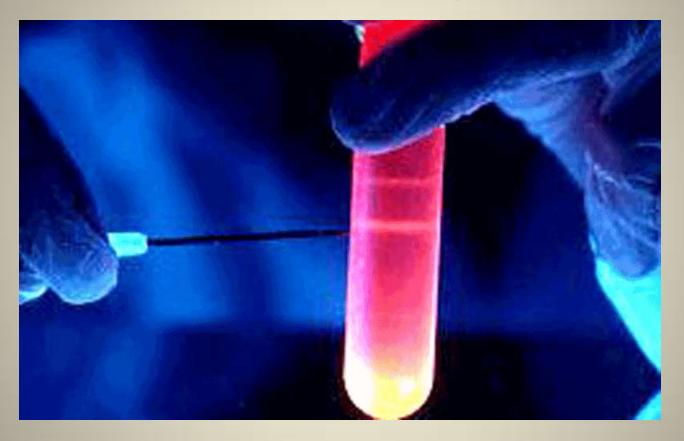
The New High



Designer Drugs and New Trends

Bath Salts Devil's Breath Cheese Krokodil Bromo-DragonFly Crunk **Drunken Gummies** Hand sanitizer **Synthetic Cannabinoids** Khat

BATH SALTS



WHAT ARE BATH SALTS?

- Not the traditional bath salts used legitimately for watersoftening or aroma therapeutic purposes
- A central nervous stimulant used as a recreational drug
- Marketed as "bath salts" or sometimes "plant food" to avoid regulation
- Popular among teens and young adults
- Contains manmade chemicals such as:
 - methylenedioxypyrovalerone (MDPV)
 - Mephedrone (4-MEC)
 - Methylone

WHAT ARE BATH SALTS?

- Powder and crystal form that crumbles easily
- White to light brown in color
- Slight odor One doctor compared it to "old feet"
- Sold in 50 mg to 500 mg packets or containers
- Labeled "Not for human consumption"
- Sold for \$25 to \$75 per 50-milligram packet
- Easily available through the Internet





EFFECTS

- High similar to cocaine, methamphetamines, MDMA (Ecstasy) or LSD
- Initial euphoria lasts 3-4 hours
- Psychosis
- Suicidal
- Long term effects remain unknown
- Users often cannot be subdued with pepper spray or Tasers
- Cited as an "imminent threat to public safety" by the DEA

INGESTION METHODS

- Snorted (most common)
- Injected
- Smoked (similar to crack)
- Mixed with food
- Mixed with drink
- Airborne mist





SIGNS/SYMPTOMS

- Extreme paranoia
- Psychotic features (reporting seeing demons, monsters, foreign soldiers, or aliens)
- Violent behavior
- Tachycardia (rapid heartbeat)
- Chest pain
- Confusion
- High blood pressure
- Sweating
- Hyper-alertness

SIGNS/SYMPTOMS

- Sleep depravation
- Agitation
- Extreme anxiety
- Hallucinations
- Bruxism (teeth grinding)
- Compulsive water drinking
- Motor automatisms (compulsive repeated hand washing)
- Tremors
- Seizures

PRODUCT NAMES

Ivory Purple Wave

Vanilla Sky

Bliss

White

Rush

Blow

Red Dove

Aura

Zeus 2

Zoom

White Dove

Wave



PRODUCT NAMES

Blue Silk

White Lightning

Ocean

Charge

Cosmic Blast

Scarface

Hurricane Charlie

Cloud 9

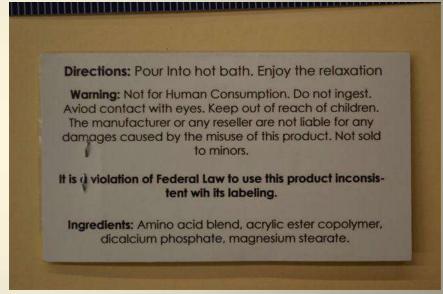
Pure Ivory

...plus many others



EXAMPLES





EXAMPLES



EXAMPLES









- West Virginia woman scratched herself "to pieces" over several days because she thought there was something under her skin.
- July 2010 Virginia (Roanoke County) man beat his friend to death.
- August 2010 UK woman died due to the effects caused by long term use.
- August 2010 UK man died after he experienced severe hallucinations and jumped off a cliff top.

