## Dangerous Drugs and Trending Options for Forsyth County Teens



Department of School Safety Forsyth County School System Cumming, Georgia

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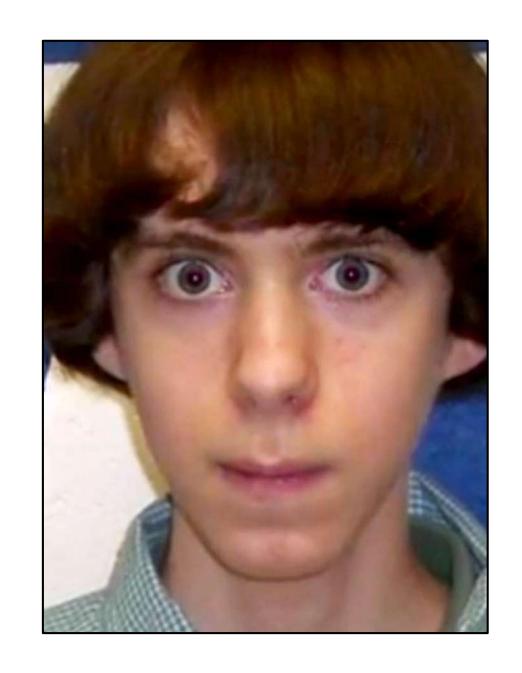


#### Think about this.....

In 2012 – 36 die in school shootings (26 in one school alone)

Greater than 55 million students in public schools.

.00006% chance of being in this statistic



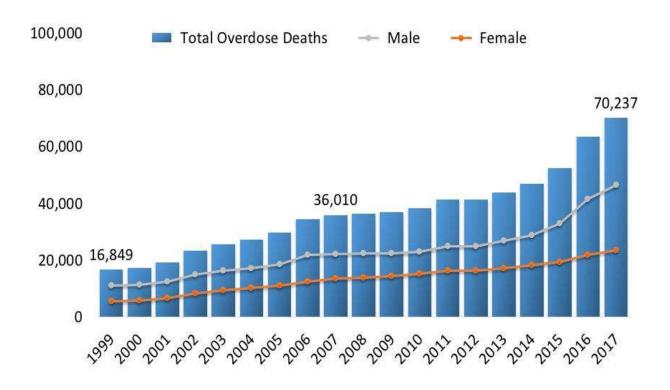
National Drug Overdose Deaths— Number Among All Ages, by Gender, 1999-2017.

More than 70,200 Americans died from drug overdoses in 2017, including illicit drugs and prescription opioids—a 2-fold increase in a decade.

Drug overdose deaths rose from 16,849 in 1999 to 70,237 in 2017.

The bars are overlaid by lines showing the number of deaths by gender from 1999 to 2017 (Source: CDC WONDER).

Figure 1. **National Drug Overdose Deaths**Number Among All Ages, by Gender, 1999-2017



Source: : Centers for Disease Control and Prevention, National Center for Health Statistics. Multiple Cause of Death 1999-2017 on CDC WONDER Online Database, released December, 2018

#### What are Synthetic/Designer Drugs?

- Synthetic designer drugs that are intended to mimic THC, the main active ingredient of marijuana.
- Not organic. Synthetic drugs are chemical compounds created in a laboratory
- There are numerous different synthetic cannabinoids that may be sold as "legal" alternatives to marijuana that are gaining in popularity.
- Abused for their psychoactive properties





#### What are Synthetic/Designer Drugs?

- Packaged without information as to their health and safety risks, often stating they are not for human consumption
- Frequently sold at small convenience stores, gas stations, and online, making them easily accessible to the public.
- Often marketed and sold under the guise of "herbal incense" or "potpourri."
- "Spice," "K2," Blaze, RedX Dawn, Paradise,
   Demon, Black Magic, Spike, Mr. Nice Guy, Ninja,
   Zohai, Dream, Genie, Sence, Smoke, Skunk,
   Serenity, Yucatan, Fire, and Crazy Clown.





