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Designer Drugs

A New, Futile Front in the War on Illegal Drugs

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EXECUTIVE SUMMARY

ews media accounts abound regarding the proliferation of synthetic or "designer" drugs that produce physical and psychological effects similar to those of traditional mind-altering substances such as marijuana, cocaine, and heroin. There is a bewildering variety of the new drugs, most of which until recently were not covered by existing laws. The array of synthetic drugs often seems limited only by the creativity of enterprising chemists.

The daunting task of trying to outlaw substances that can sometimes regain legal status with a modest change in chemical makeup has caused consternation among officials in the United States and other countries determined to stamp out drug abuse. Policymakers have scrambled to come up with legal rationales to contain a murky, everchanging situation. They have experienced limited suc-

cess—and even then only by using strained, dangerously expansive interpretations of criminal statutes.

The multiple problems associated with suppressing the use of designer drugs underscore the inherent futility of the broader War on Drugs. Even as officials devote billions of dollars each year to enforcing laws against marijuana, cocaine, and other drugs, the market for synthetic equivalents or variations has soared. Some of the new drugs even masquerade as such innocuous, perfectly legal products as air fresheners or potpourri. Instead of persisting in the failed strategy of drug prohibition, policymakers should examine ways to accommodate legal markets in mind-altering substances while promoting public safety by requiring strict production standards to prevent contamination or mislabeling. Those are beneficial and attainable objectives, unlike the utopian goals of crusades against illegal drugs.

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INTRODUCTION: THE RISE OF SYNTHETIC DRUGS

Mind-altering substances, including alcohol and marijuana, have been around nearly as long as humanity itself. Until the last third of the 20th century, though, most users did not have access to purely synthetic versions of these drugs. Drugs were either wholly natural (e.g., marijuana or coca leaves) or were processed products that had their origins in natural substances. For example, cocaine was produced from the coca plant, heroin from opium poppies, wine from fermented grapes, beer from hops and other grains, and so on.

That situation began to change in the 1960s, with the emergence of LSD as a street drug, and it changed even more with the growing popularity of an artificial chemical stimulant, methamphetamine (meth), in the 1970s and 1980s. A related drug, which became known as "ecstasy," and later as "Molly," soon joined meth as a popular way to get high. Over the past decade, similar products in a broader category, amphetamine-type stimulants (ATS), have become an increasing part of the international drug trade. The 2014 Global Synthetic Drugs Assessment, from the United Nations (UN) Office on Drugs and Crime, confirmed that worldwide ATS seizures had risen from slightly less than 60,000 kilograms in 2008 to more than 130,000 kilograms in 2012.1

Matters have become even more complex in recent years with the proliferation of so-called designer drugs. The 2014 UN report states that the use of such new psychoactive substances (NPS) has "grown rapidly over the past decade, and there have been increasing reports of the availability and manufacture of such substances."2 Extensive UN data confirm that point. The number of substances in the category of narcotics already covered under international agreements has remained nearly unchanged since the early 1960s. The number of psychotropic substances covered under existing international control agreements experienced a modest growth spurt in the 1970s and early 1980s but has remained largely unchanged over the past three decades. However, the number

of reported new psychoactive substances has skyrocketed since 2008.³ That increase reflects both the growing creativity of suppliers and an increase in consumer demand.

Socially conservative or even reactionary societies have not been immune from the mounting popularity of synthetic drugs. Reuters cites a surge of methamphetamine use in Iran. "Women in headscarves and men in tatty clothes puff on a glass pipe as smoke swirls around their faces. The pictures published by Iranian media and blogs in recent months are a sign of a new drug epidemic: shishe, or methamphetamine."4 Seizures of meth in Iran soared 128 percent between 2008 and 2012, topping all other countries in the region. Iranian authorities contend that most users are urban, middle class, and young. University students have begun using shishe to stay up longer and boost their performance in school. Women have reportedly purchased the drug because of promises that it will help them lose weight.5 Meth has even surpassed opium from neighboring Afghanistan as the drug of choice among young urban Iranians. All of this has occurred even though Iran has some of the harshest drug laws in the world, including the frequent execution of traffickers.

