

Uniform Controlled Substances  
Act (UCSA)(1990)  
Controlled Substance Analogs



---

# Table of Contents

*C-63* Policy Statement

*C-65* Highlights

*Section 101 C-67* Definitions

*Section 201 C-67* Authority to Control. Subsections (b) and (g)

*Section 214 C-68* Controlled Substance Analog Treated as Schedule I Substance



---

# Uniform Controlled Substances Act (UCSA)(1990) Controlled Substance Analogs Policy Statement

America has experienced for the past 20 years a growth in the popularity of controlled substance analogs, or “designer drugs.” Federal and state drug statutes control substances by listing them on schedules. Each controlled substance is defined according to a precise chemical structure. Manufacture, distribution, and use of a substance with a listed chemical structure is subject to regulation. In the 1970s drug dealers quickly realized they could evade drug laws by creating substances which varied slightly in molecular structure from commonly abused controlled drugs. Because these new analog substances were unscheduled, their production and use were unrestricted. Chemists with rudimentary scientific knowledge and no concern for public health consequences began to manufacture analogs with devastating results.

“China White”, an analog of the controlled substance fentanyl, was 3,000 times more potent than heroin and resulted in hundreds of drug overdoses in Southern California and other areas<sup>1</sup>. An analog of Demerol was linked to Parkinson's disease which resulted in near total paralysis of dozens of users and identification of over 400 users believed to be at serious risk of developing Parkinson's disease<sup>2</sup>. The deaths of 11 people in the New York-New Jersey-Connecticut area resulted from ingestion of a potent designer drug called “Tango and Cash.” The drug is laced with a powerful tranquilizer which makes it 27 times more potent than the heroin on which it is based<sup>3</sup>.

In 1990 the National Conference of Commissioners on Uniform State Laws (NCCUSL) promulgated legislation to help states deal fairly and effectively with the designer drug problem. The Uniform Controlled Substances Act (UCSA)(1990) provisions define and prohibit the production of designer drugs and allow emergency scheduling of analogs to avoid an imminent hazard to the public safety. Simultaneously, the UCSA permits legitimate scientific research to continue even though the research may result in accidental production of an analog. Protection is also afforded the use of analogs for purposes other than human consumption.

<sup>1</sup>American Prosecutors Research Institute, *Overview STATE DRUG LAWS FOR THE '90s* 37 (1991).

<sup>2</sup>*Id.*

<sup>3</sup>*Id.*



---

# Highlights of the Uniform Controlled Substances Act (UCSA)(1990) Controlled Substance Analogs

- Defines a controlled substance analog as a substance substantially similar to a controlled substance in chemical structure which has, or is represented to have, an effect on the central nervous system substantially similar to that of a controlled substance.
- Excludes from regulation substances which are the subject of legitimate scientific research or are intended for purposes other than human consumption.
- Allows temporary emergency scheduling of an analog to prevent imminent hazards to public safety upon receipt of relevant information by prosecutors.
- Requires commencement of general comprehensive rulemaking proceedings simultaneously with issuance of an emergency scheduling order.
- Authorizes prosecution of illegal manufacturers and distributors of analogs.
- Requires analogs to be treated as Schedule I controlled substances for prosecution and penalty purposes.
- Terminates prosecution of an analog case if the appropriate agency finds that the analog should remain unscheduled.



---

# Uniform Controlled Substances Act (UCSA)(1990) Controlled Substance Analogs

## **Section 101. Definitions.\***



(3) (i) “Controlled substance analog” means a substance the chemical structure of which is substantially similar to the chemical structure of a controlled substance listed in or added to Schedule I or II and:

(A) which has a stimulant, depressant, or hallucinogenic effect on the central nervous system substantially similar to the stimulant, depressant, or hallucinogenic effect on the central nervous system of a controlled substance included in Schedule I or II; or

(B) with respect to a particular individual, which the individual represents or intends to have a stimulant, depressant, or hallucinogenic effect on the central nervous system substantially similar to the stimulant, depressant, or hallucinogenic effect on the central nervous system of a controlled substance included in Schedule I or II; but;

(ii) the term does not include:

(A) a controlled substance;

(B) a substance for which there is an approved new drug application;

(C) a substance with respect to which an exemption is in effect for investigational use by a particular person under Section 505 of the Federal Food, Drug, and Cosmetic Act [21 U.S.C. 355] to the extent conduct with respect to the substance is permitted by the exemption; or

(D) any substance to the extent not intended for human consumption before an exemption takes effect with respect to the substance.



## **Section 201. Authority To Control. Subsections (b) and (g).**



(b) In making a determination regarding a substance, the [appropriate person or agency] shall consider the following:

(1) the actual or relative potential for abuse;

(2) the scientific evidence of its pharmacological effect, if known;

(3) the state of current scientific knowledge regarding the substance;

(4) the history and current pattern of abuse;

(5) the scope, duration, and significance of abuse;

(6) the risk to the public health;

(7) the potential of the substance to produce psychic or physiological dependence liability; and

(8) whether the substance is an immediate precursor of a controlled substance.