#### **Synthetic Lab**







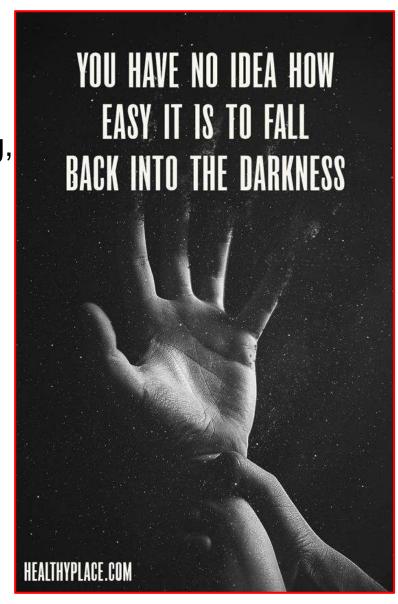
Teen spent 10 days on a ventilator after his lungs failed. Doctors think vaping is to blame.

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#### Headlines are clear.....

- Two deaths, 54 other cases of severe bleeding tied to fake ... - CNN.com
- Apr 2, 2018 Dozens of people suffered severe bleeding, and two died, related to synthetic cannabinoids, according to Illinois health officials who are also ...
- Synthetic Cannabinoids Linked to Deaths in Illinois -Pharmacy Times
- Apr 10, 2018 Three deaths in Illinois are being connected to the use of synthetic cannabinoids. The deaths are among 107 reported incidences of individuals
- The Spice of Death: The Science behind Tainted
   "Synthetic Marijuana ...



#### Regulation

- In response to a fatal overdose of a young teen, Georgia lawmakers added (2012) the common chemicals used for synthetic marijuana to the Schedule I list of controlled substances in Georgia (Chase's Law)
  - Soon after, drug manufacturers found ways around the law by changing the chemical compounds in their designer drugs
- Forsyth County passed its own ordinance governing synthetic drugs making it unlawful for any person to use, sell, give, manufacture with intent to sell, possess, purchase, deliver, transport or distribute any <u>unregulated</u> <u>marijuana substitutes</u> within the limits of Forsyth County



#### The NEW fad - VAPING

Vaping is the simple act of inhaling and exhaling vapor from an electronic cigarette or similar device, for example a vaporizer or vape pen. The actual device used for vaping is a small battery powered device that heats eliquid into an inhalable vapor, similar to how steam is formed.





A man has told how he was engulfed in flames and left with third degree burns after his vape exploded in while he was driving. (SWNS)

#### A look at cigarette substitutes: The JUUL

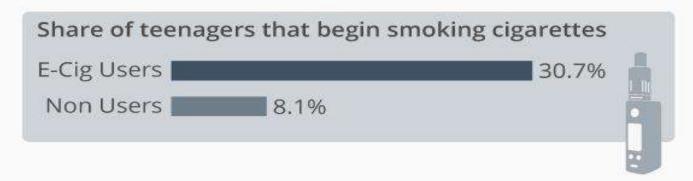
A new brand of electronic cigarette (e-cigarette) has become one of the most popular vaping devices, particularly among youth. JUUL® (pronounced jewel) looks like a USB drive, and is promoted as an alternative to combustible cigarettes and existing e-cigarettes or vaping devices.



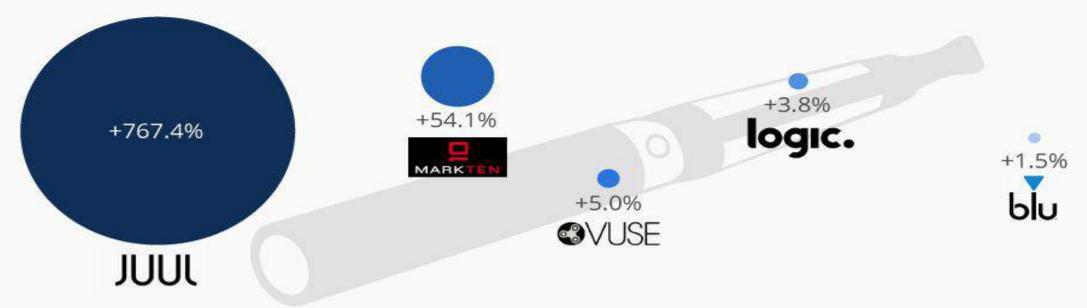
- The liquid in JUUL pods contain nicotine salts from tobacco leaves. The nicotine salts are absorbed into the body at almost the same rate as nicotine from a combustible cigarette.
- JUUL has more than twice the amount of nicotine concentrate as many other brands of e-cigarettes. One cartridge, called a pod, has roughly the equivalent amount of nicotine as one pack of cigarettes.



