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s more states look at loosening laws on the sale and use of marijuana, Colorado is offering a disturbing preview of what may be in store for them.

Colorado OK'd the use of medi-

cal marijuana in 2000, as 23 oth-

ers have over the last several years. But in 2013, it, along with Washington state, took the unprecedented step of legalizing the recreational use of marijuana—and catastrophic calls have been on the rise ever since.

There has been a sharp increase in pot-related calls to poison control; seizures have quadrupled; two deaths so far are attributed to marijuana overdoses; neighboring states are experiencing a surge in pot use; and advertising through every available medium blankets the Centennial State, desensitizing people to the risks.

Perhaps most troubling, the drug is infiltrating Colorado schools, which now have lists of young people waiting to get help. Teens who use pot face nearly twice the risk of addiction as adult users, and juvenile usage increases the brain damage associated with the drug.

On July 9, Colorado published its first market study of the new marijuana industry. According to the results, gleaned from the first three months of sales data from this year, the market demand statewide is 130 metric tons per year, and the average market rate is \$220 per ounce. That's a third higher than even the state Department of Revenue projected. About 44 percent of the recreational marijuana—which is taxed far more heavily than medical marijuana—is used by out-of-state visitors; in the mountain regions, that number can be as high as 90 percent. Occasional users (less than once a month) account for only 0.3 percent of the total marijuana market; the rest is made up of "heavy daily users."

The study is the first of its kind, because Colorado has created the first functioning, regulated and taxed pot-production and -distribution system in the world—leapfrogging even Europe's most liberal cities.

The question that remains is how many will follow Colorado into the void.

Eating the Leafy Greens

"For those who become addicted, it is devastating," says Ben Cort, director of the Colorado Center for Dependency, Addiction and Rehabilitation at the University of Colorado. "It can be a pretty insidious drug."

Cort should know: Eighteen years ago, he kicked his own four-year addiction to hard drugs—one which began, like so many others, he says, with marijuana.

This is not about just smoking joints anymore. Much of the pot now being sold in Colorado is packaged as food: There are pot bars, pot gummy bears, pot

suckers, pot hard fruit candies and pot sodas. Roach clips? Today's young users don't know what you're talking about.

Among the many myths that the new law is busting is that using pot is relatively benign and overdosing is almost impossible.

This April, Richard Kirk of Denver bought a package of Karma Kandy from one of the new pot shops, and within a few hours began raving about the world ending, pulled out gun and allegedly killed his wife. She was on the phone with 911 telling the dispatcher that he had eaten the pot and was hallucinating.

Levy Thamba, a 19-year-old college student on spring break, became delirious and agitated after eating a pot-laced cookie in March. He began shaking, screaming and throwing things before jumping off a four-story balcony to his death.

When *New York Times* syndicated columnist Maureen Dowd visited Colorado in May to research the pot for a future column, she was shocked. She bought a pot cookie, which had no dosing instructions, and nibbled on it. Noticing nothing, she nibbled more. And then, she writes:

"I felt a scary shudder go through my body and brain. I barely made it from the desk to the bed, where I lay curled up in a hallucinatory state for the next eight hours. I was thirsty but couldn't move to get water. Or even turn off the lights. I was panting and paranoid, sure that when the room-service waiter knocked and I didn't answer, he'd call the police and have me arrested for being unable to handle my candy."

A study published in the April 16 issue of the *Journal* of *Neuroscience* found that large amounts of marijuana can create high levels of fear, anxiety and panic, which is what happened with Kirk, Thamba and Dowd. In two of the three cases, that made it deadly.

"People's theory on legalizing marijuana is very different from reality," says Kevin Sabet, who worked in the White House Office of National Drug Control Policy under three administrations before becoming the director of the Drug Policy Institute at the University of Florida in 2012. He also sits on the board of Smart Approaches to Marijuana (SAM), a bipartisan group with offices in California, Massachusetts and New Jersey.

"This will have a massive effect on our public health, on our education, on our families," he says.

