

CHEMICAL HEALTH TREND CORNER:

FDA-NEW ATTENTION To Controlling E-Cigarettes

The Story

The FDA says way too many teens are [smoking e-cigarettes](#).

Explain.

For years, the FDA has been trying to get people to quit cigarettes. It's illegal for people under 18 to buy them. But teens have found a new option.

I'm listening...

Enter: e-cigarettes - the new, sleeker, sometimes flavored version of smoking. Sales for e-cigs have jumped in the past year, with more than two million teens reportedly using them last year. The FDA thinks it's because of popular companies like Juul, whose products look like USB drives (aka can easily be hidden from teachers and parents). And says that e-cig use has reached "an epidemic proportion."

That can't be good.

Nope. Officials are worried about the potential health impacts on developing brains. See: the fact that some e-cigs

could have as much addictive nicotine as a pack of cigarettes.

So what's the FDA doing about it?

It's giving e-cig companies 60 days to get it together and come up with a plan to stop teens from buying their products.

Otherwise, the FDA says it could pull co's flavored products. It also fined more than 100 stores for illegally selling e-cigs to minors. And sent warning letters to more than 1,100 others.

theSkimm

Nicotine addiction for teens can be even more detrimental than it is for adults. So the FDA is getting involved and calling this its largest coordinated crackdown ever.

Emerging Trends and Alerts

New drugs and drug use trends often burst on the scene rapidly. NIDA's [National Drug Early Warning System \(NDEWS\)](#) reports on emerging trends and patterns in many metropolitan areas and states.

NDEWS Links

Ohio State Highway Patrol Reports Heroin and Fentanyl Mixture in Ross Correctional Institution

Posted on September 06, 2018

The Ohio State Highway Patrol identified a mixture of heroin and fentanyl found in the

Ross Correctional Institution in Chillicothe after one inmate showed possible signs of an overdose and 27 staff members required medical attention on the morning of August 29, 2018. The inmate and several staff members received doses of naloxone prior to hospitalization. One staff member/first responder and one inmate remain in treatment.

For more information:

- <http://statepatrol.ohio.gov/media/2018/18-192%20Unknown%20exposure%20at%20RCI%20UPDATE2.doc> (Word, 233KB)

Connecticut Governor Warns of Overdoses Linked to K2/Spice

Posted on August 17, 2018

The Governor of Connecticut, working with the state Department of Public Health (DPH) and Department of Mental Health and Addiction Services, [issued a statement](#) in response to a large number of overdoses linked to synthetic cannabinoids (K2 or Spice) in the New Haven, CT area in mid-August, 2018

For more information about synthetic cannabinoids:

<https://www.drugabuse.gov/publications/drugfacts/synthetic-cannabinoids-k2spice>

FDA Warns of Synthetic Cannabinoids Laced with Anticoagulant

Posted on July 26, 2018

The U.S. Food and Drug Administration issued a [warning statement](#) on July 19, 2018 about **numerous** health emergencies, mostly in midwestern states, caused by consumption of [synthetic cannabinoid](#) products laced with brodifacoum, an anticoagulant (blood-thinning) compound commonly used in rat poison. Hundreds of users of synthetic cannabinoid products typically sold in gas stations and convenience stores under various brand names such as "K2" and "Spice" have been treated for complications such as bleeding, and several people have died. Users of these products should be alert for bleeding and other symptoms like easy bruising, oozing gums, and nosebleeds and seek medical attention if they suspect they may have consumed contaminated drugs. Brodifacoum remains in the body a long time and can raise bleeding risk for weeks after consumption.

"The next drug epidemic that has long term health issues for our children"

Vaping/E-cigarettes The Hidden Risks

Opioids & Prescription Drugs



These Pills Could Be Next U.S. Drug Epidemic, Public Health Officials Say

STATELINE ARTICLE
 July 18, 2018
 By: [Christine Vestal](#)

Clonazepam (traded as Klonopin), diazepam (Valium) and alprazolam (Xanax) are among the most sold drugs in a class of widely prescribed anti-anxiety medications known as benzodiazepines. Public health officials warn the pills should be used only in the short term and should never be mixed with opioids or alcohol.

The growing use of anti-anxiety pills reminds some doctors of the early days of the opioid crisis.

Considered relatively safe and non-addictive by the general public and many doctors, Xanax, Valium, Ativan and Klonopin have been prescribed to millions of Americans for decades to calm jittery nerves and promote a good night's sleep.