- November 2010 Louisiana man sliced his throat and said, "I can't handle what this drug has done to me. I'm never going to touch anything again." Hours later he shot and killed himself when he had visions of army men swarming his house.
- December 2010 Mississippi man shot and killed
 Tippah County Deputy Sheriff DeWayne Crenshaw
 at a disturbance call. It took six men more than
 half an hour to wrestle the man into an ambulance.
 He ripped through gurney straps and heavy medical
 tape.

- January 2011 Florida woman attacked and attempted to behead her 71 year-old mother with a machete.
- March 2011 Pennsylvania man broke into a monastery and stabbed a priest.
- March 2011 Pennsylvania couple almost slashed their 5 year-old daughter with knives as they attacked "voices in the walls".
- April 2011 Washington man killed himself, his wife and their five-year-old son.

- May 2011 West Virginia man killed his neighbor's goat. Man was found semi-dressed in women's clothing in his bedroom with blood everywhere. The goat was dead on the floor next to a pornographic photo.
- June 2011 Indiana man climbed a roadside flagpole and jumped into traffic.
- July 2011 Arizona man seriously burned his child's hands because the child had touched his Bible. The man stated that voices told him the child was possessed.

- July 2011 Maine man was running around and yelling at people. The man charged at an officer, resisted arrest, broke off an antenna from a police car, and used it to smash the rear windshield. The man was taken to a hospital, where he died three hours after the incident.
- September 2011 South Carolina man was arrested after shooting out of the windows of a house while claiming that there was a body inside. There was no body inside.

- February 2012 Florida man bit the hood of a police cruiser when police attempted to restrain him.
- May 2012 Ohio man fired at police when they interrupted him while he was breaking into his own house. Police fired back and wounded him.
- May 2012 Ohio man was shot and killed by police after he held a knife to his girlfriend's neck.
- May 2012 Florida man ate the face off of a homeless person and growled at officers before being shot & killed. Bath salts are suspected.

REGIONAL PROBLEMS

- Augusta County is one of the hardest hit areas in Virginia
- Patrol in Augusta receives four to five calls a week dealing with bath salts
- Estimated that 30 to 40 percent of all property crime and theft in the Augusta are directly tied to bath salts
- ER physicians at Augusta Health deal with about 50 patients a month experiencing negative side effects from the use of bath salts
- Reported that the Valley is being supplied by the Sureños

INDIANA STATUTE

HOUSE BILL No. 1196/24 Feb 2012

Citations Affected: IC 4-22; IC 16-31; IC 20-28; IC 22-15; IC 25-1; IC 25-26; IC 35-41; IC 35-48.

Synopsis: Synthetic drugs (including "bath salts"). Changes the term "synthetic cannabinoid" to "synthetic drug". Adds additional chemical compounds (including some compounds sold as "bath salts") to the definition of synthetic drugs and expands the definition of synthetic drugs to include certain chemical compounds that are structurally related to synthetic drugs. Allows the board of pharmacy (board) to adopt an emergency rule to declare that a substance is a synthetic drug. Provides that the definition of synthetic drug includes a compound determined to be a synthetic drug by a rule adopted by the board. Enhances penalties for dealing in or possessing a synthetic drug if the amount of the synthetic drug is more than two grams.

Donald W. Reid 2012

FEDERAL BAN

- Currently banned in 38 states
- September 7, 2011 DEA used it's emergency scheduling authority to temporarily control three synthetic stimulants (mephedrone, MDPV, and methylone).
- May 31, 2012 Federal legislation to criminalize bath salts was passed in the United States Senate.
 It is now on its way to the House of Representatives.

SIRCHIE NARK II TEST KIT

MDPV is a synthetic stimulant recognized as a schedule I substance. This specific field test will presumptively identify MDPV by turning a distinct Yellow to Yellow/Green color. Commonly found as a white to tan powder, this substance is being sold as everyday products like bath salts, stain remover, plant food or glass cleaner. Of the "bath salt" products on the market, this is the most popular chemical configuration currently and all testing should start with this specific field test. Like all our NARK II narcotic field tests, the MDPV Reagent is meant for presumptive field drug testing. For Sale to Law Enforcement Only!



SIRCHIE NARK II TEST KIT



Mephedrone is the 2nd "bath salt" configuration of this synthetic stimulant found on the street. Not as common as the MDPV, we recommend conducting this test only after you have conducted the MDPV Reagent and not received a positive. This presumptive field test will positively identify Mephedrone with an IMMEDIATE Purple color after breakage and agitation of the 3rd ampoule. This product will again be sold as standard household substances like bath salts, stain remover, plant food or glass cleaner. Like all our NARK II narcotic field tests, the Mephedrone Reagent is meant for *presumptive field drug testing*.