Another socially conservative society, Russia, has experienced a comparable surge in the popularity of "spice"—synthetic marijuana. An *Al Jazeera* story reported that spice "is widely available in Russia and several ex-Soviet republics in myriad variations." In the late 1990s and early years of the new century, Afghan heroin flooded Russia. By 2008 Russians used more than 70 tons annually, more than one-fifth of the drug consumed globally. But as Russian authorities focused on curbing the flow of opium and heroin from Afghanistan, users increasingly switched to other drugs, including synthetics.⁷

On February 3, 2015, President Vladimir Putin signed a bill banning all variations of spice and punishing its production or distribution with hefty fines and jail sentences of up to eight years. Observers noted that "the law seems to have changed little about the spice

trade. Hundreds of Russian websites and online forums still advertise and sell spice."⁸

The U.S. experience has followed the global pattern. According to John Scherbenske, an official at the Drug Enforcement Administration (DEA) who heads the agency's Synthetic Drugs and Chemicals section, designer drugs first began to appear in the United States in late 2008. U.S. Customs and Border Protection agents intercepted suspicious shipments of "herbal incense," and the DEA's forensic lab identified some of the substances as synthetic cannabinoids (marijuana). Over the next few years, drug enforcement officials contend, designer drugs exploded in popularity, especially among teenagers.

SOME OF THE POPULAR DESIGNER DRUGS

There is a vast variety of synthetic drugs available to consumers in the United States and countries around the world. Indeed, the 2014 *Global Synthetic Drugs Assessment* listed 348 amphetamine-type stimulants (ATS) or new psychoactive substances (NPS), "the majority of which were identified between 2008 and 2013." Moreover, the report noted that "the actual number of NPS available worldwide may be significantly higher." The list of such drugs grows steadily, with the more popular ones generally falling into two categories, synthetic cannabinoids and synthetic cathinones.

Synthetic cannibinoids are chemically engineered substances that are applied (often by spraying) onto plant material (usually dried herbs) and mimic the effects of THC, the primary psychoactive ingredient in marijuana. When smoked or ingested, synthetic cannabinoids produce a "high" similar to marijuana. The chemicals were originally developed for research into pain management, as well as research regarding the effects of cannabis on the brain. "Such "synthetic marijuana" soon became a popular street drug as a cheaper alternative to the natural version. It is marketed under various names, especially "K2," "Genie," and, as noted above, "Spice." Under those and other labels, the product is of-

ten sold in legal retail outlets as potpourri, herbal incense, or even plant food. Synthetic cannabinoids account for about 31 percent of all NPS used in the United States.¹³

Synthetic cathinones are derivatives of cathinone, a psychoactive substance found in the khat plant (which is popular as a recreational drug in its own right in Ethiopia, Somalia, and other East African and Middle Eastern countries). ¹⁴ Synthetic cathinones are chemicals related to amphetamines and mimic the physical and psychological effects of meth. The cathinones are typically sold as "bath salts" or "jewelry cleaner"—both of which are, of course, perfectly legal functions. Synthetic cathinones account for 24 percent of NPS used in the United States. ¹⁵

Adding to the obstacles that prohibition policies face with regard to designer drugs, manufacturers typically put warnings on the label of the alleged potpourri, herbal incense, bath salts, or jewelry cleaner, that the product is "not for human consumption." Law enforcement officials contend that such warning labels are merely cynical attempts to mask the intended purpose of the product and to avoid regulatory oversight by the Food and Drug Administration (FDA) of the manufacturing process.¹⁶ Critics contend that using brand names such as "Benzo Fury" and "Blaze," along with "psychedelic wrapping and their sale alongside drug [paraphernalia] such as glass pipes and bongs," leaves "no doubt as to their true purpose."¹⁷

