



The Poison Control Center at CHOP

Kevin Osterhoudt, MD

January 31, 2022

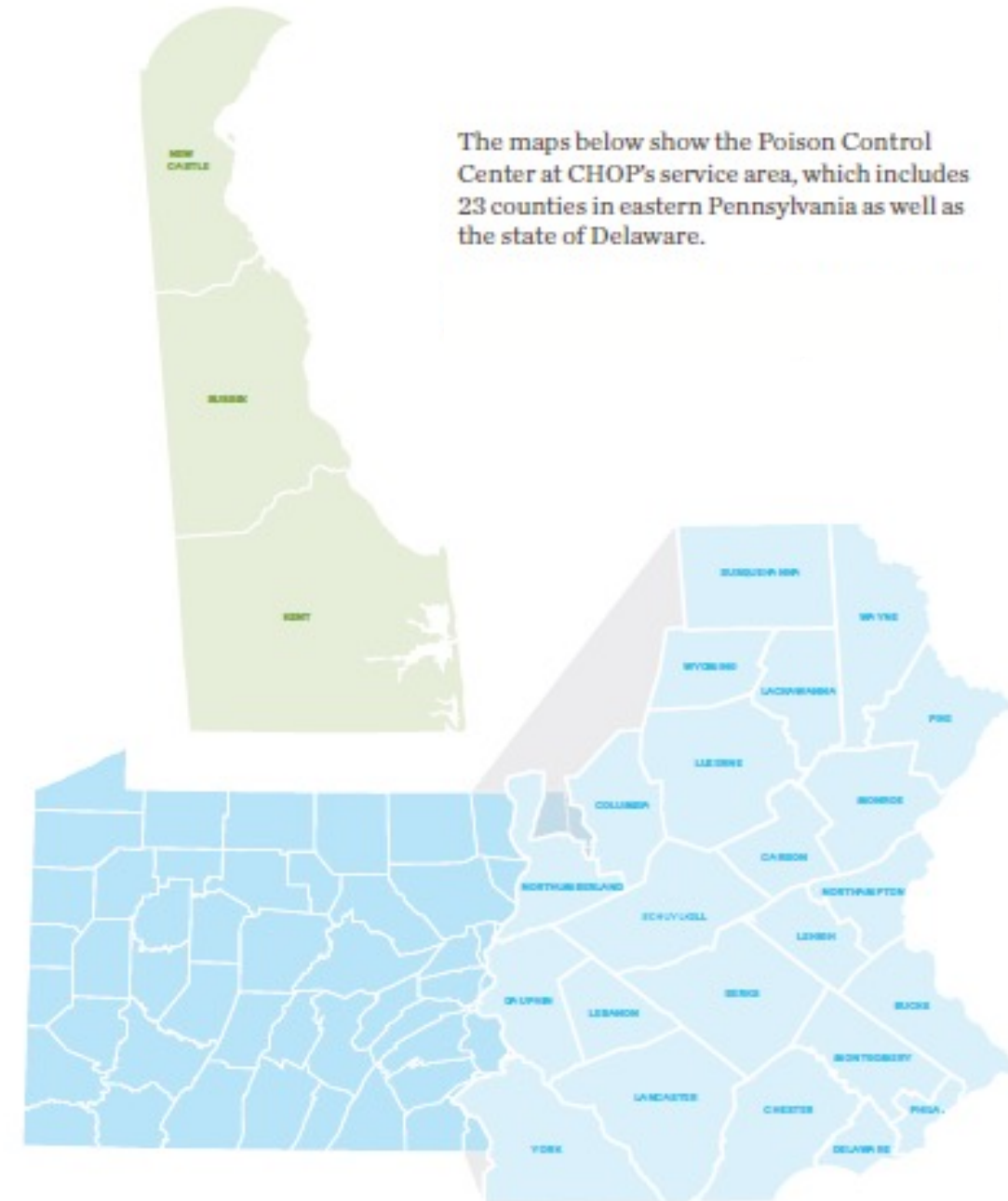


**Children's Hospital
of Philadelphia®**

Office of Preparedness,
Prevention & Response

THE POISON CONTROL CENTER AT CHOP

- Founded in 1986
 - CHOP, Phila College of Pharmacy & Science, and PDPH
 - Became a Center at CHOP in 1995
 - HRSA designated for 8.9 million in DE & PA
- Team of health care providers
 - Nurses (8), Pharmacists (6)
 - Medical Director
 - Associate Medical Director
 - Senior Toxicologist
 - Clinical Managing Director (Pharm.D.)