#### Juuling Is Growing, While Teen Use Is Under Investigation



Percent change year over year for revenue for different e-cigarette brands, 2017







#### Juuling Is Growing, While Teen Use Is Under Investigation

by Sarah Feldman,

Aug 29, 2018

Juul, the <u>e-cigarette</u> company, is under investigation by the FDA for intentionally targeting underage teenagers when marketing its devices. The Attorney General of Massachusetts, Maura Healy, is also investigating how effective the company was at preventing underage users from accessing its devices.

As the chart below illustrates, Juul is coming off a stellar year especially when compared to its competitors. The ecigarette firm has increased its revenue by over 700 hundred percent from last year. Sales campaigns for Juuls are popular with teenagers across the country, with the product turning into a verb: Juuling.

Teenagers who use e-cigarettes are at a higher risk of using cigarettes than those that never try e-cigarettes. There is mixed evidence as to whether e-cigarettes help people quit smoking all together, though this is Juul's stated purpose. A major public health problem rests at the heart of this investigation: can you create a product that helps addicted smokers switch, while not getting new people hooked?

The **study**, **published Tuesday**, revealed previously unknown dangers in connection to the liquids used in Juul's e-cigarettes. Vanillin is banned from use in cigarettes, but it's used in e-cigarettes and has been connected to airway irritation when combined with vapor.

"We were surprised that levels in Juul vapor were already close to safety limits for workplaces where vanillin is used, such as in bakeries and the flavor chemical industry," co-author Sven-Eric Jordt from Duke University said in the release.



### Advertising and ease of use make the Juul the device of choice





#### A look at cigarette substitutes: The Pathfinder Vape





https://www.youtube.com/watch?v=9KcsVOJ7ono

#### **Myths**





## Many teens have dangerous misperceptions that lead them to believe that vaping is harmless.

#### **Common myths**

believed about vaping, along with the facts.

"It's just flavoring.",

Vapes get their flavors from chemicals. While these flavorings are safe to eat in food, they're not safe to inhale. Inhaling flavor chemicals can harm your lungs.\*\*

Want an example?

Some buttery-flavored vapes like caramel contain diacetyl and acetoin. Inhaling diacetyl has been linked to popcorn lung, a lung disease that doesn't have a cure.<sup>11</sup>

Some vapes that claim they are nicotine-free are not 9.47-22

"My vape says it's nicotine-free. There's no way I'll become addicted."

Vaping delivers nicotine to the brain in as little as 10 seconds. 14,16

A teen's brain is still developing, making it more vulnerable to nicotine addiction. 4

"Nicotine isn't that bad for me."

Nicotine exposure during the teen years can disrupt normal brain development. It can have long-lasting effects, like increased impulsivity and mood disorders.<sup>23-25</sup> "Just because I vape doesn't mean I'm going to smoke cigarettes."

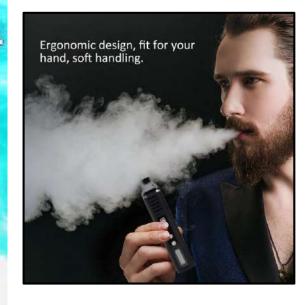
Research shows teens who vape are more likely to try smoking cigarettes.<sup>26</sup>

"It's just water vapor."