SOURCES OF SYNTHETIC DRUGS

The trade in synthetic drugs has a sizable international dimension, with important production centers in places as diverse as West Africa and Western Europe.¹⁸ Mexico has long been a major source for meth and the precursor chemicals that are used to manufacture it, and in recent years the country has become an increasingly prominent player in the broader ATS trade.¹⁹

The Sinaloa cartel, which by the 1990s had already become a major factor in marijuana and cocaine trafficking, worked diligently throughout that decade to open new product lines. Dur-

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ing the 1990s, a smaller trafficking organization in northwest Mexico, headed by Jesús Amezcua and his brothers, also began using contacts that he had developed in East Asia to import large quantities of the precursor chemicals for the production of methamphetamine, a drug that was becoming increasingly popular in the United States. The Amezcua brothers developed an impressive supply chain that ran from their production facilities in the Sierra Madre region in western Mexico, where the chemicals were converted into a saleable product, to distribution centers in the border cities of Tijuana and Mexicali. From there, shipments went out to consumers throughout the United States, although Mexican producers had to compete with a large number of U.S. competitors—primarily small, independent operations in rural areas and small towns throughout the South and Midwest.

The Sinaloa cartel saw huge new profit-making potential in the methamphetamine trade and moved to gain control. Ultimately, the Sinaloa organization absorbed or displaced the Amezcua cartel, and by the early years of the 21st century had become the principal player. Joaquín (El Chapo) Guzmán, the leader of the Sinaloa cartel, assigned one of his top allies, Ignacio "Nacho" Coronel, to take charge and better professionalize the methamphetamine trafficking business. Coronel was so successful in his assignment that he became known as the "king of ice" or "king of crystal." He had already made the Sinaloa cartel utterly dominant in the methamphetamine trade at the time of his death in a shootout with Mexican federal authorities in the summer of 2010.20

There are increasing allegations that ostensibly legitimate Mexican businesses have allied with the cartels in producing meth. U.S. officials accused a pharmaceutical company, Grupo Collins, of branching out from its production of antibiotics and other medicines to provide chemicals that drug cartels use to manufacture methamphetamine. Grupo Collins executives denied the allegations, but there is little doubt that the drug-trafficking organizations endeavor to maintain a variety of ties with legitimate pharmaceutical businesses.

Meth, along with heroin, has become an increasingly important revenue producer for the Mexican cartels. That is especially true since the trend toward decriminalization—and even legalization—of marijuana in the United States has gained momentum in recent years. Washington Post correspondent Nick Miroff contends that changes in the U.S. policy environment are "upending the North American narcotics trade." Data regarding drug seizures along the U.S.-Mexico border support Miroff's thesis. The amount of marijuana confiscated has fallen 37 percent since 2011. Miroff concludes: "Made-in-USA marijuana is quickly displacing the cheap, seedy, hard-packed version harvested by the bushel in Mexico's Sierra Madre Mountains."22 Legalization of marijuana for recreational use gave U.S. consumers "access to high-quality marijuana, with genetically improved strains, grown in greenhouses," notes Raul Benitez-Manaut, a drug policy expert at the National Autonomous University in Mexico. "That is why the Mexican cartels are switching to heroin and meth."23

The DEA estimates that 90 percent of the meth on U.S. streets now comes from labs in Mexico. Seizures of methamphetamine shipments along the border with Mexico have soared even more than the increase in heroin seizures. In 2009 authorities confiscated 3,076 kilograms of meth; the figure for 2014 was 15,803 kilograms.²⁴ Meth also seems to have displaced cocaine as a profit leader for the cartels. Gary Hill, a DEA special agent in San Diego, contends that trafficking organizations find it far less expensive to produce meth in Mexico than to import cocaine from Colombia and other Andean countries for distribution in the United States. "The overhead is tremendous for cocaine," Hill states, while for meth, "the overhead is minimal. They oversee the manufacturing. There is no middleman."25 He also points out that undercover agents are able to purchase meth for \$3,500 per pound, while a pound of cocaine goes for about \$11,800, making the former drug highly appealing to traffickers who seek the most efficient use of their funds.