For Sale to Law Enforcement Only!

VIDEO

Man on Bath Salts

Devil's Breath



A hazardous drug that eliminates free will and can wipe the memory of its victims is currently being dealt on the streets of Colombia.

The drug is called scopolamine, but is colloquially known as 'The Devil's Breath,' and is derived from a particular type of tree common to South America.

Stories surrounding the drug are the stuff of urban legends, with some telling horror stories of how people were raped, forced to empty their bank accounts, and even coerced into giving up an organ.



It only takes a moment: One drug dealer in Bogota explained how victims are drugged within minutes of exposure

Demencia Black, a drug dealer in the capital of Bogota, said the drug is frightening for the simplicity in which it can be administered. He states that Scopolamine can be blown in the face of a passer-by on the street, and within minutes, that person is under the drug's effect – scopolamine is odorless and tasteless. 'You can guide them wherever you want,' he explained. 'It's like they're a child.' Black said that one gram of Scopolamine is similar to a gram of cocaine, but later called it 'worse than anthrax.' In high doses, it is lethal.



Deadly drug: Scopolamine is made from the Borrachero tree, which blooms with deceptively beautiful white and yellow flowers



Victims: One Colombian woman said that under the influence of scopolamine, she led a man to her house and helped him ransack it.

The drug, he said, turns people into complete zombies and blocks memories from forming. So even after the drug wears off, victims have no recollection as to what happened. One victim told Vice that a man approached her on the street asking her for directions. Since it was close by, she helped take the man to his destination, and they drank juice together.

'You can guide them wherever you want. It's like they're a child.'

She took the man to her house and helped him gather all of her belongings, including her boyfriend's cameras and savings.

'It is painful to have lost money,' the woman said,' but I was actually quite lucky.'

According to the British Journal of Clinical Pharmacology, the drug – also known as hyoscine – causes the same level of memory loss as diazepam. Because of the drug's chemical makeup, it also induces powerful hallucinations. The tree common around Colombia, and is called the 'borrachero' tree – loosely translated as the 'get-you-drunk' tree.

It is said that Colombian mothers warn their children not to fall asleep under the tree, though the leafy green canopies and large yellow and white flowers seem appealing.

VIDEO

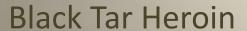
Devil's Breath

Cheese



"Cheese": The New Face of Heroin







Xanax Tylenol PM or generic



"Cheese"

What is "Cheese"?

- Black tar heroin combined with crushed Xanax orTylenol PM tablets
- Highly Addictive and very dangerous
- Tan-colored powder usually snorted through the nose with a tube, straw, or small ballpoint pen
- Packaged in a small paper bindle or zip lock baggie
- Can be bought for as little as \$2
- Popular among Hispanic juveniles, both male and female
- Has been identified in more than a dozen Dallas ISD secondary and surrounding suburbs

The New Teenage Heroin Market

 Cheese, Chees, Cheez, Chez, Chz, Queso, Keso, Kso,...

- Combination of:
 - Black Tar Heroin
 - Xanax
 - Tylenol PM(or generic)





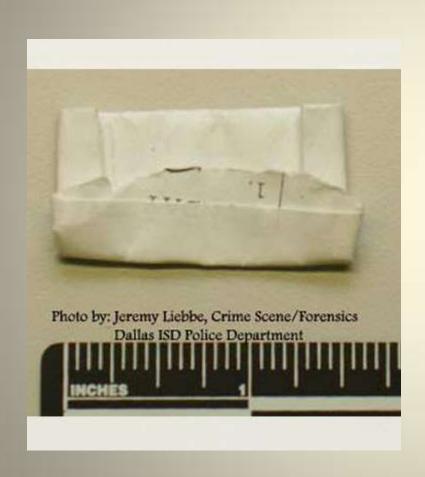
What does "Cheese" look like

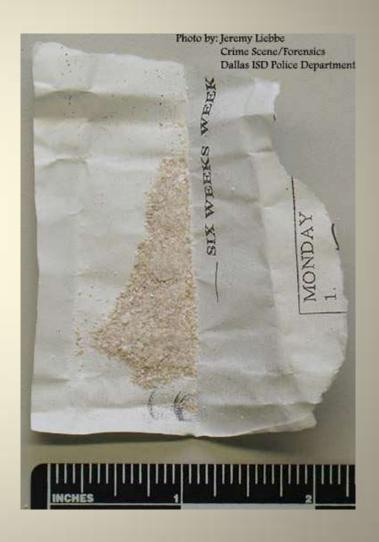






"Cheese" Packaged In Bindles





"Cheese" Packaged In Bindles



Suspect was storing his "cheese" in his car radio face-plate case

More "Cheese"