Our activities areas of interest

1. 24/7 and free public health hotline
2. Toxikosurveillance
 - *VAPI, laundry pods, new trends in drug adulterants, anthrax, marijuana*
3. Research
4. Public health programming and advocacy
 - Substance use disorder, mental health, medicine safety, environmental health/lead
5. Professional education
6. Sustainability

Delaware call volume by county, 2021

| | |
|---|--------------|
| Kent | 941 |
| New Castle | 3,225 |
| Sussex | 1,265 |
| DE resident, did not provide zip | 186 |
| Total | 5,617 |

Most common calls to the PCC



Children <6 years old

Cosmetics/Personal care products

Cleaning Substances (Household)

Analgesics

Foreign Bodies/Toys/Miscellaneous

Dietary Supplements/Herbals/Homeopathic

Vitamins

Plants

Topical Preparations

Antihistamines

Pesticides

Most common calls to the PCC



Children 6 to 19 years old

Analgesics

Antidepressants (did not break top 10 in 2020)

Antihistamines

Stimulants and street drugs

Cosmetics/personal care products

Cleaning substances (household)

Sedatives/hypnotics/antipsychotics

Foreign bodies/toys/miscellaneous

Cardiovascular drugs

Dietary supplements/herbals/homeopathics

Most common calls to the PCC



Adults 20 years and older

Analgesics

Antidepressants

Sedatives/hypnotics/antipsychotics

Cleaning substances (household)

Cardiovascular drugs

Anticonvulsants

Cosmetics/personal care products

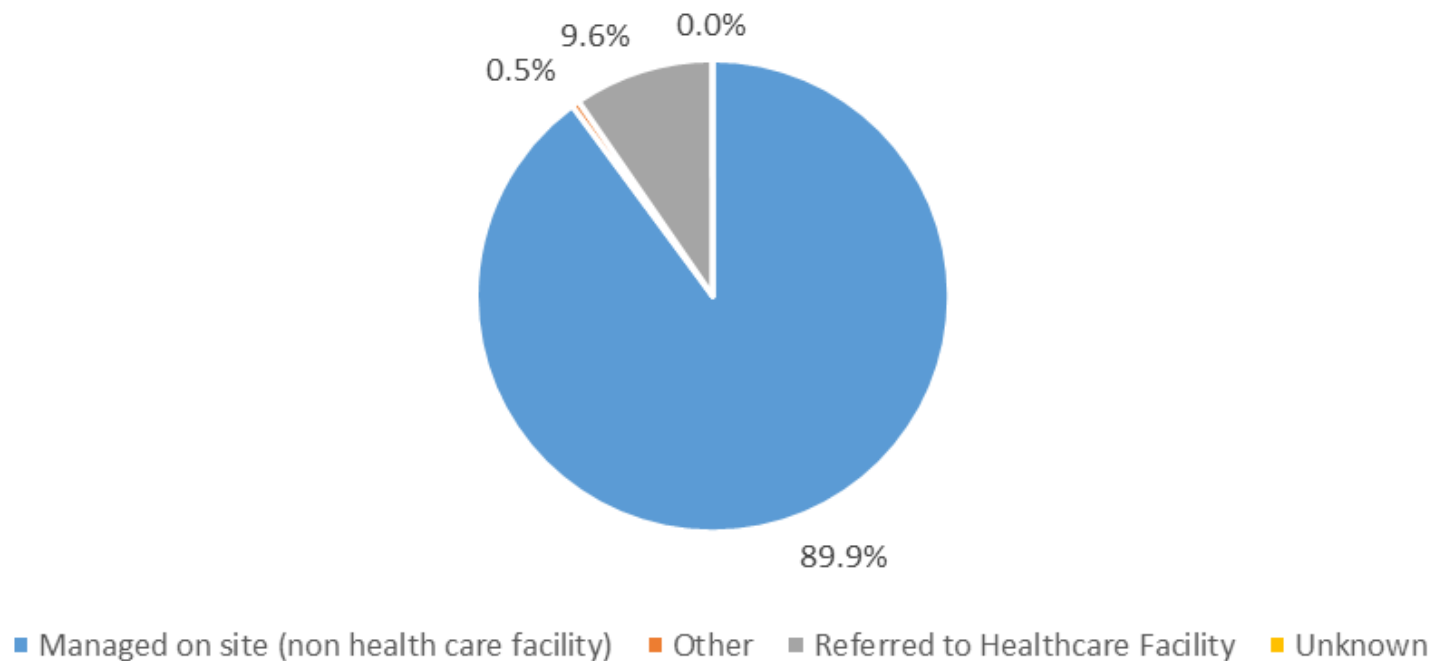
Antihistamines

Pesticides

Chemicals

Did we refer
the caller to
seek
treatment?

Management of Cases Reported Outside of Hospitals



The background of the slide is a dense, close-up photograph of numerous gummy bears. The bears are in various colors including red, orange, yellow, and green, and they are all shaped like bears. They are piled together, creating a textured, colorful background.

