County, 2016-2020

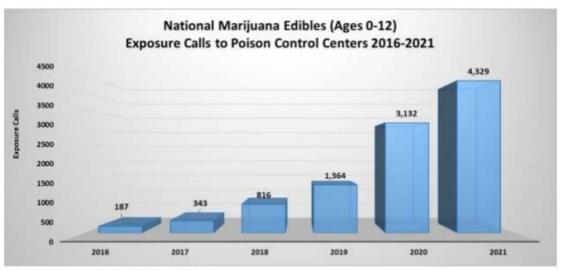
200



75% increase

in marijuana exposure cases in San Diego County handled by the California Poison Control Center since 2016.





Source: Association of Poison Control Centers

Note: Data collected as of June 6, 2022. Numbers may change as cases are closed or additional information is received.

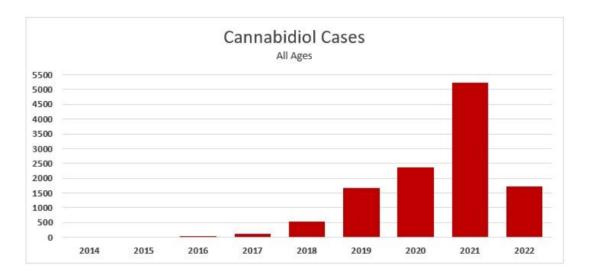
National marijuana edibles exposure calls for ages 0-12 from 2016 (187) to 2021 (4329) has increased by 2215%.

National Poison Control

- Poisoning calls for marijuana edibles
- Cases increased during Covid lockdown

National Poison Control Cases CBD

As of March 31, 2022, poison control centers have managed 1,717 cases in 2021 related to cannabidiol.

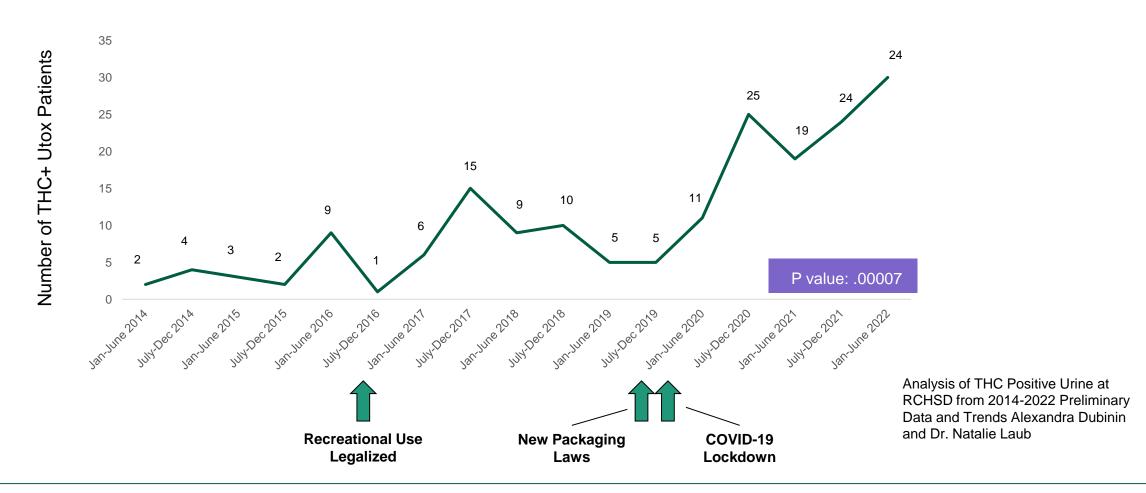


FOR THE MEDIA:

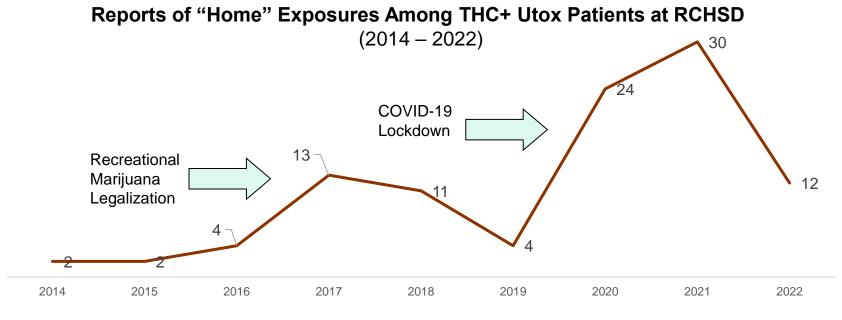
Please cite this data as "National Poison Data System, American Association of Poison Control Centers." Any and all print, digital, social, or visual media using this data must include the following: "You can reach your local poison control center by calling the Poison Help hotline: 1-800-222-1222. To save the number in your mobile phone, text POISON to 797979." Email media@aapcc.org or call 703-894-1863 for more information, questions, or to submit request data.