Symptoms of Use

- Drowsiness and Lethargy
- Euphoria
- Excessive Thirst
- Disorientation
- Sleepiness and Hunger



Sudden change in grades & friends

Symptoms of Withdrawal

(may begin within a few hours of use)

- Mood Swings
- Insomnia
- Headache, chills, nausea, vomiting
- Muscle Spasms/bone pain
- Anxiety, agitation, disorientation
- May last five to six days

Overdose Risks

- Heroin, morphine (heroin metabolite) and diphenhydramine HCl are all CNS and respiratory depressants
- Overdose or combination with other depressants (i.e. alcohol) can cause respiratory arrest and subsequent death



Manufacturing & Distribution



- End users purchase "bumps" of "cheese" from other juveniles or, in some cases, directly from adult dealers
- "Cheese" Can be purchased for as little as \$10 a gram
- A single dose or "bump" typically costs \$2
- Weights vary when packaged in bindles and stay consistent when packaged in baggies

VIDEO

Cheese

Krokodil



Desomorphine aka Krokodil

- Invented in 1932 in the United States
- Derivative of morphine
- It has sedative and analgesic effects
 Drug has a short half life in the body
- Around 8-10 times more potent than morphine
- Cheaper alternative to heroin
- \$6 to \$8 per injection

Desomorphine aka Krokodil

- The drug is easily made from codeine, iodine, lighter fluid, industrial cleaning fluid, paint thinner, gasoline and red phosphorus
- Similar to the process of making Meth from pseudoephedrine
- Desomorphine processed this way is highly impure and contaminated with various toxic and corrosive by-products

The Drug that Eats Junkies

Nick Names: Walking Dead, Crocodile, Krok,

Zombie Drug





Codeine tablets

Desomorphine aka Krokodil

- Drug is primarily used by heroin addicts that can no longer afford heroin
- The drug is available in the market for a greatly reduced price
- First appeared in Siberia and East Russia in 2002
- Drug use continues to spread across Russia
- Codeine pills are widely available in Russia without a prescription
- Russia is now proposing to restrict Codeine sales

Manufacturing Process

1-Codeine + SOCl2 ---> α -Chlorocodide + HCl + SO2 2- α -Chlorocodide + I2 ---> 7,8 diiodo α -Chlorocodide 3-7,8 diiodo α -Chlorocodide + HI ----> desomorphine

•Basically steps 2 & 3 are done in 1 pot. The iodine adds across the 7,8 double-bond in the same way Br adds across a double bond. The chemist then adds P to make HI which is a reducing agent. It removes the Is. The HI also demethylates the 3-methoxy. Looking at a list of the stuff formed, 6 or 7 impurities are found in varying amounts. Yield of product is about 30% at best. Of course, the stuff is x10 morphine so about 4x heroin. (http://www.shroomery.org)