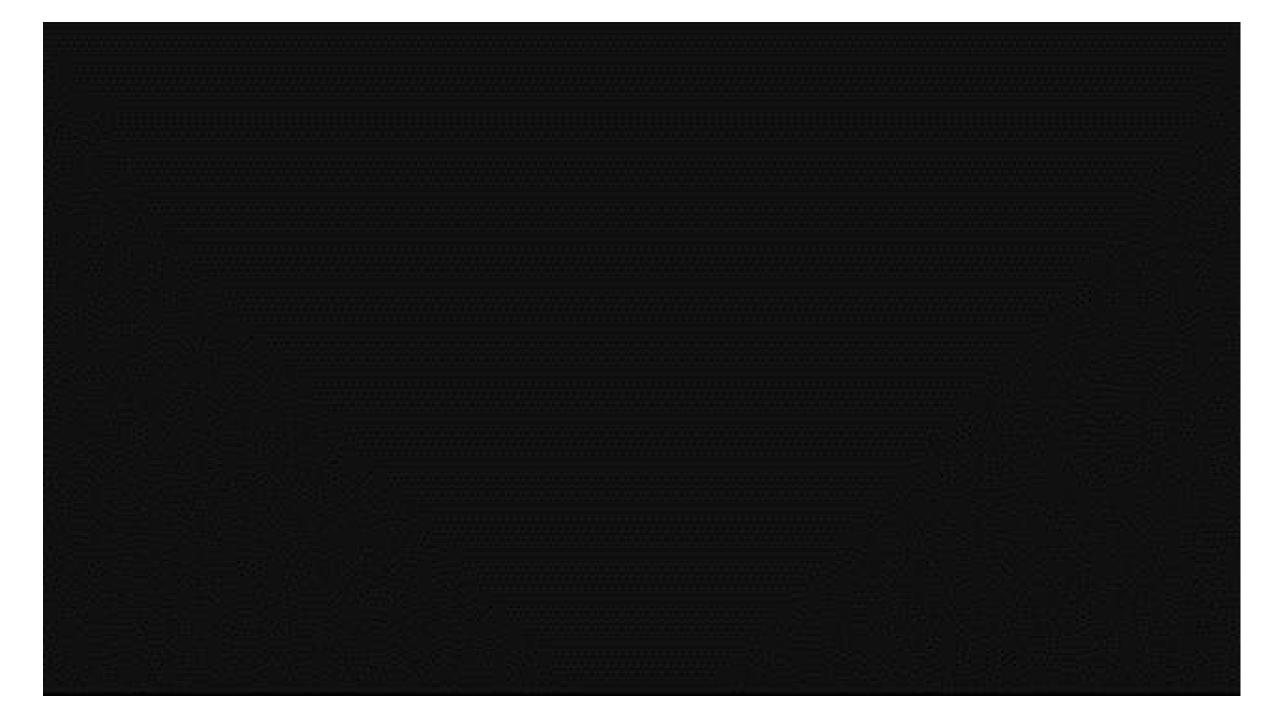
But it's not.

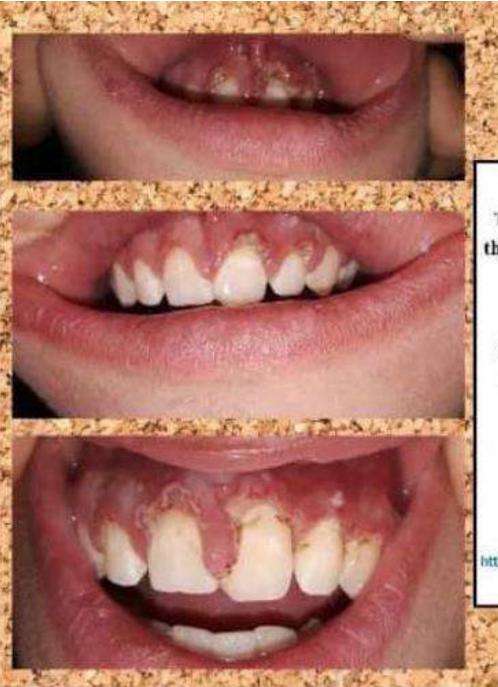
Vaping can expose the user's lungs to harmful chemicals like formaldehyde, diacetyl and acrolein, as well as toxic metal particles like nickel, tin and lead. 4,0-10,11-15

"I don't have an addictive personality —I won't get hooked on vapes."









These Photos are of a 12 year old male patient that has been vaping 2 vials a day! 2 Vials a day is equal to 2 packs of cigarettes!!

Set aside a minute this weekend to show your children these photos, this mom had no idea, please advise them of the dangers!

https://www.yalemedicine.org/stories/teen-vaping/

#### **A Natural Option??**



#### Despite Government Crackdown, Kratom Scientists Awarded \$3.5M for Research

They're optimistic human trials can begin in five years.



eter Hess on December 14, 2018

Filed Under Chemistry, Drugs, Experiments, Health & Medicine

The controversial plant kratom, a drug with opioid-like properties, is directly in the crosshairs of American federal regulators. Because it has some similarities to problematic opioids like oxycodone and fentanyl, multiple government agencies have attempted, with some success, to severely curtail its availability. That's why it was so unexpected when on Monday the University of Florida

#### **Kratom**

The tree known locally as **Kratom** in Thailand is known as Mitragyna speciosa to biologists. Mitragyna speciosa is native to Southeast Asia and the archipelagos of Melanesia where its leaves have been used medicinally by indigenous ethnic groups for centuries.



#### **Kratom in Vapes**

FDA---- "Patients addicted to opioids are using kratom without dependable instructions for use and more importantly, without consultation with a licensed health care provider about the product's dangers, potential side effects or interactions with other drugs."

The FDA noted that there have been reports of kratom being laced with other opioids like hydrocodone.