THC Positive Urine Toxicology Encounters at Rady Children's from Jan 2014- June 2022





Home exposure summary – Courtesy of Rady's Children's



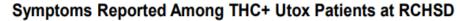
Analysis of THC Positive Urine at RCHSD from 2014-2022 Preliminary Data and Trends Alexandra Dubinin and Dr. Natalie Laub

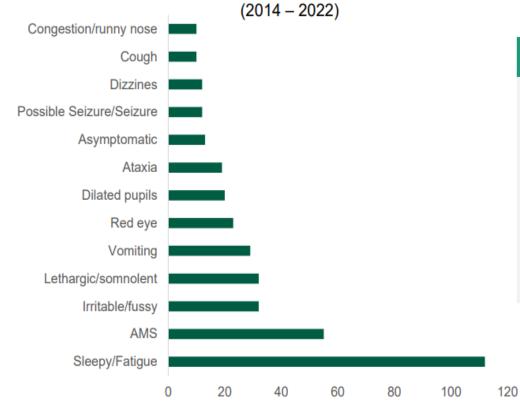
Summary of cases:

- Whose marijuana Mom
- What type of marijuana product Edibles (fruity candies/gummies)
- Where did the exposure occur Home
- How children present Heart arrhythmia, altered mental status, fatigue, fussiness, vomiting.
- 10% of the cases were so severe they required stays in the pediatric intensive care unit.



Symptoms Reported





Symptoms

- Overall, the most common symptoms included fatigue, altered mental status, fussiness, lethargy, vomiting, and ocular symptoms
- Symptoms reported in <5% included hypotonia, hallucinations, slurred speech, increased oral intake, nystagmus, difficulty breathing, diaphoresis, headache, clonus, lip cyanosis, abnormal coordination, and joint swelling
- 13 out of 180 children were asymptomatic

Symptoms Reported

Chief Concern

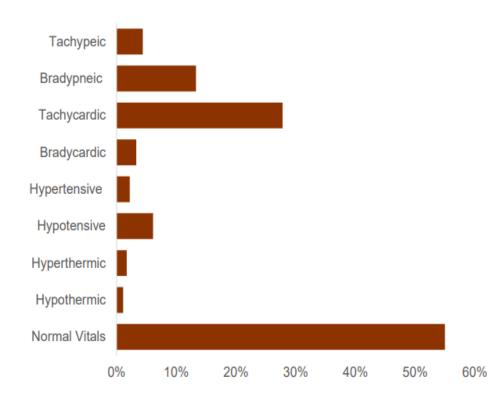
- 45% Ingestion/Drug overdose
- 31% Altered Mental Status
- 11% Fatigue

Vital Signs

- Overall, >50% of children had normal vitals
- Tachycardia and Bradypnea were the most common irregularities seen



Vital Signs of THC+ Utox Patients at RCHSD



Exposure
Cases and
Child
Protective
Services





In California from 2010 to 2020 the number of cannabis exposure calls to California Child Protective Services (CPCS) more than tripled despite a total population increase of only 6.1% and a consistent number of CPCS calls throughout this time.

What is Delta 8 THC?