Krokodil Lab



Krokodil Lab



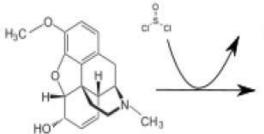
Appearance





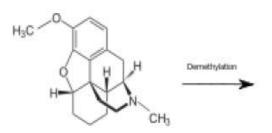


Thionyl chloride

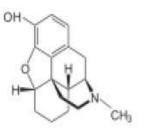


Codeine

a-Chlorocodide



Desocodeine



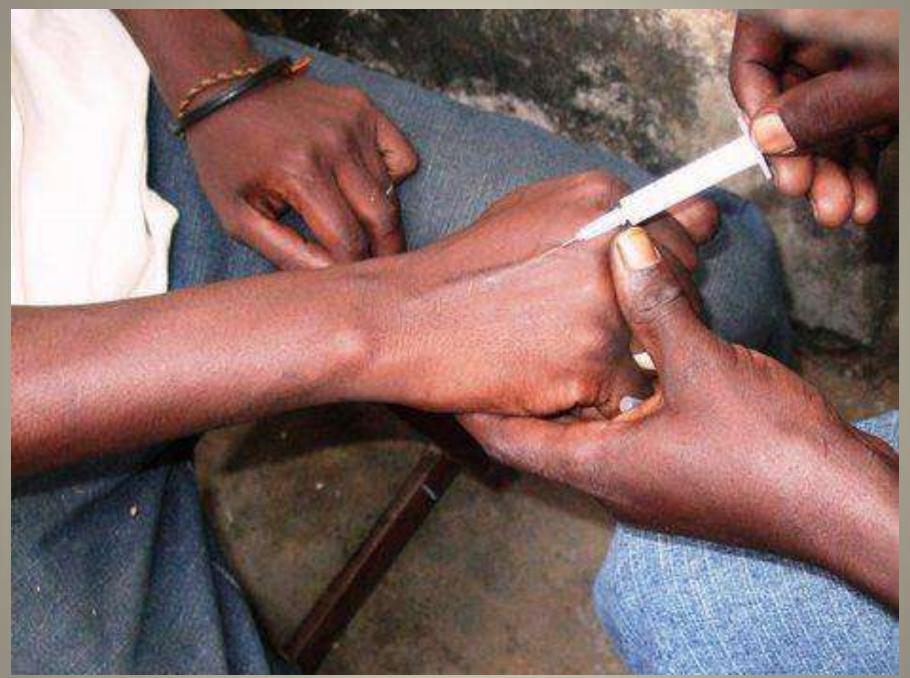
Desomorphine

Side Effects

- Drug is a neurotoxin that causes brain damage
- Drug is named for its scale-like appearance of the skin on its users
- Has become notorious for producing severe tissue damage
- -Phlebitis and gangrene, sometimes requiring limb amputation in long-term user
- Deterioration of internal organs (Kidney / Liver)
- •The amount of tissue damage is so high that addicts' life expectancies are said to be as low as two to three years

Use

- Drug is injected into a vein in the hand, arm, leg, or groin area
- Small lumps begin to appear around the injection site
- Followed by scaling and discoloration of flesh (red, black, brown, green, grey)
- Skin scales up, tissue rots and starts to deteriorate and peel off
- Can lead to amputation of limbs



Donald W. Reid 2012









Abuse and Addiction

- Heroin detox lasts a week to ten days
- Withdrawal from desomorphine can take an agonizing MONTH
- Russia is believed to have over 1,000,000 drug addicts that are believed to be using krokodil or related homemade drugs (DEA Monitoring Krokodil
- Fox News)
- Drug has recently made its way into the European Drug Market (2011)

VIDEO

Krokodil

Bromo-DragonFly



also referred to as B-Fly is a synthetic hallucinogenic substance similar to phenethylamines, and has effects similar to those of LSD. B-FLY, a synthetic designer drug, is being sold over the World Wide Web.



B-FLY is an extremely potent hallucinogenic drug, similar to that of LSD, but not as potent.

Nick named FLY or 2C-B-fly; it was first synthesized in the laboratory of Dr. David E. Nichols at Purdue University by Matthew Parker in 1998. It has virtually no human use history, as is the case with most designer drugs (not having been tested on humans according by Dr. David E. Nichols). Dr. David E. Nichols is a researcher of psychedelic agents with emphasis in developing medicines to assist people by improving their physical conditions, such as alleviating the symptoms of Parkinson's disease, or improve memory and cognition in patients having schizophrenia.

Erowid (The Vaults of Erowid) reports that B-FLY has been found in several forms, pressed tablets (less often), powder, liquid which is placed on blotter paper, which is the most common form of use. Erowid receives their information from users of substances who have reported information to them, research documents and reports, and other sources.



B-FLY's chemical name is Bromo- benzodifuranylisopropylamine, and is related to the phenethylamines drug group. B-Fly is a long-lasting hallucinogenic drug, sometimes lasting up to 3 days, and sometimes referred to as "a ride to the moon" due to its long lasting effects, which leaves users drained. It was found to be an emerging trend of abuse by Psyhonaut Web Mapping Group in Italy, Norway, Belgium, and Finland in 2008, with the first reported recreational abuse use in 2001. It is mainly sold in the form of blotter paper on the internet in at least two different forms) European Batch (active at 200 to 500µg doses) and the American Batch, also the least potent (active at 800 to 1800µg).

There are no current legitimate medical uses for B-Fly. It is sometimes sold as LSD which is sold on blotters and has similar effects to LSD. There is little known about the pharmacological characteristics of B-Fly, but evidence that it has vasoconstrictive properties in humans. B-Fly is known to be a serotonin agonist, or that binds to the serotonin cell and triggers a response.



B-Fly is very toxic and the risk of overdose is high. As mentioned earlier, B-Fly has similar effects as LSD, but the effects last much longer. Effects after orally ingesting the substance can be delayed for as long as 6 hours which may lead to "double dosing" and an overdose. Psychonaut WebMapping Research Group has reported that several fatalities are believed to be related to the overdose of B-Fly in Norway, Sweden, and Denmark.

