

THE DRUG CRISIS:

A Description of Contingencies with a Recommendation for Regulated Legalization

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ABSTRACT: Two rival approaches for alleviating the "drug crisis" are examined: the Bush elimination proposal and the legalization proposal. The drug crisis is broken down into relevant behaviors, and separated into an individual level and a social level. How well the two approaches address the contingencies of drug use and trade is examined, as well as the probable side-effects of implementing the two approaches. It is suggested that while legalization might increase the sheer number of users, the individual problems currently associated with use would be significantly alleviated. It is also suggested that legalization would alleviate many of the social problems of the drug crisis. It is concluded that the Bush proposal would exacerbate the problems of both levels and focuses on a specific problem while ignoring the conditions that caused the problem.

In the summer of 1989, United States President George Bush proposed a multi-billion dollar plan to combat the "drug crisis" faced by our country. His plan follows the pattern of Ronald Reagan's "war on drugs", and attempts to eliminate drug use and trade. Also during the summer of 1989, the Libertarian political party called for the legalization of currently illegal drugs (e.g. cocaine, heroin, marijuana) in order to alleviate that same crisis. Few problems are considered more pressing in the United States, and strong feelings have thus been expressed from all ends of the political spectrum regarding strategy for the war on drugs (e.g. Marshall, 1988a; Muck, 1988). It has been suggested (Holland, 1978) and demonstrated (e.g. Agras, Jacob & Lebedeck, 1980; Stokes and Fawcett, 1977) that behavior analysis may have something to contribute to the design of public policy. With this in mind, I will translate the drug policy controversy into behavioral terms and assess the implications of such reframing on drug policy decisions. I will describe the contingencies influencing the major players in the drug crisis, examine both the Bush proposal and the legalization proposal, and evaluate the probable efficacy and side-effects of the two approaches. I will conclude that the evidence supports the regulated legalization position as the approach that would lead to the greater good.

The "drug crisis" is a summary term given for a cluster of behaviors that

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surround the trade and use of currently illegal drugs. There are two aspects to the drug crisis, the individual and the societal. On the individual level there is the physical addiction and subsequent disruption of life associated with drug dependency (American Psychiatric Association, 1987, p. 165-185), as well as the life-style created by drug legislation (Brecher et al., 1972). On the societal level there is the phenomenon of the "drug turf" (and subsequent violent "turf wars", which increasingly imprison our citizens in their homes and lead to the deaths of innocents), the danger posed to others by the addicted individual both through crime and impaired functioning, the overloading of our courts and prisons, the threat of political corruption, the tremendous drain of resources in attempting to enforce drug laws, and the adverse effects in drug-growing countries caused by the power of "drug lords" (Marshall, 1988a).

CONTINGENCIES FOR THE INDIVIDUAL DRUG USER

The behavior of the drug user, and the presumed consequences of this behavior, are at the very core of the whole debate. It is, supposedly, the danger to the addicted individual and others that (s)he comes into contact with that is behind the whole drug uproar. (There is also the matter of moral absolutism. As pointed out by Szasz [1990], the drug uproar closely mirrors other issues in which the ever-popular ideology and political tool, the Judeo-Christian ethic against giving in to pleasurable temptation, has been central. These arguments will be addressed in a subsequent section regarding contingencies influencing policy makers.) The drug user is seen as an unpredictable and dangerous individual, and it is feared that (s)he will introduce others to drugs ("contagion"- e.g. the scare film *Reefer Madness*; laughable to today's mainstream society in its sensationalism and misinformation, the government's rhetoric regarding drug policy has changed little since the film's debut). When attempting to describe the contingencies that influence the behavior of the drug user, however, it is important to keep in mind the distinction between contingencies created by drug intake and contingencies created by drug legislation. Brecher et al. (1972), for example, have conducted a historical and cross-cultural study of the use and trade of currently illegal drugs. They have made a very strong case that the problems we commonly attribute to drug intake are actually a result of the life-style the drug user is forced into by current drug legislation. In order to properly assess the effects of these two different sets of contingencies, it is necessary to examine historical and cross-cultural research in addition to the more traditional research discussed below. Unfortunately, much of the research regarding the drug crisis is of an unreliable survey nature (Michaels, 1987), with the distinction between drug use-created and drug law-created contingencies badly underappreciated. Misinformation regarding the effects of drug use and the results of international drug policy is also widespread (Brecher et al., 1972), disseminated in accord with political goals (Michaels, 1987), and we must thus be careful when

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evaluating "evidence". There are several conclusions, however, that we can confidently draw regarding the effects of drug use and drug laws.