The dominant role played by large shipments from Mexico also highlights the futility of annoying restrictions enacted in the United States, such as requiring signatures and photo identification for consumers purchasing Sudafed-style medications. Most drug abusers, to say nothing of drug traffickers, are not getting their supply of methamphetamines by hoarding Sudafed.

Although Mexico remains a crucial factor in the meth trade, the DEA contends that most of the chemicals used to make the newer synthetic drugs come primarily from China. Indeed, according to a September 2013 article in *Time*, the drugs "typically originate in suburban laboratories around Chinese port cities." From those locales, they can be shipped easily to North America and Europe, often using normal commercial delivery services. Larger quantities are also available from those Chinese sources, typically sold on the internet as "research chemicals."26 "They ship the bulk product here in the United States, where we have individuals that will take that product and package it for retail distribution," according to John Scherbenske.²⁷ Given the shifting nature of the drug market, an assortment of Chinese producers now appears to be in serious competition with the more established Mexican traffickers.

REPORTED PROBLEMS

With the growing popularity of synthetic drugs, reports have surged about adverse reactions, sometimes even dangerous health consequences, among users. A 2012 report from the White House Office of National Drug Control Policy noted that calls received by poison control centers regarding exposure just to synthetic marijuana (Spice, K2, or similar versions) had soared from 2,906 in 2010 to 6,959 in 2011.²⁸ The U.S. Substance Abuse and Mental Health Services Administration reported 28,531 emergency room visits involving synthetic cannabinoids in 2011.²⁹ The data involving bath salts showed an even more startling upward trend. Poison control centers

reported a mere 304 incidents in 2010, but in 2011, the number was 6,138.³⁰ Before 2009, emergency calls involving synthetic marijuana or bath salts were virtually unknown.

Scherbenske insists that the "the biggest user population of these drugs are 12- to 17-year-olds." His rationale for the supposed popularity among such young consumers is because such drugs "are easily accessible." Moreover, such products had a least a patina of legality until very recently. But the "easy availability because the designer drugs were legal" thesis is a questionable one. Savvy teens have shown for decades that they encounter few difficulties in purchasing explicitly illicit drugs, especially marijuana.

Moreover, even the assertion that teens represent a disproportionate percentage of synthetic drug users should be viewed with skepticism. Proponents of drug prohibition have made similar allegations with respect to more traditional drugs, even though evidence confirms that the vast majority of such users are actually adults. The statement by Karen P. Tandy, the head of the DEA under President George W. Bush, typifies the allegations about illegal drugs being a dire menace to children. She stressed that "marijuana is the most widely used illicit drug in America and is readily available to children. In fact, there are more teens in treatment each year for marijuana dependence than for alcohol and all other illegal drugs combined." Tandy repeatedly stressed the impact of that drug on the extremely young, asserting that "children are the most vulnerable to its damaging effects."32

Yet the 2013 survey on drug use and health by the Substance Abuse and Mental Health Services Administration confirmed the findings of earlier surveys that the use of marijuana and other illegal drugs is predominantly an adult vice. The 2013 analysis found that 8.8 percent of youths in the 12 to 17 age group reported the use of illegal drugs, compared to 21.5 percent of adults age 18 to 25. Moreover, although adults over 26 use illegal drugs at a lower rate (just 7.3 percent) than younger Americans, they reinforce adult dominance of drug consumption,

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since they constitute a much larger portion of the overall population than the 12- to 17-year old contingent.³³ Natural marijuana, the mildest and least harmful of those drugs, is still, by far, the illicit drug of choice among teenagers. The University of Michigan's 2014 *Monitoring the Future* study found that some 35 percent of high school seniors reported using marijuana during the previous year, and that figure has remained remarkably steady over the past two decades.³⁴ Moreover, it is important to note that high school seniors are either already adults or adolescents on the threshold of adulthood; they are hardly "children."