#### **GA House Bill 551**

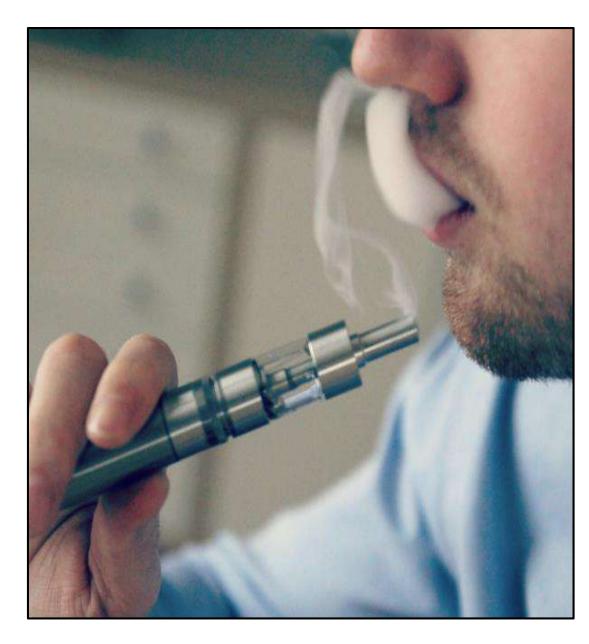
- Minimum purchase age of 18 years
- No possession of kratom by persons under age
   18 years
- These are misdemeanor offenses (selling and possession)



#### **Old School**







#### Tough to catch in schools





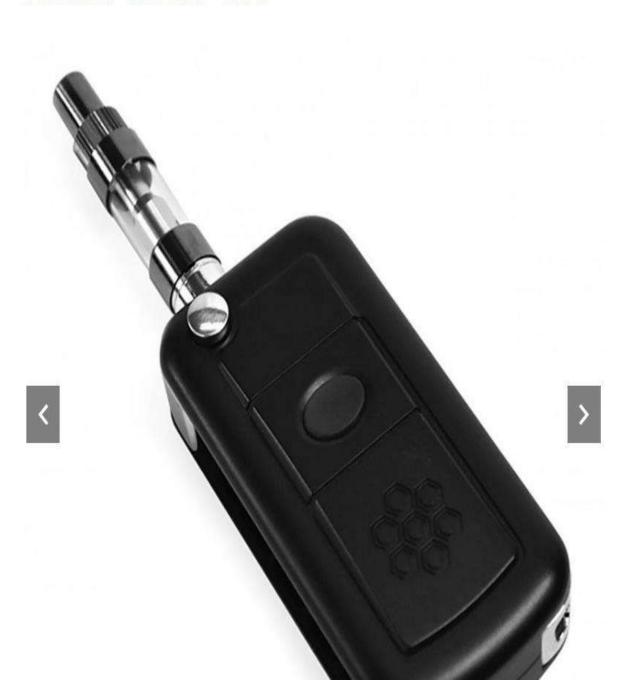
#### Tough to catch in schools







#### STEALTHY "KEY FOB" VAPE







#### PEN PIPE









Pens. They're a dime a dozen. Actually if you can get them for that price it's honestly an excellent deal and you should probably pick some up. But anyway, you get my drift: no one gives a fuck about pens. Which is exactly what makes this stealthy pipe so amazing. It's disguised AS A PEN! No way, really?!? Yes, I'm so serious!

#### PUFFIT "INHALER" VAPORIZER











Oh snap! Is what your friends will say when they see your new vaporizer that looks like an inhaler what!??!?!! Yeah, you can believe your eyes. This innocuous looking inhaler is indeed a rechargeable, portable, bad ass vaporizer with an advanced temperature control system, USB charger, carrying case and a bunch of accessories.

And talk about stealth! Cause sometimes you gotta be sneaky. And what's less conspicuous than an asthmatic? They're practically invisible in our society. And rightly so. Hey asshole, if you wanna breath, move to Europe! Sorry, I promised myself I wouldn't use this website as my anti-asthma bully pulpit and THERE I go again.