Emergency Preparedness and Response

Resources for Emergency Health Professionals > Health Alert Network (HAN) > HAN Archive > 2021 ★ Health Alert Network (HAN) **HAN Jurisdictions HAN Message Types** Sign Up for HAN Updates **HAN Archive** 2021 HAN00453 HAN00452 HAN00451 HAN00450 HAN00449 HAN00448

Increases in Availability of Cannabis Products Containing Delta-8 THC and Reported Cases of Adverse **Events**





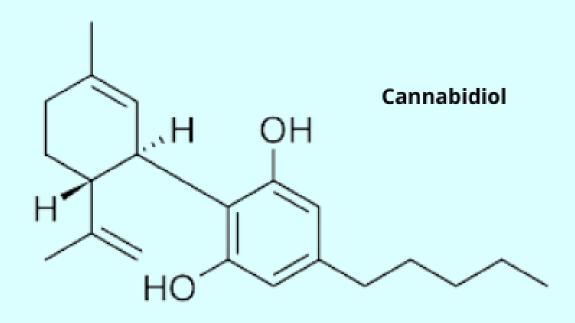
Distributed via the CDC Health Alert Network September 14, 2021, 10:00 AM ET CDCHAN-00451

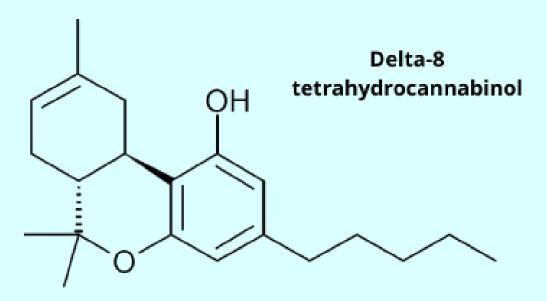
Summary

The purpose of this Health Alert Network (HAN) Health Advisory is to alert public health departments, healthcare professionals, first responders, poison control centers, laboratories, and the public to the increased availability of cannabis products containing delta-8 tetrahydrocannabinol (THC) and the potential for adverse events due to insufficient labeling of products containing THC and cannabidiol (CBD).

Background

Marijuana, which can also be called weed, pot, or dope, refers to all parts of the plant Cannabis sativa L., including flower,

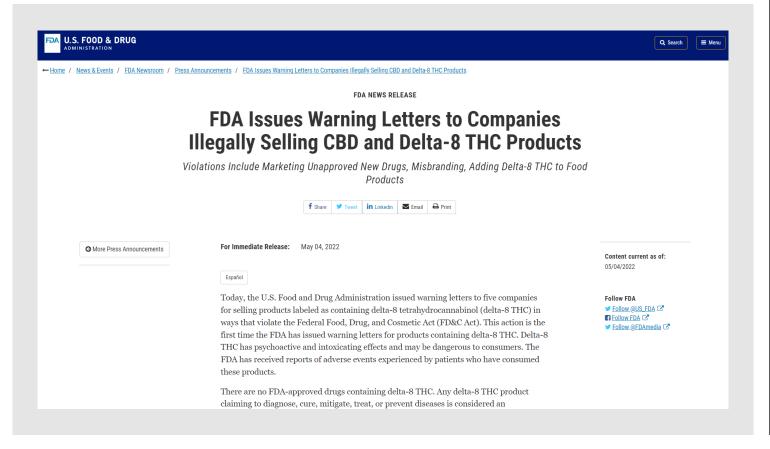




Delta 8 THC

- Delta 8 is made from CBD from the Hemp plant which is converted by using a solvent into Delta 8.
- The conversion of CBD to delta-8-THC involves refluxing CBD in an organic solvent, such as toluene or heptane, with acid that serves as a catalyst. The reaction is typically run for 60–90 min.

FDA Warning Delta 8



- Delta-8 THC is one of over 100 cannabinoids produced in the *Cannabis sativa* L. plant but is not found naturally in significant amounts.
- Concentrated amounts of delta-8 THC are typically manufactured from hemp-derived cannabidiol (CBD) and have psychoactive and intoxicating effects.



FDA reports

The FDA received 104 reports of adverse events in patients who consumed delta-8 THC products between December 1, 2020, and February 28, 2022. Of these 104 adverse event reports:

- 77% involved adults, 8% involved pediatric patients less than 18 years of age, and 15% did not report age.
- 66% described adverse events after ingestion of delta-8 THC-containing food products (e.g., brownies, gummies).

Adverse events included, but were not limited to: hallucinations, vomiting, tremor, anxiety, dizziness, confusion, and loss of consciousness.

Delta 8 Exposure Cases – National Poison Control

National poison control centers received 2,362 exposure cases of delta-8 THC products between January 1, 2021 (i.e., date that delta-8 THC product code was added to database), and February 28, 2022.