But the number of people taking the sedatives and the average length of time they're taking them have shot up since the 1990s, when doctors also started [liberally prescribing opioid painkillers](#).

As a result, some state and federal officials are now warning that excessive prescribing of a class of drugs known as benzodiazepines or "benzos" is putting more people at risk of dependence on the pills and is exacerbating the fatal overdose toll of painkillers and heroin. Some local governments are beginning to restrict benzo prescriptions.

When taken in combination with painkillers or illicit narcotics, benzodiazepines can increase [the likelihood of a fatal overdose](#) as much as tenfold, according to the National Institute on Drug Abuse. On their own, the medications can cause debilitating withdrawal symptoms that last for months or years.

Public health officials also warn that people who abruptly stop taking benzodiazepines risk seizures or even death.

What we're seeing is just like what happened with opioids in the 1990s."Dr.

Anna Lembke, researcher and addiction specialist **STANFORD UNIVERSITY**

The number of adults filling a [benzodiazepine prescription](#) increased by two-thirds between 1996 and 2013, from 8 million to nearly 14 million, according to a review of market data by Lembke and others in the *New England Journal of Medicine*. Despite the known dangers of co-prescribing painkillers and anti-anxiety medications, the rate of combined prescriptions nearly doubled between 2001 and 2013.

Psychiatrists, including Lembke, agree that relatively inexpensive benzodiazepines can be effective at relieving acute cases of anxiety and sleeplessness.

Physicians agree that benzos should not be used long term to solve psychiatric problems. Research indicates that use of the drugs for more than a few weeks can cause tolerance, including withdrawal symptoms between doses, and physical and psychological dependence.

"Doctors need to be informed that the medications should be prescribed for no more than two to four weeks. They were always meant to be short term."

Dr. Christy Huff, co-director **BENZODIAZEPINE INFORMATION COALITION, UTAH**

Mounting Dangers

As prescriptions for benzodiazepines have grown since the late 1990s, so have deaths, according to a study at Montefiore Medical Center in New York. The National Institute on Drug Abuse reports that [overdose deaths involving benzodiazepines quadrupled](#) from 2002 to 2015.

New highly potent forms of benzodiazepines that are illicitly traded are also causing overdose deaths, addiction doctors say. Adding to the dangers, the Drug Enforcement Administration has reported that [the deadly synthetic drug fentanyl](#) has been found in counterfeit forms of Xanax.

Xanax and Valium were involved in more than 30 percent of opioid overdose deaths between 2010 and 2014, far more than cocaine and methamphetamines, according to the Centers for Disease Control and Prevention

Local Current New Drug Trend- Tianeptine

From the Minnesota Fusion Center: Buod Cmnd
Aptohanam:
January 2017

Tianeptine is an atypical tricyclic drug used as an anti-depressant in Europe, Asia, and Latin America. The drug is not approved by the Food and Drug Administration (FDA) for medical use in the United States.

Tianeptine is an opioid receptor agonist, meaning Tianeptine produces effects similar to opioids. (U//LES) The Roseau County Sheriff's Office stated they have not been able to seize this drug as it is not a controlled substance. They believe if it was to be labeled a controlled substance, they would be seizing it multiple times a week. (Users of Tianeptine in Roseau County stated the high was like that of heroin, but worse, and the high does not last as long. Users stated that they have to shoot up every hour and a half to two hours in order to not come down off of the high. Users also stated they were only able to use the same vein two to three times before it would collapse and be unusable. Withdrawal symptoms from the use of Tianeptine are noted to be worse than heroin. It is known that Naloxone will work in reversing the effects of Tianeptine.

Tianeptine is easy to obtain and it is legal. Users can purchase the drug on the internet from either health food type stores or eBay. Most people are Injecting it, but some users are also mixing it with water and drinking it.

Those controversial CDC opioid guidelines may have caused “better prescribing practices”

More than two years after the federal government released controversial guidelines for prescribing opioids, a new analysis suggests the effort is having an impact as the number of prescriptions for the addictive painkillers

Click below to read more

[Those controversial CDC opioid guidelines may have caused ‘better prescribing’ practices](#)



The Marijuana Report
 Marijuana News Based on Science, Not Spin 11.28.2018



For every dollar gained in tax revenue, Colorado taxpayers paid \$4.50 to mitigate the effects of marijuana legalization

A comprehensive new report by the Centennial Institute analyzes what marijuana legalization costs Colorado taxpayers. A few highlights:

- The highest costs are connected to marijuana-related ER admissions, hospitalizations, and school dropouts.
- There is a connection between marijuana use and the use of alcohol and other drugs.