B-Fly is sometimes taken in combination with other drugs:

- 1. LSD
- 2. Cannabis
- 3. 2C-B
- 4. Ketamine
- 5. Methylone
- 6. Amphetamines
- 7. Alprazolam
- 8. Cocaine
- 9. Kratom
- 10. Alcohol

Monitoring internet availability of "legal highs" substances show that in the United States there were over 30 online shops selling "legal highs" in 2010 and in 2011 there were over 60.

In the United Kingdom there were 20 online shops in 2010 and nearly 80 in 2011. Several internet sites that sell B-Fly as well as other psychoactive substances:

http://www.freewebclassifieds.net/ads/buy-pure-grade-2-cibromodragonfly-oxycodone-4-aco-dt-and-other-plantfeeders/

http://cm.countrysearch.ec21.com/bromo-dragonfly.html http://getadsonline.com/2011/10/methedrone-bromodragonfly-jwh-073-mdpv-for-sale/

http://www.topusaclassifieds.com/?view=showad&adid=922 71&cityid=759&lang=en

Officers should be alert for mention of this drug in their community and by students of both secondary and postsecondary schools and otherwise trends in their community. Designer drugs are very popular today, and are easy to obtain over the internet. Ashland, Organ Police seized a small dropper bottle containing approximately 3 milliliters of a clear, colorless liquid in 2007. The substance was thought to be DOB, but analysis later determined it to be bromobenzodifuranylisopropylamine or Bromo-DragonFLY.









VIDEO

Bromo-DragonFLY

Crunk



Now, the newest fad includes a "high" created right at home from ingredients that can be found in any medicine cabinet and refrigerator in your own home.

It's called a Crunk Concoction, and it's a deadly juice that teens are downing in the hopes of getting high.

In January, a Hawaii man, Chucky Dias Oliveira made the headlines after he died in his sleep after drinking the concoction called "Crunk."

"When they don't understand the dangers of it, they're more willing to take the risk. And we see the effects of it," Hawaii Police Dept. Det. Ian Lee Loy said.

Crunk is referred to in rap music and urban slang. It means a lot of things, including a drink that mixes soda or other beverage with an over-the-counter cough syrup and crushed prescription pain killers.

Crunk produces an intense rush that's proven dangerous. A "Crunking high" can cause blackouts and breathing problems. It slurs speech and motor skills.

"A lot of prescription drugs act like narcotics," said Reece.
"They're central nervous system depressants, so it slows down the heart and the central nervous system. Just like enough alcohol can cause alcohol poisoning and stop the heart."

Drinkers experience a sense of whoozy euphoria, Stewart said, one that can be incredibly addictive, not to mention deadly. Overdoses can lead to difficulty breathing, loss of consciousness and death. And prolonged exposure to the painkillers can do lasting damage to one's liver and other organs.

"I had a fourth-grader tell me that he had seen it in the schools. They can buy pills for \$3 to \$5," said Officer Robert Stewart, who speaks regularly at area schools and events to discuss drug abuse.

Crunk is a deceptively sweet concoction, he said, consisting of over-the-counter cough syrup and a lemon-lime flavored soft drink (such as Sprite), mixed with crushed up prescription painkillers.

"It's popular due to the soft drink being palatable to the kids," added Detective Ian Lee Loy. "It's sweet, it's tasty, and it affords the medium to ingest the narcotic."

VIDEO

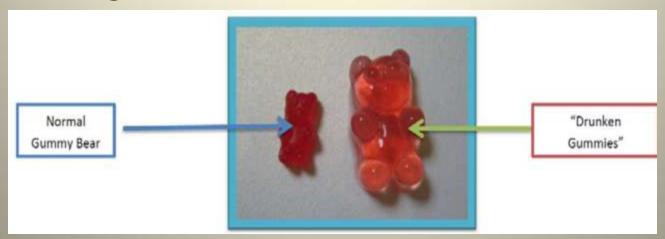
Crunk

Drunken Gummies



Drunken Gummies

One new way young adults are becoming intoxicated is by mixing Vodka and Gummy Bears together. The Gummy Bears will soak up the Vodka, and then teenagers eat the Gummy Bears and become intoxicated. The Gummy Bears that have been mixed in Vodka can be odorless. The person eating them has no idea how much alcohol they are putting into their system. You can find step-by-step instructions on how to make the gummies on Youtube.