Of the 2,362 exposure cases:



- •58% involved adults, 41% involved pediatric patients less than 18 years of age, and 1% did not report age.
- •40% involved unintentional exposure to delta-8 THC and 82% of these unintentional exposures affected pediatric patients.
- •70% required health care facility evaluation, of which 8% resulted in admission to a critical care unit; 45% of patients requiring health care facility evaluation were pediatric patients.
- •One pediatric case was coded with a medical outcome of *death*.

FDA Warning Letters



FDA NEWS RELEASE

FDA Issues Warning Letters to Companies Illegally Selling CBD and Delta-8 THC Products

Violations Include Marketing Unapproved New Drugs, Misbranding, Adding Delta-8 THC to Food
Products



More Press Announcements

Today, the U.S. Food and Drug Administration issued warning letters to five companies for selling products labeled as containing delta-8 tetrahydrocannabinol (delta-8 THC) in ways that violate the Federal Food, Drug, and Cosmetic Act (FD&C Act). This action is the first time the FDA has issued warning letters for products containing delta-8 THC. Delta-8 THC has psychoactive and intoxicating effects and may be dangerous to consumers. The FDA has received reports of adverse events experienced by patients who have consumed these products.

There are no FDA-approved drugs containing delta-8 THC. Any delta-8 THC product claiming to diagnose, cure, mitigate, treat, or prevent diseases is considered an unapproved new drug. The FDA has not evaluated whether these unapproved drug

Content current as of:

05/04/2022

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FDA Letters

- An uptick in adverse event reports to the FDA and the nation's poison control centers.
- Marketing, including online marketing of products, that is appealing to children.
- Concerns regarding contamination due to methods of manufacturing that may in some cases be used to produce marketed delta-8 THC products.

NY Attorney General – Consumer Alert

- In 2020, more than 70 percent of calls related to marijuana edibles to the Poison Control Center involved children under the age of 5.
- In the first half of 2021 alone, the American Association of Poison Control Centers has reported that poison control hotlines have received an estimated 2,622 calls for services related to young children ingesting illegal cannabis products.



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CONSUMER ALERT: Attorney General James Issues Alert to Protect Children From Deceptive Cannabis Products Sold in Snack Packaging

Concerned Consumers Are Encouraged to File a Complaint With OAG Immediately

NEW YORK – New York Attorney General Letitia James today issued an alert to New York parents concerning products that are deceptively designed to look like standard snack foods and candy, but actually contain high levels of cannabis and tetrahydrocannabinol (THC). These products — which are illegal and unregulated in New York state — can be extremely dangerous to human health. The Office of the Attorney General (OAG) urges parents throughout the state to remain alert against the online sale of these dangerous and misleading products.

"These unregulated and deceptive cannabis products will only confuse and harm New Yorkers, which is why they have no place in our state," said Attorney General James. "It is essential that we limit their access to protect our communities and, more specifically, our children. In light of an increase in accidental overdoses among children nationwide, it is more vital than ever that we do everything we can to curb this crisis and prevent any further harm, or even worse, death. My office is committed to preventing the sale of these products and protecting the wellbeing of all New Yorkers. I urge everyone to remain vigilant against these products and to report these harmful items to my



Vape juice poisoning

Liquid nicotine is the liquid inside an ecigarette or vaping device and is also called "vape juice" or "e-liquid."

The product is dangerous to swallow and can even be absorbed if spilled on the skin. As little as one teaspoon could be harmful.

Nicotine poisoning often causes nausea, vomiting, dizziness, tremors (shakiness), and sweating, and can make the heartbeat much faster than normal. Severe poisoning can cause seizures. It can even cause death. Seizures can begin only 20-30 minutes after swallowing products containing nicotine.

Other chemicals in vape cartridge

- THC, CBD, Nicotine
- **Terpenes:** Vape cartridges may contain both cannabis and non cannabis derived terpenes.
- **Hydrosols:** Floral or aromatic waters (i.e., essential oils) and contain only small percentages of actual terpenes.
- Artificial flavors: The artificial flavors found in cannabis cartridges are sourced from the e-cigarette industry. There are thousands of flavors, but their safety is in question (e.g., diacetyl causing "popcorn lung").
- **Vitamin E acetate**: is an oily chemical commonly added to THC vaping liquids to dilute or thicken the mixture.
- **Propylene glycol, vegetable glycerin, glycerol**: responsible for the mist/vapor.