Behaviorally, several processes play a role in the genesis and maintenance of individual drug usage. The initiation of drug use has been attributed to modeling effects (Kandel, 1978, p. 25) and also to negative reinforcement from peer pressure (Fulmer and Lapidus, 1980). The reinforcement paradigm as described by Herrnstein's (1970) hyperbola must also be appreciated (R. F. Rakos, personal communication, November 28, 1989).

Herrnstein's hyperbola describes the progression of reinforcement effects and suggests that reinforcers must be considered relative to all other reinforcers in the environment in order to predict effects (McDowell, 1982). Given this latter assertion, we can better conceptualize the behavior of drug use, particularly in economically depressed inner-city areas. In areas devastated by, among other things, the last ten years of disastrous federal policies towards the poor, the range of available reinforcers is severely limited. The powerful effects of drugs thus stand out, against a backdrop of poverty and slim hope (particularly when an individual lacks marketable skills), as an attainable and immediate source of reinforcement (pleasurable physical effects, a sense of self-efficacy or purpose, temporary escape from despair, etc.). To prevent drug use, then, it is imperative that other reinforcers be readily available to the potential user. They often are not. From this perspective, Ronald Reagan's "just say no" policy seems like cruel irony: first the government withdraws sources of reinforcement (e.g. financial aid for education, job training, social services, etc.) and then it moralistically tells people to avoid the remaining source. Such an approach blames the victim (Ryan, 1970), ignores the social contingencies that created the problem (e.g. Holland, 1978), and furthermore presumes that self-control is simply a matter of willpower. However, self-control research suggests that the immediate reinforcers maintaining drug use will prove difficult to resist: organisms prefer immediate reinforcers to delayed reinforcers, even if the delayed reinforcer is twice as large as the immediate reinforcer (Rachlin and Green, 1972).

Once the behavior is established, the most obvious reinforcer maintaining drug intake is, of course, the drug itself (McAuliffe and Gordon, 1980). Currently illegal drugs, many of which have been used across cultures for centuries, produce powerful physical effects and often addiction (or, in the old tongue, dangerous moral weakness). This perceived danger, along with assorted political and racist reasons, is why many drugs were declared illegal in the first place (Hamowy, 1987; Musto, 1987). Addicted lab animals will perform grueling tasks for a "fix" (Woods, 1978). Addicted humans will similarly do whatever is necessary to obtain their drugs. Addicted humans have reported total life disruption as their drug became their all-consuming reinforcer (Sutker and Archer, 1984, p. 611), although this phenomenon may be more a function of contingencies created by drug legislation than drug use per se.

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As opposed to the drug intake-created contingencies described above, there are several contingencies created by drug legislation that must be appreciated in order to understand the individual level of the drug crisis. Our picture of the drug user is that of the "junkie", an individual who gives up all resources for drugs, with a body slowly falling apart. This picture, however, is more accurately assigned to the influence of drug laws than drug use itself. Drug laws have created a contingency such that being caught using or trading drugs often leads to being imprisoned or fined. Although we will see that these punishers are ineffective in halting drug trade and use, this contingency has forced users into behavior that would be unnecessary in the absence of the drug law. The drug laws drive up the drug prices and thus prompt the user to commit crimes and forego food and medical care; force the user to spend time attempting to buy drugs rather than engaging in more constructive behavior; force the user to buy drugs that may be impure; and encourage the user to abandon mainstream society and join the drug subculture. Most importantly, it is the drug laws and the media's attention to the drug laws (which glamorizes drug use and makes it seem illicit and therefore thrilling), and not the behavior of any individual user, that leads to huge rises in the social level of drug use (Brecher et al., 1972; Zinberg, 1987). Drug users are not somehow lacking in morality; their behavior follows the same laws that govern any other operant response.