The data regarding consumers of synthetic drugs are still too sketchy to accept the assertion of drug war bureaucrats that the substances are an especially worrisome temptation to teenagers. Indeed, preliminary data indicate that scare stories about an epidemic of such abuse among teenagers are just that: scare stories. Figures from the 2014 University of Michigan study showed that the use of synthetic marijuana had actually declined steadily among all three groups surveyed (8th graders, 10th graders, and 12th graders) from 2010. Among 12th graders, for example, reported use in the previous 12 months went from 11.4 percent to less than 6 percent.35 The trend in the use of bath salts showed a similar pattern. Moreover, contrary to apocalyptic headlines in some media outlets, that illicit drug didn't seem all that popular to begin with. In 2012 fewer than 2 percent of high school seniors reported using bath salts during the previous 12 months. In the 2014 survey, it was barely 1 percent.³⁶

There is little doubt, though, that Scherbenske and other officials are correct that designer drugs are becoming a new option among consumers of various ages who wish to experience a chemical high. And law enforcement personnel are issuing shrill, sometimes apocalyptic, warnings about the dangers. "Kids are playing Russian roulette with their lives," intones San Francisco area DEA agent Bruce Goldberg.³⁷ Contrary to Goldberg's stark imagery, though, there have been very few fatalities from overdoses or related problems with

synthetic drugs. Indeed, there are far more fatal incidents from alcohol overdoses following binge drinking incidents.

A GROWING LIST OF PROHIBITION STATUTES—AND TROUBLING IMPLICATIONS

In the United States and other countries, there has been an array of domestic legal responses to the growing presence of synthetic drugs. But there has been surprisingly little systematic coordination yet on the international front. The 2014 UN report conceded that "in spite of the significant increase in NPS reported over the last few years and growing concerns about the health risks associated with them, no psychoactive substances have been internationally scheduled [i.e., restricted] since 2009"38 In June 2013 leaders of the G-8 nations finally signed an agreement to share information about what they saw as a growing global problem with new psychoactive substances, but took no other action.³⁹

On the domestic front, there has been a far more noticeable surge of state statutes outlawing both synthetic cannabinoids and synthetic cathinones. By November 2012, 45 states and Puerto Rico had banned one or both classes of drugs, and by January 2015 all 50 states had done so. ⁴⁰ In addition, President Obama signed the federal Synthetic Drug Abuse Prevention Act into law on July 9, 2012. That act added classes of synthetic cannabinoids and two specific cathinones—mephedrone and methylene-dioxypyrovalerone (MDPV)—to the existing federal Controlled Substances Act.

Drug prohibitionists face an array of daunting challenges in trying to formulate legal measures to deal with the issue of synthetic psychoactive drugs. Indeed, officials do not merely have to deal with the drugs themselves, but also the precursor chemicals that can be diverted into such manufacturing. The 2014 UN report highlights the nature of the problem. "The majority of precursor chemicals that can be used in the manufacture of ATS and synthetic drugs have widespread licit use in

the chemical and pharmaceutical industries." Their diversion from such legitimate purposes by drug trafficking organizations "is the primary sources of precursor chemicals used in the illicit manufacture of synthetic drugs." It is not easy for authorities to prevent illegal diversions of precursor chemicals without creating intrusive and economically burdensome restrictions on legitimate firms and purposes.

Another major challenge facing those who want laws to ban synthetic, mind-altering drugs is coming up with legal descriptions of the targeted substances that are sufficiently comprehensive. A 2013 CNN report noted that "manufacturers play a dangerous cat-andmouse game with law enforcement by constantly changing the chemical compounds of the drugs to circumvent existing laws."42 James Capra, the DEA's chief of operations, contends that chemists, especially in China, "are not just sitting back waiting for their products to be made illegal. Often they have already created the next variation of a substance and have it ready to hit the streets before the ink on the banning order of its parent drug has dried."43

A 2015 report from the National Conference of State Legislatures (NCSL) noted that initially most state legislative actions targeted specific versions of the synthetic drugs with individual bans. However, legislators discovered that "minor changes to the chemical composition of these substances can create new, but very similar, drugs not previously covered by law." In response, laws passed after 2011 have "become more general in nature, targeting entire classes of substances or using broad language to describe the prohibited drugs."44 The NCSL report was candid about the motivation for that shift. The intent of the general bans "is to prevent new forms of synthetic drugs from remaining unregulated, while still allowing use for approved medical and research purposes."45