(g) Upon receipt of notice under Section 214, the [appropriate person or agency] shall initiate scheduling of the controlled substance analog on an emergency basis pursuant to this subsection. The scheduling of a substance under this subsection expires one year after the adoption of the scheduling rule. With respect to the finding of an imminent hazard to the public safety, the [appropriate person or agency] shall consider whether the substance has been scheduled on a temporary basis under federal law or factors set forth in subsections (b) (4), (5), and (6), and may also consider clandestine importation, manufacture, or distribution, and if available, information concerning the other factors set forth in subsection (b). A rule may not be adopted under

\*The Uniform Controlled Substances Act (UCSA)(1990) was drafted and distributed by the National Conference of Commissioners on Uniform State Laws. The Commission has excerpted the UCSA analog provisions and reformatted them to be consistent with the Commission's other model acts.

subsections (b)(4), (5), and (6), and may also consider clandestine importation, manufacture, or distribution, and if available, information concerning the other factors set forth in subsection (b). A rule may not be adopted under this subsection until the [appropriate person or agency] initiates a rulemaking proceeding under subsections (a) through (d) with respect to the substance. A rule adopted under this subsection lapses upon the conclusion of the rulemaking proceeding initiated under subsections (a) through (d) with respect to the substance.

**Section 214. Controlled Substance Analog Treated As Schedule I Substance.**

A controlled substance analog, to the extent intended for human consumption, must be treated, for the purposes of this [Act], as a substance included in Schedule I. Within [ ] days after the initiation of prosecution with respect to a controlled substance analog by indictment or information, the [prosecuting attorney] shall notify the [appropriate person or agency] of information relevant to emergency scheduling as provided for in Section 201(g). After final determination that the controlled substance analog should not be scheduled, no prosecution relating to that substance as a controlled substance analog may be commenced or continued.

COMMENT

This section is based on Section 203 of the federal Controlled Substances Act, 21 U.S.C. 813, as added by the Anti-Drug Abuse Act of 1986, §§ 1201-1204 (the "Controlled Substance Analogue Enforcement Act of 1986"). Because a controlled substance analog, as defined by Section 101, is an unscheduled substance, the section provides for procedures to be initiated to schedule the analog as well as to prevent further prosecution if the analog is found to be not appropriate for scheduling as a controlled substance.

ANALYSIS

**Section 101. Definitions**

**Section 201. Authority to Control. Subsection (g)**

**Section 214. Controlled Substance Analog Treated as Schedule I**

**Hypothetical**

**Joe Cooker is a former college student with a rudimentary knowledge of chemistry and a keen interest in illegal drugs both from the standpoint of abuse and**

**economic profit. One day Joe learns through friends that by making a simple alteration in the chemical structure of the controlled substance ABC, he can produce a legal substance that, because it is not listed on any "schedule" is non-controlled and legal. The new drug has the same or greater hallucinogenic effect on the central nervous system as the outlawed ABC. Joe and his friends invest in some laboratory equipment, set up a primitive lab in a garage, and begin manufacturing the new substance ABCX or "Utopia" in bulk quantities. No scientific studies of the physical or psychological effects of ABCX on humans have ever been conducted. Indeed, no animal studies of any kind have taken place. ABCX has not been subjected to any of the controls by the FDA to protect the public, but Joe and his friends continue to manufacture and distribute ABCX in an indiscriminate manner. Soon public health officials are receiving reports of ABCX abusers needing medical and psychological treatment. Law enforcement officials are helpless to stop this activity because ABCX can't become a controlled substance until the lengthy process for scheduling has been completed.**

The State of Justice, where Joe resides, adopts an emergency scheduling provision similar to Section 201(g) of the UCSA (1990). The state scheduling agency initiates an "emergency scheduling" proceeding with respect to ABCX by publishing a public notice. Joe and his cohorts catch wind of this proceeding and simply begin to produce a new and even more dangerous analog of the controlled substance ABC which they dub ABCZ or "Eros." Six months later, when the state completes the emergency scheduling of ABCX, there is none being produced or sold on the street. Nearly a year later, law enforcement personnel have identified the new substance as ABCX and, once again, the state initiates "emergency scheduling" proceedings. Joe and his cohorts merely create another variation on the chemical structure of ABC and remain in business fully oblivious to the public health consequences of their activities.

**Analysis\***

Unless the State of Justice enacts an "analog" statute similar to Section 101(3) and Section 214 of the UCSA (1990), this scenario may be played out indefinitely.

\*The analysis, prepared by the National Drug Prosecution Center and Harry Harbin of the U.S. Department of Justice, does not necessarily represent the views of the National Conference of Commissioners on Uniform State Laws. The analysis was excerpted from the publication entitled "STATE DRUG LAWS FOR THE '90s" (1991).