- Calls to Poison Control increased dramatically after legalization for medical use in 2000 and recreational use in 2014.
- Adult marijuana users generally have lower educational attainment than nonusers.
- Some 69 percent of marijuana users say they have driven at least once under the influence of marijuana.
- Some 27 percent do so on a daily basis.
- In 2016, the marijuana industry used enough electricity to power 32,355 homes.
- That year, the industry was responsible for 393,053 pounds of CO2 emissions.

Read full Centennial Institute report [here](#).



Greater risk for frequent marijuana use and problems among young adult marijuana users with a medical marijuana card

With funding from the National Institute on Alcohol Abuse and Alcoholism, researchers conducted a multi-year study of southern California children from middle school through high school.

At age 19, 28 percent (188) of 671 young adult marijuana users possessed a medical marijuana card.

- Card holders showed steeper increases in frequent marijuana use (20 to 30 days in the past month) from ages 13 to 19 than those who did not have a card.
- They also reported more problems in young adulthood than non-card holders, including negative consequences, selling marijuana/hashish, and driving under the influence of marijuana.

- In addition, they were more likely to have tried to cut down or quit using marijuana in the last three months than those who did not possess a medical marijuana card.

The researchers conclude that given expanding state legalization of marijuana for medical use, this issue warrants further attention.

Read *Science Direct* summary of *Drug and Alcohol Dependence* journal article [here](#).



FullMeasure takes a look at Colorado's marijuana legalization

This 8-minute video and transcript presents a picture of the results of marijuana legalization in Colorado, the first state to legalize marijuana for recreational use. We hear a lot about the up side of legalization, not so much about the down side. This reporting team set out to examine both.

The biggest surprise has been the expansion – rather than the demise promised by legalization advocates – of the black market. Cartels rent homes in

upscale neighborhoods, rip up carpeting, tear down walls, and push up wooden floors to turn them into grow houses, totally destroying half-million-dollar homes in the process. And those are *rented* homes.

There has also been a spike in crime. In 2016, Colorado's increase in its crime rate was eleven times more than the average 30 biggest US cities. Homicides are up by almost 10 percent.

Read and see *FullMeasure* story [here](#).



Cannabis use and suicide attempts among 86,254 adolescents aged 12-15 years from 21 low- and middle-income countries.

Researchers analyzed data from the Global school-based Student Health Survey taken by 86,254 adolescents from 21 countries to assess whether suicide attempts in the past year might be associated with lifetime and past-month marijuana use.

Overall prevalence of past-month

marijuana use was 2.8 percent (varying from 0.5 percent in Laos to 37.6 percent in Samoa).

Overall prevalence of lifetime marijuana use was 3.9 percent, while overall prevalence of suicide attempts was 10.5 percent.

The researchers found that past-month marijuana use was significantly associated with suicide attempts. Lifetime marijuana use was also independently associated with suicide attempts.

They call for the causality of this association to be confirmed or refuted in prospective studies to further inform policies for suicide prevention.

Read *European Psychiatry* abstract [here](#).

Mount Sinai researchers conduct study of second-hand marijuana smoke in children

Researchers found that nearly half of children whose parents smoked marijuana showed evidence of second-hand smoke exposure.

Their study was a secondary analysis of data and samples collected in a larger study evaluating the effectiveness of a tobacco cessation program for parents whose children were hospitalized in Colorado. Some of the parents also reported that they smoked marijuana.

The Centers for Disease Control and Prevention tested urinary biomarkers in the collected samples. They found that 46 percent of the children had detectable levels of a THC metabolite; 11 percent had detectable levels of THC itself.

“There are worrisome results, suggesting nearly half of the children of parents who smoke marijuana are getting exposed and 11 percent are exposed to a much greater degree,” says lead researcher Karen Wilson, MD, MPH of the Icahn School of Medicine at Mount Sinai.

The parents of one-third of the marijuana-exposed children said they had stepped outside to smoke pot, but the children still were exposed, suggesting that their exposure may have come from third-hand smoke. Third-hand smoke is smoke that lingers in hair, clothes, even on skin and results in biological exposure that can be detected.

Read Mount Sinai press release of *Pediatrics* article [here](#).