While SAM strongly opposes recreational and medical legalization, it does lobby for research to be conducted on the potential benefits of medical marijuana. But many observers see medical legalization as a pathway to recreational legalization—and that seems to be playing out in states that have approved medical use.

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Pot-ential Hazards

The marijuana being grown today isn't like what was smoked at Woodstock. Potency has grown more than 400 percent in the past 30 years, vastly aggravating negative mental and physical impacts on users and spiking the addiction level.

Tetrahydrocannabinol (THC) is the primary psychoactive component of marijuana. As THC enters the brain, it creates a euphoric "high" by stimulating the reward system in the same way as chocolate or other sensory pleasures. Usage limits a person's ability to form new memories and shift focus, and impairs coordination, balance and reaction time, according to the National Institute of Drug Abuse. This means that learning, athletic prowess, driving and other complicated tasks all become impaired.

"There's been a 10-fold increase from the '70s and '80s in the THC levels, and a 90-fold increase in the candies," Sabet says. "It's a very different experience today than for Baby Boomers."

The percentage of recreational marijuana users in the population remained flat to falling until 1996, when California kicked off the nation's medicallegalization efforts. But as recreational usage increases, so does the number of emergency-room visits in Colorado—which experts attribute to the increasing THC potency.

The Institute of Medicine found in 1999 that 10 percent of those who try marijuana become addicts. (By comparison, the study also revealed that 17 percent of those who try cocaine become addicted.) In 2011, 333,578 people nationwide entered drug-treatment programs for pot addiction, according to the federal Center for Behavioral Health Statistics. If marijuana usage starts in adolescence, the chances of addiction increase to 1 in 6, according to a study published in the July 4, 2013 edition of the psychiatry journal Neuropsychopharmacology.

The health impacts are all too real.

Long-term studies in the United States and New Zealand show regular marijuana smokers—like cigarette smokers—demonstrate much higher symptoms of chronic bronchitis and emphysema than nonsmokers. And marijuana use is linked with depression, anxiety and mental illness—especially schizophrenia and psychosis, according to systematic reviews of studies published in Lancet, Archives of General Psychiatry and the British Medical Journal.

Research also shows the areas of the brain regulating complex cognitive behavior, personality expression, decision making and social behavior are not fully developed until the age of 25. The effects of marijuana are even more pronounced in these developing brains, according to research published in the Annals of the

Pipe Dreams

Marijuana advocates lobbied for legalization with several arguments which science and experience are showing to be untrue.

No one gets hurt. In reality, 27 percent of seriously injured drivers nationwide test positive for pot. More than 333,000 people entered drug treatment programs for pot addiction in 2011.

Marijuana is not addictive. Use of marijuana leads to physical addiction and when heavy users stop, they go through classic withdrawal symptoms. In 2011, nearly 4.2 million people had a marijuana addiction problem, according to the National Institute on Drug Abuse.

Everyone agrees on its medical value. The American Medical Association, the American Society of Addiction Medicines, the American Cancer Society, the American Glaucoma Society and the American Academy of Pediatrics all report finding no documented medical value in marijuana. The British Medical Association asserts that marijuana use increases health risks.

These are grassroots efforts to legalize pot. Most of the legalization has come with the backing of more than \$120 million from two billionaires.

New York Academy of Sciences in 2004.

"This is a drug we know categorically does bad things to people," Cort says. "The science is crystal clear on this."

Weed Lots

As gangs have long known, there's a lot of money to be made in selling drugs. But with marijuana's new status, the entire business of growing, distributing and selling is becoming more corporate.

Colorado has approved 739 sites for growing pot, spread across more than 1,200 acres. The marijuana industry now leases more than one million square feet of space in the Denver area, for both indoor growing and warehousing.

Just after the recreational-usage law took effect last year, marijuana sales averaged nearly \$1 million per day statewide. In January alone, the taxed sales stood

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9 -September14.indd 20 7/23/14 11:06 AM at \$14 million, and there was steady growth through April; state legislators put the first full-year sales estimate at \$600 million, and industry watchers expect it to reach \$1 billion annually in Colorado.