But general bans create new problems and concerns. Individuals prosecuted under such statutes are in a strong position to assert that the applicable law is vague and overly broad.⁴⁶ Convictions for other offenses over the de-

cades have been overturned on that basis, and general bans of synthetic drugs would seem to occupy a precarious legal status.⁴⁷ Even bona fide researchers have to worry about whether their use of such substances might run afoul of the law. That creates a potential chilling effect on scientific inquiry into new medications.

Another passage in the NCSL report is perhaps even more troubling in its implications:

More recently, a few states also have passed laws restricting marketing, display, labeling, and advertising of these substances by utilizing consumer protection laws or classifying these activities as deceptive trade practices. When substances are not specifically banned, law enforcement and prosecutors have also creatively used existing provisions such as agricultural regulations, consumer protection laws, and public nuisance laws to prosecute those selling these drugs.⁴⁸

Even people who believe that designer drugs pose a threat to society ought to be worried about the dubious legal precedents that such law enforcement techniques might be setting. Agricultural regulations, consumer protection laws, and public nuisance laws used "creatively" can easily become grotesque distortions and abuses of power. If laws can be stretched beyond recognition to address the synthetic drug issue, it becomes easier to do so for other purposes that a vocal segment of the population might deem desirable. Some jurisdictions have long sought to utilize zoning laws and other measures to keep adult bookstores and even fast food outlets out of certain areas.

When statutes and regulations are not interpreted in a strict fashion, the floodgates are open to political and ideological power plays that can make a mockery of the rule of law. Such abuses breed justifiable anger and cynicism on the part of victims and a breakdown of respect for legal norms on other issues. Crusaders against designer drugs venture down a dark, worrisome path when they advocate tortured applications of existing laws to achieve their goals.

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We are already seeing troubling signs of abuse. Indeed, some police agencies have engaged in "creative" law enforcement that seems indistinguishable from harassment and malicious prosecution. The treatment of Ilana Lipsen, the owner of a smoke shop, the Purple Zone, in Alpine, Texas, is a case in point. State and local authorities raided her business twice in 2012, in March and again in November. No arrests followed the first raid, although the police confiscated 60 of Lipsen's products, including herbal incense and similar substances. Following the second raid, they arrested Lipsen and her mother, even though the latter was apparently not involved in the operation of the business. Subsequently, the state charged both of them with selling "chemical analogs" to substances that were explicitly banned under state law. As Reason correspondent Brian Doherty muses, "All that is not permitted is forbidden in this weird area of the law, apparently."49

There was one embarrassing problem, however, as Lipsen's attorney pointed out. The chemicals cited in the indictment were first made illegal by the Texas Legislature in mid-2013—months after the two raids. Perhaps realizing that this might pose a problem, local authorities offered to drop criminal charges and leave Lipsen alone, if she would agree to stop selling spice and similar products. When she rejected the offer, officials expressed a mixture of annoyance and astonishment at her "singular incorrigibility."50 Undeterred by the legal impediment created by the Constitution's prohibition against ex post facto prosecutions, and the apparent impediment caused by his office's budgetary limitations, the Alpine police chief engineered yet another raid-this time led by the DEA.51 That one produced additional arrests on various charges.

Such an episode ought to trouble even people who are adamantly opposed to designer drugs. It certainly appeared that police and prosecutors targeted a maverick business woman who sold products that occupied an unpopular grey area of legality. Perhaps not coincidentally, she had previously done other things to annoy powerful figures, including publicly expressing caustic views

of federal, state, and local police agencies. Perhaps the attention devoted to her was not a case of harassment and selective prosecution, but detached observers could understandably have doubts on that score. At a minimum, the incident illustrates how vague laws against synthetic drugs have an enormous potential for abuse.