To test the hypothesis that drug laws and not the drugs themselves are the cause of supposed "anti-social" behaviors, we must question whether these behaviors were present in the addict population before the drug laws were enacted, or in places where the laws were never enacted. While the physical effects of the drugs certainly preceded the drug laws, the anti-social behavior did not; nor, with the possible exception of "speed", historically or cross-culturally, were anti-social behaviors spontaneously emitted in places where a supply of drugs was not limited by legislation or politics (Brecher et al., 1972). Even in the case of speed, limiting access and criminalizing use and trade did little more than popularize the drug (a familiar trend in drug legislation). The addicted individual may indeed introduce others to the drug, but it is the drug laws and media attention that have historically led to huge increases in the social level of use of any given drug. The addict is thus probably merely an "expert" that is consulted once interest has been roused. Given that drugs do not in and of themselves lead to anti-social activities, drug laws can only be justified from a moralistic standpoint (addressed later), or in terms of a paternal desire to "protect the user from him/herself". While such protection might be a noble (if based on faulty knowledge of the effects of drug use) ambition, it a) is misdirected and useless in the absence of changes in the conditions that led to drug use in the first place, and b) paradoxically achieves the opposite effect, popularizing drug use. Further, temporally distant, intermittently produced, and low intensity punishers are relatively impotent compared with immediate positive reinforcers (Skinner, 1989, p. 118). Against the immediate reinforcers of drug

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usage, society's application of temporally distant contrived punishers of imprisonment or fines have been virtually useless (Hamowy, 1987; Whitlock, 1987). Drug use is in all probability here to stay, and drug laws only exacerbate the situation.

CONTINGENCIES FOR THE DRUG TRADER

Drug use is initiated and maintained by social conditions, and by the addictive qualities of the drugs themselves. Drug trading, however, is created and maintained by a different set of contingencies, contingencies created by drug legislation. Cooper, Heron, & Heward (1987, p. 31-32) describe "setting events", stimulus-response interactions that alter stimulus-response interactions that follow. Extending this concept to our current discussion, legislation limiting drug use and trade is a stimulus that has strengthened the drug use life-style described above by creating a tremendous black market for currently illegal drugs. Drug prices are inflated (at least) several hundred percent on this black market, making illegal drug trade extremely profitable (Barnett, 1987). It is this profit factor that leads to violent turf wars, as rival gangs battle for territories in which to conduct their business. When drugs are available legally, there is little need for a black market, and prices are maintained at a tolerable level. When the drug supply falls into the hands of the black marketeers, however, the addict has no choice but to pay exorbitant black market prices. Like other businesspeople enjoying a large profit margin, black marketeers try to expand their operation. This expansion exacerbates the problems we currently experience. Drug laws thus bring about the very conditions they are intended to prevent.

As with the user's behavior, society's contrived punishers are virtually useless in effecting behavior change in drug traders. Herrnstein's hyperbola predicts this outcome, particularly in economically depressed areas where individuals often lack marketable skills, and where drug trade may thus appear as the only route to financial security and the social reinforcers this entails. Besides, it is usually only a user or minor courier who is caught and brought up on charges. The real sources are rarely apprehended, and for every minor player that is taken out of the game, there is a substitute who is eager to take his/her place.

One of the great virtues of behavior analysis is its emphasis upon evaluating the results of interventions rather than relying up on preconceived notions. To take a common example from the clinical literature, a misbehaving child is often unwittingly reinforced by attention for this misbehavior. The misbehavior will persist as long as it is reinforced with attention. Historically, the same effect has occurred with drug legislation. While the intentions of righteous attention are noble, the behavioral effects run counter to the purpose of the legislation. Conceptualizing the question from a behavioral research standpoint, the "A" of our AB design would be pre-1914 (Harrison Narcotics Act implemented). We can think

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of 1914 as the point at which the "B" of our AB research design begins. The B phase has seen an exacerbation of the problems we sought to solve. For the past 76 years we have poured more and more resources into efforts to eliminate drug trade and use, without ever bothering to note what the results of these efforts are (Barnett, 1987; Marshall, 1988c). An appreciation of the behavioral effects of drug laws is seriously overdue. Either a return to baseline or a "C" phase (possibly of regulated legalization) is clearly indicated.