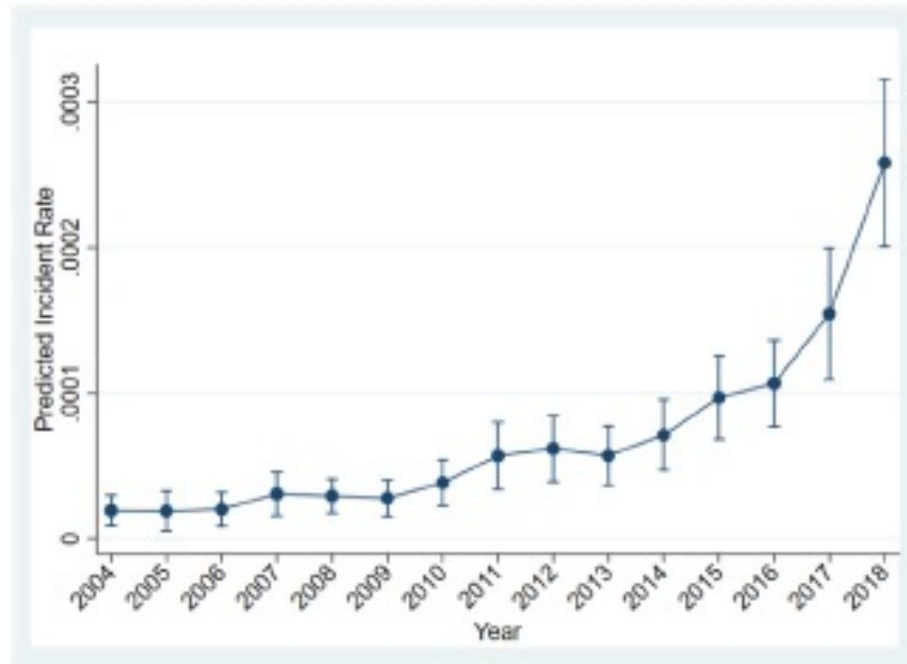
Rise in Child Marijuana Poisoning

- Increased availability
- Increased reporting with decreased stigma
- Increased THC content in products
- Rise in “edibles” attractive to children

Child Marijuana Poisoning Epidemiology

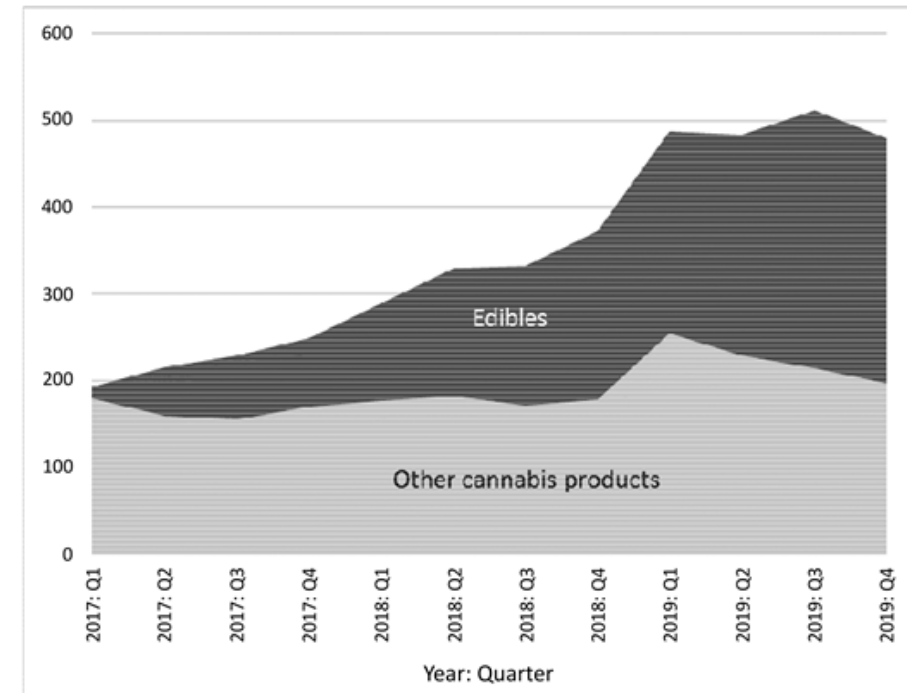
Bennett, Acad Pediatr, 2021

Hospital Data – Children 0-6 years



Whitehill, Pediatr, 2021

PCC Data – Children 0-9 years



THC Poisoning – Our PCC Epidemiology

2014-2019

- 500% increase in child cases
- Increase attributable to edibles

<https://injury.research.chop.edu/blog/posts/rise-child-injury-cannabis-not-high-we-wanted>

RESEARCH IN ACTION

[Home](#) > [Research In Action Blog](#) > [Rise in Child Injury from Cannabis: Not the High We Wanted](#)



[Rise in Child Injury from Cannabis: Not the High We Wanted](#)

Does THC Cause Severe Illness?