HOW DRUG PROHIBITION EXACERBATES THE DRUG ABUSE PROBLEM

CNN correspondent Tricia Escobedo underscored, perhaps inadvertently, a key problem associated with the current approach to dealing with designer drugs. "No one really knows what's in these so-called synthetic drugs," she noted.⁵² But that is not really a problem unique to those substances; it is an inherent problem with all illegal drugs. By driving commerce in certain mind-altering substances underground, prohibition laws put the trade in the hands of, at best, dubious enterprises with inadequate quality control standards, and, at worst, criminal elements out for a quick, massive return on their investment. To put it mildly, the health and well-being, especially the long-term health and well-being, of consumers is not a high priority for most illicit producers.

As with more traditional illegal drugs, the synthetic versions often vary wildly in terms of potency and purity. Purchasers have no way to determine before ingesting the product whether it has been contaminated with another substance that may be unexpectedly dangerous or even poisonous. They certainly have no way of knowing whether the dose they are planning to take is relatively safe. One user in San Francisco acknowledged that it was impossible to determine whether a particular dose of "Molly" (MDMA or Ecstasy) contains harmful additives. It's "a hell of a drug," she told a reporter. "I've used it and you don't know what's in it." She suspected there was "a lot of meth in it. There are hallucinogens in it. That's a scary drug."53 When drugs operate in a system of illegality, not knowing what's really in the product is a pervasive situation for users.

Some 45 people were treated in Austin, Texas, in early May 2014 for overdoses of designer drugs. A police investigation revealed that nearly all of them could be traced to one product called "The Walking Dead," a version of K2 that apparently originated with one supplier in Houston. 54 *Time* correspondent Charlie Campbell notes that products such as Spice and K2 "are sold as a kind of legal cannabis, but in reality comprise plant leaves and stems laced with an assortment of toxic chemicals that can lead to psychosis, hallucinations, delusions, extreme paranoia and even death. "55

Again, these are not problems that just emerged with the appearance of synthetic drugs. In their detailed study of the illegal drug trade, University of California professor Robert J. MacCoun and RAND Corporation scholar Peter Reuter conclude that many of the adverse public health effects from the array of illicit substances are "unquestionably the consequence of prohibition." They note that "most heroin overdoses are the result of uncertainty about potency, which could be avoided in a legalized and regulated market."56 Indeed, police blotters have been filled for decades with reports of cocaine and heroin overdoses, usually because consumers could not be sure about either the potency or purity of the drug they were using. Even natural marijuana has had some problems in that respect. Even worse, unscrupulous drug dealers sometimes lace marijuana with hard drugs, such as cocaine or heroin, thereby putting naïve users on the road to addiction to those substances.

Such problems and abuses invariably arise whenever drugs are illegal, and the consequences are sometimes tragic. During America's utopian crusade involving alcohol prohibition in the 1920s and early 1930s, cases of alcohol poisoning from bootleg liquor soared. Mark Thornton, a historian who has studied that era, notes that Prohibition "resulted in lower-quality products that often were a threat to consumers' health." Indeed, "bootleg whiskey was 10 times as poisonous as medicinal alcohol, and the reason for this was its high concentration of alcohol, contaminants,

and deadly poisons." Thornton notes that "the death rate from liquor poisoning increased by 300% during prohibition and quickly declined after the repeal of prohibition."⁵⁷

The most horrific episode occurred at the beginning of the 1930s with the "Jamaica Ginger" disaster, when an estimated 50,000 people suffered paralysis from drinking contaminated alcohol.⁵⁸ One economic effect of Prohibition was to greatly increase the price of available alcoholic beverages-especially good-quality beer, wine, and liquor smuggled in from Canada and other locales. In poor (primarily immigrant) neighborhoods throughout the United States, some people began using a modified ginger extract (or "jake"), combined with cheap alcohol, as a substitute for liquor. Unfortunately, as demand for that product rose, contamination became a serious problem, especially in shipments that originated with two Boston bootleggers. There were growing reports of a mysterious paralysis (often called "jake leg" or "jake leg blues"), a problem that was eventually traced to drinking their product.⁵⁹