Proper handling and disposal of E-cigarettes and other vaping devices



Always wear new nitrile gloves when handling e-cigarettes and vaping devices





Place all confiscated parts into a sealed container or bag for storage. This includes:

- · Devices and batteries
- E-liquids and bottles
- Tanks, cartridges, and pods





Transport to a hazardous waste disposal site. To find the nearest location, visit:

https://www.calrecycle.ca.gov/HomeHazWaste/Directory/





Handle e-cigarettes with bare hands



PublicHealth

Rinse or throw e-liquids in the sink or toilet



Throw any component in the trash or recycling bin

Drug Interactions

Please tell your
Doctor if you are
using any
marijuana
products!

Visit drugs.com





Stoned California Seniors Headed to ERs By the Thousands, UCSD Study Says

Story by Eric S. Page • Yesterday 9:33 AM

↑ toned seniors — and we're not talking high-school kids — are visiting emergency rooms for cannabis-related issues in unprecedented numbers, according to a new study by UC San Diego researchers.



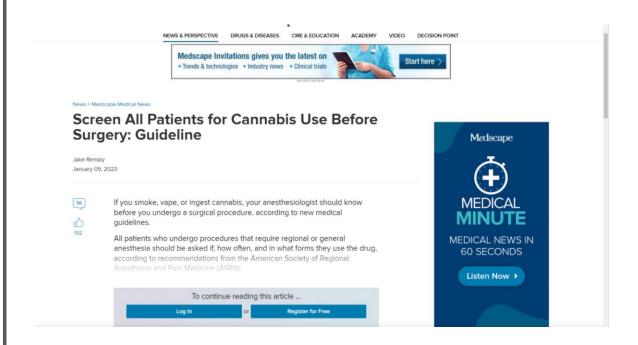
Screen All Patients for Cannabis Use Before Surgery: Guideline

Screen All Patients for Cannabis Use Before Surgery: Guideline

https://www.medscape.com/viewarticle/986690

- All patients who undergo procedures that require regional or <u>general anesthesia</u> should be asked if, how often, and in what forms they use the drug, according to recommendations from the American Society of <u>Regional Anesthesia</u> and Pain Medicine (ASRA).
- One reason: Patients who regularly use cannabis may experience worse pain and nausea after surgery and may require more opioid analgesia, the group said.
- Kenneth Finn, MD, president of the American Board of Pain Medicine, welcomed the publication of the new guidelines. Finn, who practices at Springs Rehabilitation in Colorado Springs, Colorado, has edited a textbook about cannabis in medicine and founded the <u>International Academy on the</u> Science and Impact of Cannabis.

"The vast majority of medical providers really have no idea about cannabis and what its impacts are on the human body," Finn said