Bennett, Acad Pediatr, 2021

- **15% in ICU**
- **4% endotracheally intubated**

Intubation risk seems greatest when THC exposure unknown.

Common toxidrome = CNS depression, large pupils.

Greatest dangers = Seizures, respiratory depression.

Recent Trends in Marijuana-Related Hospital Encounters in Young Children

*Colleen E. Bennett, MD, MSHP; Atheendar Venkataramani, MD, PhD;
Fred M. Henretig, MD; Jennifer Faerber, PhD; Lihai Song, MS;
Joanne N. Wood, MD, MSHP*

More THC Work...

BRIEF

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LEGALIZATION OF MARIJUANA IN NEW JERSEY: IMPLICATIONS FOR PEDIATRIC INJURY PREVENTION

remain incompletely characterized. Much of our understanding of cannabis' physiological effects can be attributed to advances in characterizing the endogenous cannabinoid system over the past several decades [6, 7]. The endocannabinoid system is composed of endogenous cannabinoids and two major cannabinoid receptors, CB1 and CB2 [8], which are widely distributed throughout the central nervous system and other body tissues (e.g., myocardium, smooth muscle, myocardium) [9]. This system has been



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Prenatal

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AGES & STAGES



Edible Marijuana Dangers: How Parents Can Prevent THC Poisoning

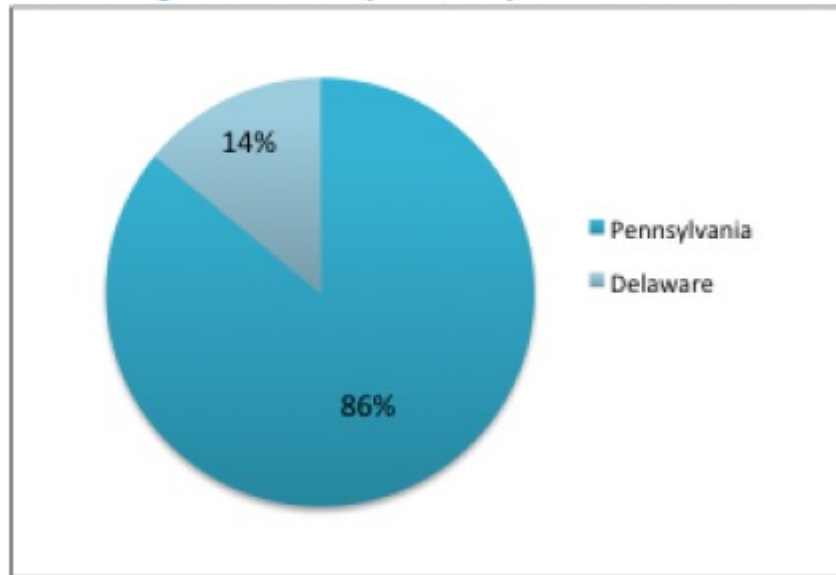
By: Kevin Osterhoudt, MD, MSCE, FAAP, FAACT, FACMT

Marijuana (cannabis) is now legal for medical or recreational use in most **U.S. states**. That means the availability of tempting treats that contain tetrahydrocannabinol (THC), the psychoactive ingredient in marijuana, is on the rise. Unfortunately, so is the unintentional THC poisoning risk these products pose to kids who get a hold of them.



THC Poisoning

Figure 2: State Contribution to Annual Marijuana Reports to PA Poison Centers
among Children ≤6 years, July 2014 – June 2019



2023 – A New Year

First 26 days...

- 23 THC cases < 18 years
- 8 THC cases < 6 years
- 16 of cases involved edibles

On pace for biggest year yet!



What is “Delta 8”?

“THC” in marijuana = delta-9-THC

- *Cannabis sativa* has dozens of alkaloids
- Delta-8-THC is a minor alkaloid in hemp
- Intoxicating
- Now being purified from hemp as “legal high”

THE WATCHDOGS

Chicago stores exploit legal loophole to sell THC-O, a 'psychedelic' 3 times stronger than weed

Military scientists once investigated the compound as a potential nonlethal incapacitating agent. Now, a hemp-derived version is touted for its powerful, mind-bending effects.

By Tom Schuba | Jan 14, 2022, 11:15am CST


What's Next in THC?





THC Poisoning Prevention Tips

Policy

- Edible THC products should not be made in forms or packages that resemble typical child treats.
- THC products should be in child-resistant packaging that conforms to the [Poison Prevention Packaging Act](#) .
- THC product packaging should be opaque and have limits on the quantity of THC in each serving size and package.
- Edible THC products should be conspicuously labeled as containing THC and should show the dose.
- THC containing products in stores should not be accessible to children and should not be displayed near food items.