VIDEO

Drunken Gummies

Hand sanitizer



Hand sanitizer is the latest in a string of household products used to induce intoxication, and it has public health officials worried, as a few squirts of hand sanitizer could equal a couple of shots of hard liquor. "This is a rapidly emerging trend," Dr. Cyrus Rangan, medical toxicology consultant for Children's Hospital Los Angeles, said in a news conference today. About 2,600 cases have been reported in California since 2010, but it's become a national problem.

"It's not just localized to us," Helen Arbogast, an injury prevention coordinator in the trauma program at Children's Hospital Los Angeles, told ABC News today. "Since 2009 we can see on YouTube it's in all regions of the country. We see it in the South, in the Midwest, in the East." Liquid hand sanitizer is 62 to 65 percent ethyl alcohol, or ethanol, the main ingredient in beer, wine and spirits, making it 120-proof. To compare, a bottle of vodka is 80proof.

"A few swallows is all it takes to get a person to get the intoxicated effects of alcohol," Rangan said. Doctors said ingesting hand sanitizer can produce the same side effects as consuming large amounts of alcohol - slurred speech, unresponsiveness, possibly falling into a coma state.

Rangan warned that long-term use could lead to brain, liver and kidney damage.



Teenagers use salt to break up the alcohol from the sanitizer to get a more powerful dose. These distillation instructions can be found on the Internet in tutorial videos that describe in detail how to do it. Other troubling videos have surfaced online showing kids laughing as they purposely ingested sanitizer, many boasting of fulfilling a dare.



"Methods to distill it can be found through friends and the Internet, but straight ingestion of the product without distillation is also common,"

Rangan said in a news release.

Dr. Sean Nordt, director of toxicology at the USC Los Angeles County Emergency Department, told ABC News it used to get reports of children accidentally consuming small amounts of hand sanitizer, but now the trend is toward purposeful ingestion by those who cannot purchase or obtain alcohol legally. ""We get worried about children getting into these, but it is different from an adolescent who is trying to drink half a bottle to get drunk," said Nordt.

And it's a tough problem to combat, as hand sanitizer is inexpensive and seems to be available at the entrance of every door. Young people can buy pocket-size bottles, which can be the equivalent of two-three shots of hard liquor, or huge tubs at most markets and stores.



Arbogast said foam hand sanitizer was a safer option to keep around the house, but "any hand sanitizer will be at risk for alcohol poisoning, as the foam type is still 62 percent ethyl alcohol," she told today's news conference. Rangan cautioned parents to treat hand sanitizers "like we treat any medication in the home as far as safety is concerned. Keep it out of reach, out of sight, out of mind when not in use."

Nordt said he hoped parents and store clerks would become more vigilant and monitor the sales of hand sanitizers.

""Most stores will sell it to an adolescent without thinking twice," Nordt told ABC News. "Maybe now they will."

VIDEO

Hand Sanitizer

Weed Butter

aka Cannabutter



According to those that post in the online forums, "weed butter" is a much safer method to ingest marijuana than smoking it.

To make "weed butter," marijuana is mixed with regular butter and brought to a boil which causes the Tetrahydrocannabinol (THC) to bond with the butter. This bonding makes the THC more potent. The roughage (i.e. stems, leaves and buds) is then strained out, and the liquid is cooled and stored as butter. The "weed butter" is then used for baked goods, brownies, cakes, etc, which is either sold or consumed by the individual.

THC, which is the chemical that gives marijuana's desired effects, needs a carrier to get it into the bloodstream and THC is not water. This means that when heated or even just mixed with water, it does not chemically mix into a homogenous substance. Water and THC float separately, but THC is soluble in fats and alcohol. Butter and oils are loaded with fat and serve as a perfect carrier for the THC to go straight to the bloodstream. Since "weed butter" is blended with a soluble fat, it will stay with the body for longer periods of time (up to months) after ingesting it. A stronger version of "weed butter" can be made by substituting marijuana with hashish.

VIDEO

Weed Butter

Synthetic Cannabinoids



"7H", "K2", and "Spice" are products containing synthetic cannabinoid chemicals resembling THC, the primary element in marijuana.1Sprayed or added to dried plant material to create herbal smoking products and blends, substances comprised of these synthetic cannabinoids are an emerging trend that allows marijuana users a legal substitute to the drug, and law enforcement a hurdle in detection and deterrent enforcement.

Synthetic Cannabinoids products are psychoactive chemical and herbal blends legal in the U.S. which, when ingested, create effects similar to marijuana. Initially developed for research on the effects of cannabis on the brain and for pain management, "7H", "Spice", "7th heaven", or "K2" is currently sold as herbal smoking blends, incense, or potpourri in smoke shops, gas stations, and on the internet.2 Cannabinoids are becoming increasingly popular as a legal and readily available alternative to marijuana.