CONTINGENCIES FOR POLICY MAKERS

The relevant behaviors of policy makers include the introduction and enforcement of drug laws, as well as using their influence to make "the drug crisis" a pressing issue. As behaviorists, we realize that responses that have produced reinforcing consequences are maintained in the behavioral repertoire. Clearly, attempts at drug law enforcement have been dismal failures and have led to great damage. There would thus seem to be a contradiction here. The fact that drug laws have continued to be enforced and made more and more severe, despite the damage they have done, suggests that something other than a desire to protect public interest is involved (which we could also infer from the behavior of U.S. Commissioner of Narcotics Harry Anslinger, an adamant anti-drug influence who nonetheless provided a steady supply of narcotics to an addicted member of Congress - Brecher et al., 1972, p. 36-37). We can only conclude that there is something beyond the stated intentions of drug legislation that leads policy makers to continue this damaging battle. The task before us is therefore to identify the reinforcing elements in current drug policy. Listening to the Reagan/Bush rhetoric, it might be supposed that simple moralizing and shrewd politics are at the root of the drug hysteria. This idea has some historical support, including the spearheading efforts of William Jennings Bryan (the famed fundamentalist prosecutor from the Scopes monkey trial) regarding the legislation that would set the pattern for drug legislation in the United States, the Harrison Narcotics Act of 1914. It is possible that the Protestant ethic, which provides little sympathy for "deviants" such as drug addicts, plays a role in the ongoing battle against drugs. This would also explain the rhetoric against methadone maintenance, that it is simply exchanging one crutch for another. Drug use, according to this system of thought, should be ceased by force of will ("just say no"). The popularity of the Protestant ethic (a "rule" which changes little, if at all, with the actual contingencies) in the United States makes for very easy scapegoating of the addict (Szasz, 1987); or, if any sympathy is evoked for the addict, it is rapidly changed into violent anger against the "pusher", who has replaced the "Communist" as the great faceless threat to American values (Singer, quoted in Marshall, 1987). This makes a very efficient distraction, and allows the policy maker to avoid addressing the social conditions that created the drug use originally. Certainly, none of the

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history we have examined should be news to President Bush, and yet his rhetoric on the "drug crisis" consists largely of moralizing, completely oblivious of the historical facts regarding such drug elimination efforts. To go beyond our data, then, these moralist and political ideas may unfortunately be more accurate than we would idealistically like to believe of our President (who we would hope would have the well-being of the country, rather than his ideology or political popularity, at heart). Perhaps even more distressing, however, are charges that the "drug crisis" is really a cover that allows the U.S. government to carry out unpopular foreign policy (Marshall, 1987), including the support of brutal and oppressive governments.

Let us ignore these possible motivators, however, and examine the contingencies faced by the government official. Given the assumption that a government official has come to the conclusion that drug legalization is the proper course of action, what would be the contingencies facing this official? Government officials are under serious contingencies; the unpopularity of certain stances, e.g. drug legalization, makes the punisher of losing an election or being voted out of office a virtual certainty if the candidate appears to hold the unpopular view (Skinner, 1989, p. 119). With only a few notable exceptions, politicians who advocate drug legalization never make it into office, or, if they make it in, except in rare cases, they soon leave. In contrast, being "tough on drugs" has proven to be a winning strategy. This stance is thus maintained by the powerful reinforcers of power and influence.

THE BUSH PLAN: EDUCATE, TREAT, ENFORCE

In the tradition of Bryan, Anslinger, and the Harrison Narcotics Act, the Bush drug initiative follows the "educate, treat, eliminate, and punish" approach advocated by former President Ronald Reagan. Against the powerful contingencies governing drug use and trade, however, Reagan's strategy was ineffective, to put it mildly (Marshall, 1988c). For all the billions Bush has set aside for preventive education, treatment, elimination, and punishment, his plan does not address the contingencies of drug use and trade, the conditions that created the drug use, nor the side-effects of attempting to stop drug use and trade. Historically, such efforts have been dismal failures and have exacerbated the very problems they sought to solve. Assuming that solving the problems caused by drug use (which are more accurately conceptualized as due to drug laws) is the actual goal, the Bush effort is clearly misdirected.