A study by ArcView Market Research, a cannabisbusiness investment organization, estimates that the legalized cannabis industry nationally hit \$1.43 billion in sales for medical marijuana and will jump to \$2.34 billion this year with the inclusion of recreational pot in Colorado and Washington, which began issuing licenses for distribution on July 7. By 2018, with a few more states legalizing it both medically and recreationally, the market will be \$10.2 billion. Pot pioneers are pumping out huge profits in the 23 states that now allow medical cannabis. Where there is big money to be made, there is big money to be invested. And this is uniquely true with pot. As Sabet puts it: "The profits rely on addiction.'

Advertising is crucial to attracting new customers. But once hooked, a continuous stream of revenue flows to companies' bottom lines and government coffers—the two biggest beneficiaries of legalization.

Not surprisingly, Colorado is being smothered in advertisements for pot.

Billboards, taxis, bus stops, sign twirlers and newspapers are all avenues for marijuana ads. Themes range from Fred Flintstone cartoons to sex and are aimed at low-income and minority residents; their neighborhoods are the ones where most pot shops are located. "The level of advertising cannot be overstated," says Cort. "This is about the large-scale commercialization of pot."

That requires large-scale funding, which has been there from the start. The marijuana-legalization campaigns are not grassroots efforts; they have been funded largely by billionaire donors.

For example, George Soros has spent more than \$80 million through a network of non-profits to push for marijuana legalization over two decades. He sends money to the Drug Policy Alliance, the Marijuana Policy Project and the American Civil Liberties Union, which promote pot-legalization efforts.

Soros was joined by the late Peter Lewis. The former chairman of Progressive Insurance Co., an overt marijuana smoker, put in about \$40 million to fund legalization campaigns, according to the National Organization for the Reform of Marijuana Laws (NORML)—a primary non-profit advocate of legalization that has admitted to receiving money from illicit drug dealers. NORML originally pushed for legalizing all drugs, including cocaine and heroine.

In Colorado, 67 percent of the money spent to legalize marijuana came from those two men. It was roughly the same in Washington.

"We're starting to have buyer's remorse," says Tom Gorman, director of the Rocky Mountain High Intensity Drug Trafficking Area, an offshoot of the Office of National Drug Control Policy, which coordinates efforts between federal, state and local drug-enforcement agencies. "We need to tell the rest of the country, 'Don't do anything.' "

Going to Pot

But the rest of the country has already started "doing things."

To date, 24 states have legalized medical marijuana or decriminalized possession in small amounts. At press time, 14 were in various stages of considering legalizing recreational usage: Alaska, Arizona, California, Delaware, Hawaii, Maine, Maryland, Massachusetts, Montana, Nevada, Oregon, Rhode Island, Vermont and the District of Columbia.

"Medical marijuana is an open door," Gorman says. "It is only a matter of time before recreational" is proposed wherever medical marijuana is available.

Maryland, Minnesota and New York have passed medical marijuana-legalization bills this year, while Florida, Ohio and Pennsylvania were still considering it at press time.

Despite the fact that the momentum seems to be on the side of drug advocates for the moment, efforts to legalize medical marijuana have failed in several states so far this year: Kansas, Kentucky, Mississippi, Missouri, South Carolina, Tennessee, West Virginia and Wisconsin. And as the news about what recreational usage is doing in Colorado spreads, momentum could just as quickly build up on the side of family advocates.

"I do not think this is inevitable," Sabet says. "Parents and concerned citizens can push back."

FOR MORE INFORMATION

For general information about marijuana and drug addiction, contact Drug Free America at http://dfaf. org/, the Partnership for Drug-Free Kids at drugfree. org or the National Institute on Drug Abuse at drugabuse.gov. Read the study in the Journal of Neuroscience at http://bit.ly/1eZD6Uv. The study published in Neuropsychopharmacology is available at http://bit. ly/1qcvqil. Read the results of Colorado's first marijuana market study at http://1.usa.gov/1lVgbWY.

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