Currently, there is little data available to determine the number of users in the U.S.; however, information indicates that the demand for the product is increasing, most notably by marijuana smokers who may fear drug testing and by young adults and teenagers experimenting with the drug due to its difficult detection and belief that there are little or no adverse effects. Common field test kits, canines, and routine urine tests do not detect cannabinoids; therefore, marijuana smokers may feel that it is a "safe" alternative to marijuana.

Cannabinoids are typically packaged in re-sealable pouches and are available in 3-5 gram packs and 400-800 milligram packs ranging in prices from \$20-\$50 per pack. Bulk purchases via the internet are also common. Most products are sold as incense or herbal smoking blends produced from various dried plants, but some websites sell raw chemicals that can be administered directly to the plant material. This product is ingested by mixing the material with regular tobacco or marijuana and inhaling the smoke from a joint or pipe.

Since synthetic cannabinoids are several times more potent than marijuana, the adverse effects after ingesting the product can cause hallucinations, anxiety, heightened blood pressure, nausea, vomiting, and in severe cases, tremors and seizures. There are few studies indicating what – if any – long term effects exist. In addition, common field test kits, canines, and routine urine tests do not detect cannabinoids, making it difficult for law enforcement to detect its presence.



VIDEO

Synthetic Cannabinoids

Khat



In the United States khat use is most prevalent among immigrants from Somalia, Ethiopia, and Yemen. Cathine, a Schedule IV drug and Cathinone, a Schedule I drug, are khat's two principal active ingredients. The khat plant is illegal in California. Abuse levels are highest in cities with sizable populations of such immigrants including Boston, Columbus, Dallas, Detroit, Kansas City, Los Angeles, Minneapolis, Nashville, New York, San Diego, and Washington, D.C. There is a moderate degree of availability and abuse of khat among members of the Somali community in San Diego.

Traditionally, khat is transshipped through the United Kingdom and the Netherlands, where khat is legal, and then smuggled into the United States. Khat is smuggled via a combination of human couriers and parcel delivery services. Khat will continue to be increasingly available in the U.S., and abuse of the drug



Khat is a flowering shrub native to northeast and east Africa and the Southern Arabian Peninsula. Cathine, a Schedule IV drug and Cathinone, a Schedule I drug, are khat's two active ingredients. Khat is a slow-growing shrub that grows to 1.5 meters tall, depending on the area and rainfall, with evergreen leaves 5-10 cm long and 1-

4cm broad.



The stimulant effect of khat is most effective when the leaves are still fresh. Khat is consumed orally as a tea; chewed into a paste; and sometimes smoked or sprinkled on food. The leaves, twigs, and shoots of the khat shrub are most commonly chewed and stored in the cheek, as is commonly done with loose tobacco. After ingesting khat, the user experiences an immediate increase in blood pressure and heart rate.

Symptoms of toxicity include delusions, loss of appetite, and difficulty with breathing. According to the National Drug Intelligence Center, the effects of khat generally begin to subside between 90 minutes to three hours after ingestion; however, effects of the active ingredients can last up to 24 hours. More recent research and testing have found that the shelf life is not limited, and cathinone remains active in the dried khat after months of being harvested.

In addition to the immediate physiological effects of khat use, users may also experience: anorexia, tachycardia, hypertension, insomnia, and gastric disorders; additionally, chronic khat abuse can also result in symptoms such as physical exhaustion, violence, and suicidal depression. 4 Khat can induce manic behaviors, hyperactivity, and hallucinations, and there are reports of khat-induced psychosis. Additionally, long-term users or those that have overdosed, have been known to suffer from liver damage and cardiac complications, specifically myocardial infarctions.

Khat is traditionally sold in small bundles, with each bundle weighing approximately 100 grams. In San Diego county, khat prices range from \$40 - \$90 per bundle and average \$60 per bundle.13 Reports indicates that prices per bundle can be negotiated by individual buyers, typically \$50 instead of \$60. The Somali community in San Diego has grown significantly, and khat availability indicated that the region can now easily handle 300 - 500 bundles on a daily basis, with resultant monthly street value of \$540,000 - \$900,000 at current prices. U.S. Customs and Border Patrol report that a bundle of khat sells for approximately \$64 USD per kilogram in the U.S. and freshly packed khat can be as much as \$300 to \$600 USD per kilogram in the U.S.

VIDEO

Khat

Information obtained from Law Enforcement and Open News Sources