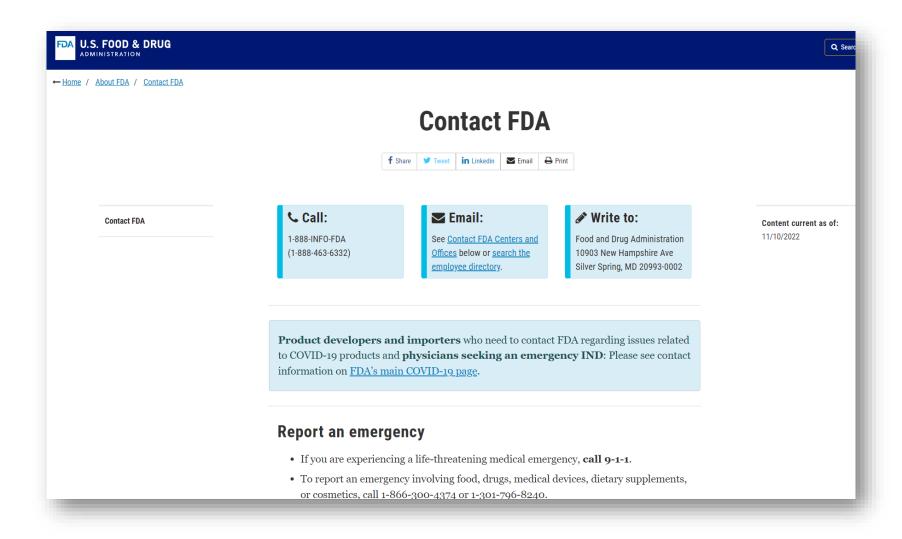




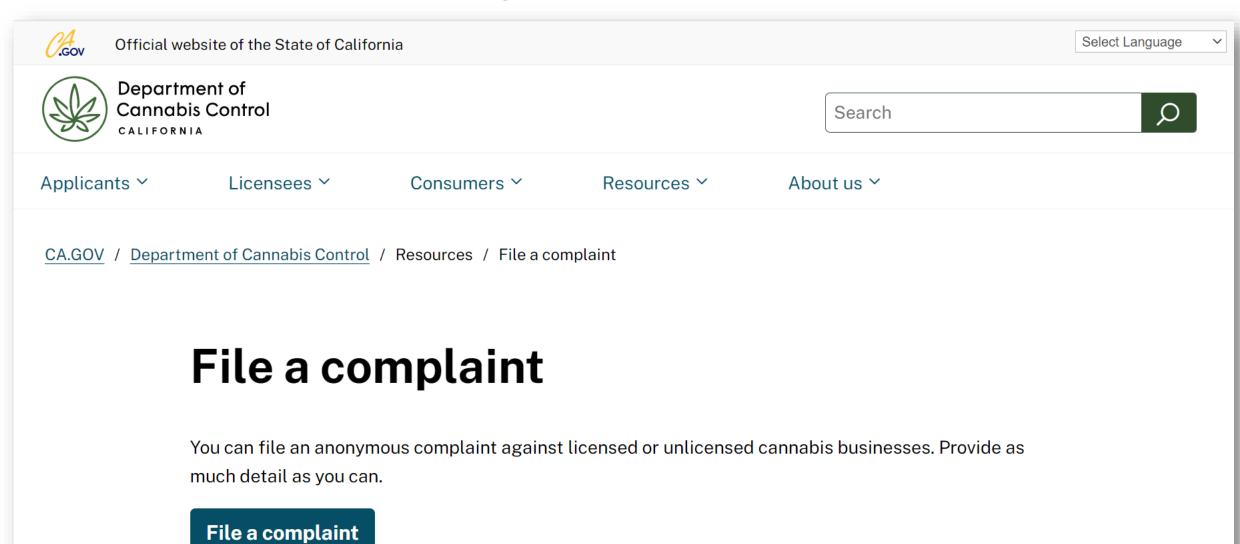
Advocate for child proof packaging

- Do not use in front of children.
- Store away from children.
- Do not leave individual candies or products outside the wrapper.
- Speak with your older children about the effects.

FDA complaint system



Know how to file a complaint - CA





Items to discuss with Administration!

- Do you document the incident
- Does the school have a Protocol, take pictures of product, document packaging, symptoms, notify parent and staff.
- Interventions
- Teachable moment!

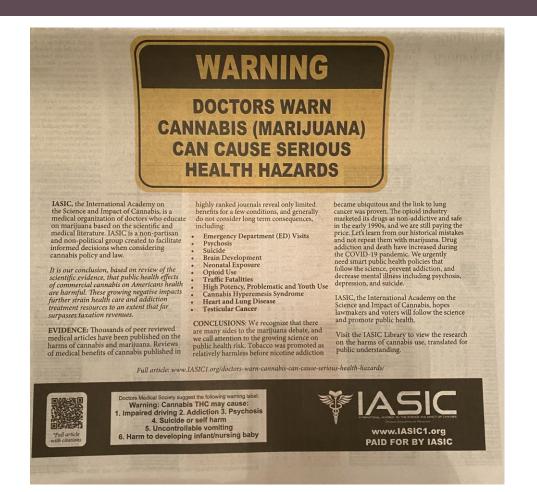
Focused MPI Trainings - 2023

Trainings for staff on how to refer kids to early intervention and treatment programs.

Parent nights where extra credit is given to youth that bring adults.



IASIC Doctors Educating on Cannabis



IASIC - International Academy on the Science and Impact of Cannabis, are doctors who educate on marijuana.

This non-partisan and non-political group is developed, organized, and guided by doctors.

Join the email list!

IASIC1.org

MPI Resources

MPI reducing underage use of marijuana.

Resources:

- IASIC link
- Vision Zero DUI
- NEW-MPI 2021 Report

Visit our MPI website, YouTube or twitter: http://www.ccrconsulting.org/mpi









Questions or comments?

My email is jeberstein@ccrconsulting.org