#### **SECRET PEN PIPE**





#### A Vape Watch!? What We Know About Uwell's Amulet Pod Vape

Adam A. 🖺 2 months ago 🔍 2 comments 🧿 2 min read





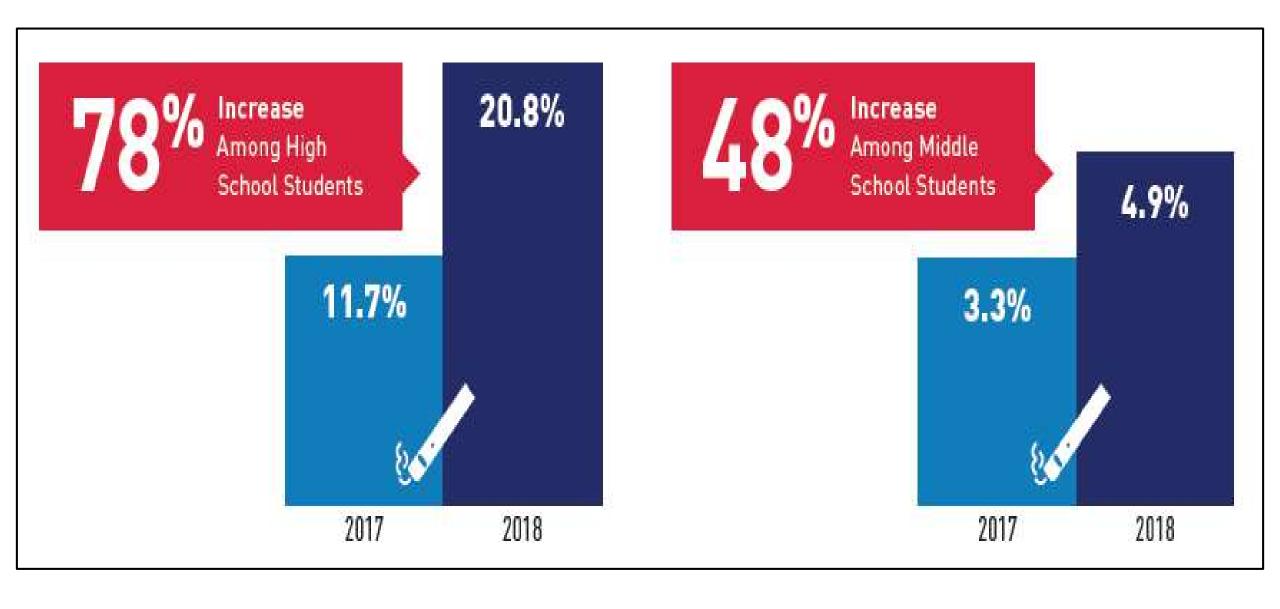
# 2018 NATIONAL YOUTH TOBACCO SURVEY FINDS CAUSE FOR CONCERN

Here is a breakdown of the recent findings:

Current e-cigarette use among middle and high school students increased alarmingly between 2017 and 2018.

SURGE IN YOUTH CURRENT E-CIGARETTE USE — 1.5 Million More Students Used E-Cigarettes in 2018 vs 2017

#### **Epidemic Progression of MS and HS use of Vape Devices**



### **Unexpected Results**



Texas man died after vape pen explosion severed major artery, caused 'penetrating trauma,' medical examiner says