As with the more recent episodes involving synthetic drugs, the principal culprit in alcohol poisoning incidents was the lack of quality control. Notably, there have been virtually no cases of health tragedies from contaminated alcoholic beverages produced by major brewers, wineries, and distillers since the end of Prohibition. Consumers not only can be confident about the purity and dosage of a specific beverage they imbibe, they have reliable information about the classes of drinks. Accurate labels let them know that beer will be approximately 4 to 8 percent alcohol, wine, about 14 to 15 percent, and distilled spirits, around 40 percent. Drinkers can then make informed choices about what strength of their chosen drug they wish to consume.

Drug warriors who stress nightmarish incidents involving designer drugs confuse symptoms of the problem with the underlying cause. All illegal drugs entail uncertainty and the risk of threats to health arising from lack of enforceable standards regarding dosage and purity. That is an inherent danger in a prohibition system, regardless of the targeted drug.

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There is one aspect of designer drugs, though, that makes the typical problems associated with prohibition even more salient. A major priority for dealers of synthetic drugs is to alter frequently the chemical composition to stay one step ahead of applicable laws. That incentive leads to aggressive experimentation, often combining a variety of substances and thereby increasing the unpredictable effects of a drug marketed at any given time. Indeed, compared to the rapidly shifting nature of synthetic drugs, marijuana, cocaine, and even heroin produce more stable and predictable effects. Thus, the various problems under a prohibition regime are magnified with synthetic drugs especially those in the NPS category.

CONCLUSION

Drug prohibition, just as its earlier cousin alcohol prohibition, tends to be an exercise in utopian futility. And the attempt to ban designer drugs promises to be the most futile of all such schemes. Prohibitionists face unpalatable policy alternatives. They can frantically attempt to keep up with rapidly shifting drug formulas and enact specific bans, but such measures will likely be overtaken and rendered irrelevant by new developments. The other option is to enact vague, sweeping bans that lend themselves to strained interpretations and potential abuses of power by law enforcement agencies. Moreover, given the dismal results of prohibitionist crusades with regard to more traditional drugs, neither strategy is likely to curb the use of designer drugs to a significant extent.

The reality is that a percentage of people will want to experience chemically induced pleasure regardless of the number, nature, and severity of laws against such behavior. Indeed, people have used an array of ostensibly legitimate products, including glue and paint thinner, to achieve the desired experience. Trying to outlaw all chemical highs is akin to a dog chasing its tail.

Driving such conduct underground merely increases the associated risks, fosters corruption, and creates a variety of undesirable social pathologies—most notably enriching and empowering criminal elements that are willing to traffic in prohibited substances. International drug cartels, as well as violent street gangs in cities around the world, are the principal financial beneficiaries of prohibitionist policies.

Rather than attempting to deal with synthetic drugs using the same strategies that have already failed with respect to marijuana, cocaine, and heroin (and in the earlier crusade against alcohol), policymakers should focus on a harm-reduction approach. In the case of designer drugs, such a strategy would seek to create a legal framework under which the trade in such products would be dominated by legitimate businesses. Laws would focus on requiring production under sanitary conditions, the accurate labeling of all ingredients, and the inclusion of warning labels for consumers about the adverse health consequences of misuse. Funding educational and treatment programs to address the specific problems associated with the abuse of synthetic drugs, while a legitimate topic for debate, would likely be more worthwhile than continuing to waste billions of dollars annually on law enforcement measures that have no realistic hope of stamping out the trade in those or more traditional illegal drugs.

A modest harm-reduction strategy would not be a panacea. Some people will continue to abuse synthetic drugs, just as they do other illegal substances, alcohol, and prescription drugs, and they will suffer adverse consequences to their health. But regulating the trade in synthetic drugs within a legal framework is an attainable objective that would reduce the extent of such negative results, as well as avoid the numerous ugly unintended consequences of prohibition. It is decidedly better than adding yet another front to the futile War on Drugs.

NOTES

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