The large numbers of high school and college age drug users (Barnes, 1988, p. 1731) challenges the efficacy of past preventive education efforts. Some researchers have gone so far as to call the effort a failure (e.g. Zinberg, 1987). This can be explained in several ways. First, the main assumption of the education approach, if people were aware of the effects of drug use then they would not take

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drugs, is probably faulty. Although many users did not believe they would get addicted, to suggest that new drug users have no knowledge of the possible adverse consequences of drug use is unreasonable. Second, the education effort has been mishandled. Drug education has consisted of sensationalistic misinformation and warnings (Hamowy, 1987; Zinberg, 1987), and it has been suggested (Brecher et al., 1972) that the failure of education efforts may be due to the fact that young users see that they have been fed lies. They then assume that nothing they have been told about the harmful effects of drugs can be true. Third, the education approach completely misses the point raised earlier about the scarcity of alternate reinforcers available in the addict's environment, and the skill deficits of the users that often are evident as well. Fourth and finally, some behaviors produce such potent reinforcers that knowledge of the inherent dangers is an insufficient deterrent. Even given the negative effects of drug use under current drug laws, the reinforcers that are provided by drug use and trade are too powerful to be countered by the known dangers (a point that we could also extend to nicotine, alcohol, sugar, salt, and caffeine consumption). As might be expected from what we have discussed, the success rates of treatments aimed at breaking drug addiction are poor (Burt, Brown, & DuPont, 1980; Meyer and Salmon, 1984, p. 328).

Drug traffic would in all probability not be significantly hampered by increased border patrols. Even as highly regulated a "society" as the U.S. Army was unable to stop drug traffic among its members (Brecher et al., 1972). The U.S. is too large and there are too many ways to get drugs into the country (Marshall, 1988b, p. 13-14), and thus despite all the resources already spent on attempts to keep drugs out of the country, virtually anyone who wants drugs can get them easily (Michaels, 1987). Even if it were more successful than the Reagan plan, the Bush elimination proposal would lead to increased violence, as a lessened supply of drugs would increase their already inflated price and thus force addicts to perpetrate even more crimes in order to support their addictions. Or, less drastically, drug users would simply change their drug of choice (Brecher et al., 1972). The "elimination" attempt, although perhaps (or perhaps not) born of noble intentions, would in all probability be a waste of time, money, and lives. Additionally, as we have seen, drugs are too powerful a reinforcer for our temporally distant, intermittently applied, low intensity contrived punishers, for users and especially for traders. Historically, even punishers that would be considered barbaric by our standards have been useless in limiting drug use and trade (Brecher et al., 1972). This pattern is currently being repeated in several countries throughout the world. Despite claims to the contrary, severe penalties, including the death penalty without benefit of a trial, have been ineffective in limiting drug use and trade (Michaels, 1987; Trebach, 1987). The call for more severe penalties thus makes for nice political rhetoric, but for poor strategy. The Bush initiative would alleviate neither the individual nor the societal aspects of the drug crisis, and would probably exacerbate both aspects.

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THE LEGALIZATION ALTERNATIVE

Proponents of legalization, on the other hand, suggest that attempting to eliminate drug use and trade is futile. Rather than attempting to eliminate drug use and trade, they seek to regulate it. (They have read their sociology: They know that you cannot eliminate socially-labeled deviance, you can only regulate it.) There are many views on how this regulation would be accomplished, but one option is simply to treat currently illegal drugs like the currently legal drugs tobacco and alcohol and allow a semi-free market. While this might be acceptable for a drug such as marijuana, this is probably not a viable option for the more powerful drugs. Regulating sales would be difficult, and large corporations and their advertising firms are probably not the ones we should count on to suggest responsible usage. Their own contingencies force them to drive sales up to as high a level as possible, and that is not the goal of any responsible drug policy. Another option is to place the burden for dispensing drugs in the hands of the medical profession, and specialized dispensement centers. This latter option is particularly attractive, because it embraces a more realistic view of drug treatment. Due to the reinforcing properties of drugs, total abstinence may be an impossible goal for most. The poor success rates of treatment centers testifies to this possibility. Perhaps maintenance at the lowest possible levels would be a more realistic goal. The fact that many users do not become addicts suggests that controlled usage should be seriously explored as an option (Zinberg, 1987), as it has been with nicotine (e.g. Glasgow, Morray and Lichtenstein, 1989) and alcohol (e.g. Sobell and Sobell, 1984). Regardless of the exact path chosen, the legalization initiative would also have side-effects, on both the individual and societal levels.