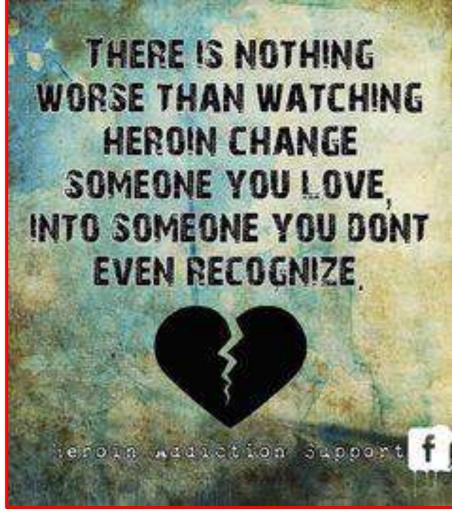


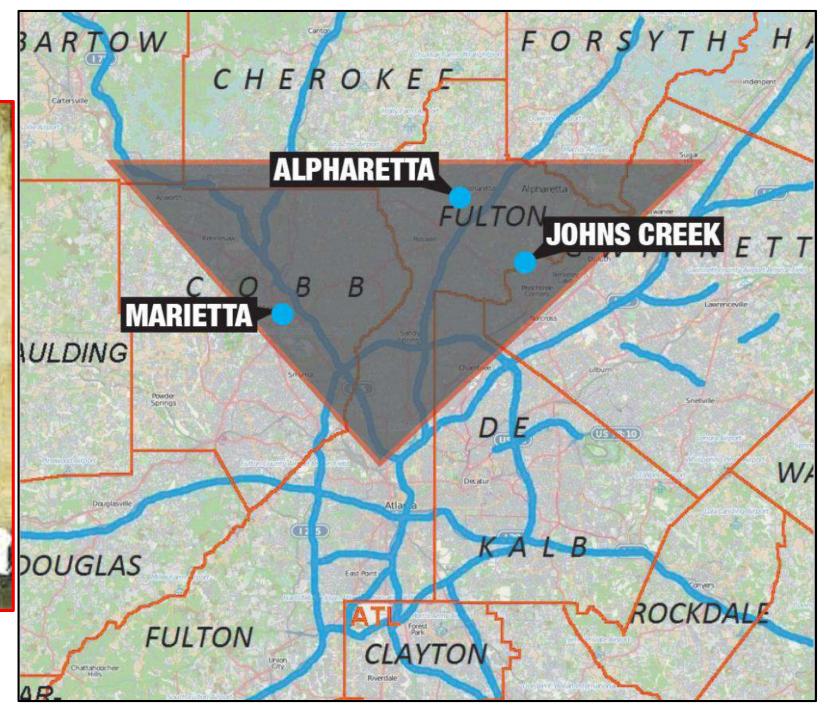
#### Heroin is here!

4 men guilty of using social media to sell heroin in Atlanta



### **Heroin Triangle**





# Heroin use is part of a larger substance abuse problem.

People who are addicted to...



**ALCOHOL** 

are

2x



MARIJUANA

are

3**X** 



COCAINE

15x



**Rx OPIOID PAINKILLERS** 

are

40x

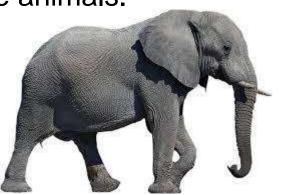
...more likely to be addicted to heroin.

SOURCE: National Survey on Drug Use and Health (NSDUH), 2011-2013.

### Why it kills

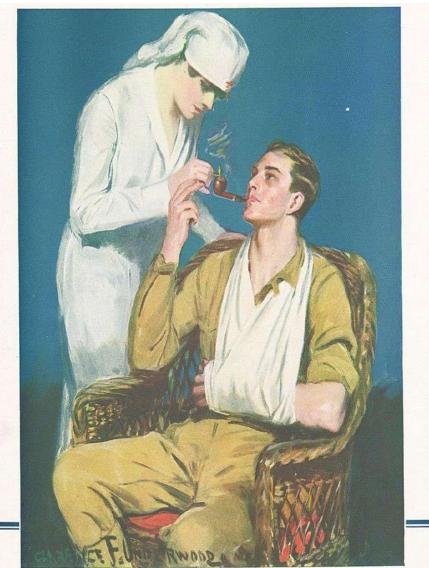
Carfentanil is an analogue of the synthetic opioid fentanyl.

- Its potency is approximately 10,000 times stronger than morphine and 100 times stronger than fentanyl.
- It is a general anesthetic designed for large animals.





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#### Help Her Fill a Pipe for "Sammy"!

\$1 keeps a fighting man happy for a month— MEN and women of America—what are you doing to being MAIL THE COUPON!

"FOR BOTH IN DUNCE DISECT FORD," 25 West 41th Street, New York

comfort to American boys who are risking their lives in Our fighting wen in the treaches and with the first need and erave tobucco. Help us to send it to them.

Dive into your purie. Out somes a quarter, half-dellar, a note. Mall it at once - currency, stamps, check or money

25 West 44th Street "OUR BOYS IN FRANCE TOBACCO FUND"

### WWI - 30's



20,679\* Physicians say "LUCKIES

are less irritating"

"It's toasted"

Your Throat Protection against irritation against cough





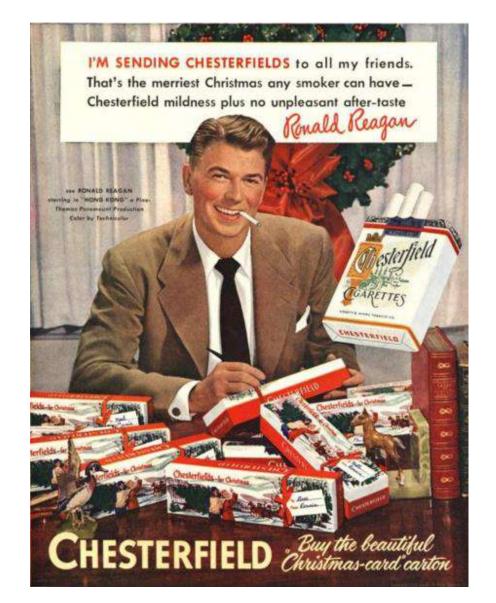
**40's** 





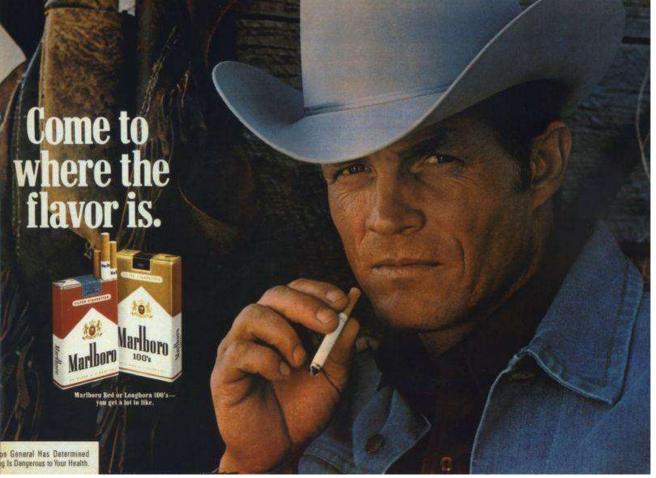
## On Pather's Day, Virginia Slims reminds you that founding fathers couldn't have been founding fathers without founding mothers. You've come a long way, baby. VIRGINIA SLIMS. Warning. The Surgeon General Has Determined 17 mg." tar." 1.2 mg. nicotine av. per cigarette, FTC Report Feb:73 That Cigarette Smoking Is Dangerous to Your Health.

## 50's & 60's

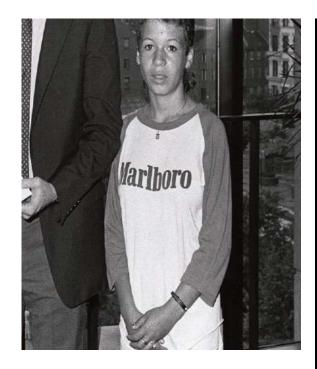


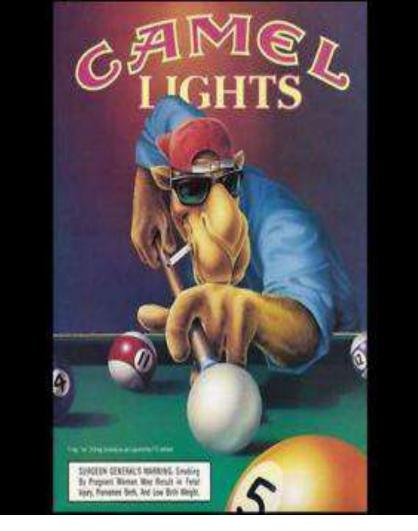


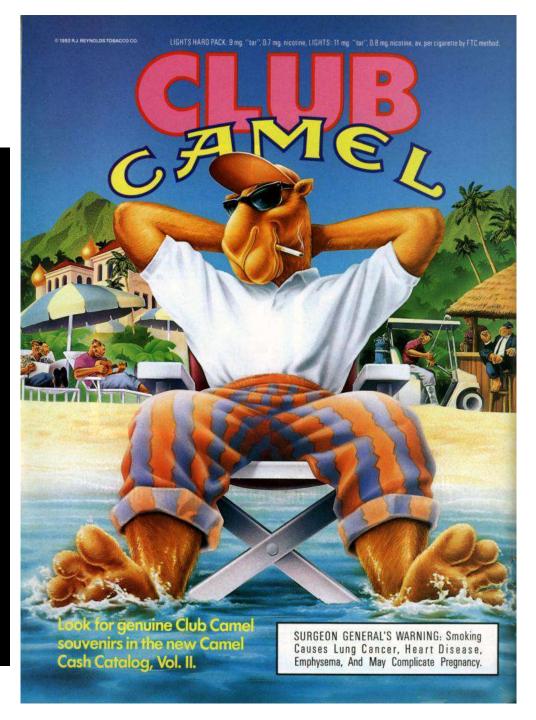
## 70's -80's



## 1988-1997











## NOW





### QUESTIONS???

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