Most seriously, drug usage would probably increase. An argument could be made that this would not occur, given that the established contingencies have been demonstrated ineffective at halting drug usage and trade and that virtually anyone who wants drugs can get them. However, using prohibition as a historical precedent we should predict a rise in the sheer number of users (Burnham and Kerr, 1988). In reality, we would have to be willing to accept the probability of a percentage of the population being perpetually addicted to currently illegal drugs (given an assumption of no change in the economic and social conditions that gave rise to the drug use in the first place). We must, however, keep in mind that this is what we face currently, and there are no indications that this will change. Furthermore, society tolerates addiction to nicotine (and the 1,000 people who die each day from cigarettes in the United States, Goldstein and Krasner, 1987, p. 85) and alcohol (American Psychiatric Association, 1987, p. 174; Barnes, 1988, p. 1729). Another negative side-effect of legalization would be the probable need for widespread drug testing in professions and activities where public safety is at stake (although arguments have been made that this is already necessary, see Stone and

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Thompson, 1989 for a discussion of the drug testing controversy). Other side-effects would be more positive: a drop in crime as drugs drop several hundred percent in price, a great increase in the quality of living for the addict, relief for our overburdened legal and corrections systems, enormous revenue from legal drug trade instead of billions spent on enforcement (this profit could be put towards research on treatment and education, which might increase their efficacy, as well as towards ending the social conditions that gave rise to the drug use originally), the end of the American drug "turf war" and the end of the "drug lords". There would seem to be no problem that legalization would bring about that we do not already see, in abundance. Legalization might increase the sheer number of users, but it would certainly improve the lot of the user and would alleviate many problems of the social level of the drug crisis.

CHANGING THE CONTINGENCIES OF THE POLICY MAKER

Clearly, there are serious issues to consider before changing drug policy. Nonetheless, an analysis of contingencies suggests that legalization will lead to the greater good. What must be acknowledged is that without efforts to improve the social conditions that led to drug use in the first place (the greatest good, because it might do away with the question entirely), efforts to eliminate drug use and traffic are pointless. The contingencies that support drug use and trade are too powerful, and thus given no change in the social conditions that give rise to drug use, we will always have a percentage of the population addicted to currently illegal drugs. An analysis of history and relevant contingencies suggests that President Bush's policy will continue to be ineffective, and suggests legalization as the strategy that will alleviate many of the societal and individual aspects of the drug crisis. The war on drugs is a losing battle, one that should have never begun.

As stated earlier, government officials are under strict contingencies regarding the drug crisis. Any indication of being "soft on drugs" is an invitation to be voted out of office. A social marketing strategy (Geller, 1989) for legalization is thus required in order to alter voting patterns and consequently shape the behavior of legislators. Prohibition was not ended because of its adverse effects; it was ended because "the propaganda war" was won by those in favor of legalization (Burnham and Kerr, 1988). Obviously, the adverse effects of criminalizing drug usage and trade have not been enough to change the behavior of legislators either.

Other groups, e.g. the Libertarians and Humanist groups, share the legalization conclusion. Social marketing efforts could be done in association with such organizations. The drug crisis will not go away by throwing more and more resources at programs that have been shown to be ineffective and damaging. With each new effort to "crack down", the drug crisis only gets worse. Social marketing aimed at the government and the media will have to be undertaken so as to allow the legalization process to begin. This will be the first step in alleviating a large

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part of the drug crisis, and it will have to begin soon. "Ice", a smokable amphetamine derivative with powerful and comparatively long-lasting effects, is beginning to make its debut in our streets. Given the potential profits of trade in this soon-to-be popular drug, wars between drug trading gangs will be bloodier than ever. We need to evaluate our drug policy, and to realize that our current policy is not achieving its stated aims. It is not only not reducing the problem, it is exacerbating it. Anti-cigarette smoking campaigns have been successfully conducted without the horrible side-effects of making the drug illegal (e.g. Pierce, Macaskill, Mappstat & Hill, 1990). It is time for those leading the war on drugs to learn from this example.

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