Indeed, such scenarios were common prior to the 1986 enactment of the federal "analog" statutes. As set forth below, the UCSA (1990) provisions are narrower than the federal provisions, provide full protection for legitimate scientific research and for use of analogs for purposes other than human consumption. They also provide safeguards against improper prosecution for mere accidental production of a controlled substance analog and they insure that the final determination of whether an analog is to be treated as a controlled substance is made by the appropriate state scheduling agency.

In 1986, Congress reported that "fentanyl" analogs had resulted in over 100 drug overdoses because they were more than 3,000 times more potent than the heroin molecule on which they were based. Moreover, one designer drug - MPPP, an analog of Demerol (meperidine) had been marketed with processing impurities (MPTP) which caused almost total paralysis in dozens of users because of a suspected link between MPTP and Parkinson's disease. At least 400 additional persons had been identified as being at serious risk of developing Parkinson's disease because of their exposure to these impurities. There was, at the time, no provision under the UCSA (1970) or under federal law for prosecuting those responsible for the manufacture and sale of such uncontrolled substances.

Makers of "designer drugs," operating out of illicit laboratories, chemically alter a controlled substance by making a very slight alteration in the chemical structure of the controlled substance in order to produce a new, uncontrolled - and therefore "legal" - substance which produces an effect on the central nervous system nearly identical to that produced by the controlled substance on which it is based. Such "designer drugs" were originally produced in a successful effort to evade the drug laws. The new substances were produced more quickly than the Drug Enforcement Administration (DEA) could add them to the schedules of controlled substances; thus, the manufacture, distribution, and use of these "designer drugs" were not illegal under either federal or state drug laws. Moreover, each time DEA completed scheduling proceedings, the illicit chemists merely made another variation in the chemical structure and invented a new, uncontrolled designer drug.

There was nothing in the UCSA (1970) which would allow states to deal effectively with the "designer drug" problem in an expedited manner. Indeed all a state scheduling agency could do was to initiate formal scheduling proceedings with respect to the substances which might consume months or even years during which the traffickers of designer drugs could ply their trade at will without any concern for the public health effects of their products. Section 201(g) of the USCA

(1990) seeks to rectify this situation by vesting state agencies with "emergency scheduling authority" which allows for the temporary placement of a substance in Schedule I based upon an expedited determination that such action is necessary to "avoid an imminent hazard to the public health." This "temporary scheduling" order may not be made unless the state agency also initiates formal scheduling proceedings under Section 201(a) with respect to the substance.

Section 201(g) of the USCA (1990) is similar to the "emergency scheduling" provision under federal law, which is codified as 21 U.S.C. 811(h). This provision was enacted in 1984 as part of the initial federal response to the "designer drug" problem. It authorized the Attorney General to place a substance in Schedule I on a temporary basis in order to avoid an "imminent hazard to the public safety," after a 30-day public notice period. This "emergency scheduling" order would expire at the end of one year unless extended for a six-month period during the pendency of formal scheduling proceedings. The legislative history of this provision made clear that its purpose was "to protect the public from drugs of abuse that appear in the illicit drug traffic too rapidly to be effectively handled under the lengthy routine scheduling procedures." S.Rep.No. 225, 98th Cong., 2d Sess., at 264, reprinted in (1984) U.S. Code Cong. & Ad. News 3182, 3446. However, even this "emergency scheduling" authority proved ineffective in stemming the tide of "designer drugs."

Indeed, a congressional report noted in 1986 that:

DEA in the course of its investigation has found a very small number of illicit chemists have been very carefully developing new drugs to stay ahead of DEA's scheduling actions. As a consequence, even with the emergency scheduling authority (of 21 U.S.C. 811(h)(1), the public remains at risk, and dangerous chemists are able to escape prosecution due to the following factors. First, there is an enormous number of drugs which can yet be developed. Second, there is an unavoidable delay in discovering that such drugs are being distributed. Third, there is the unavoidable obstacle of establishing that these drugs are being abused and pose an imminent threat to the public health. Finally, there is the [lapse] of time needed to undertake and complete action to control the drugs. The only way to effectively protect the public is to investigate and prosecute these chemists... prior to formal control of the drugs.

H.R. Rep. No. 848, 99th Cong., 2d Sess., at 5 (1986) (emphasis added).

Section 101(3)(i) and Section 214 of the UCSA (1990) represent a reasonable and measured response to the problems noted by Congress in the foregoing passage. They would allow for prosecution of "designer drug" cases, in limited circumstances, prior to the completion of any "emergency" or routine scheduling proceeding. First, Section 101(3)(i) limits the definition of "controlled substance analog" to substances which:

(1) are substantially similar to the chemical structure of a controlled substance in Schedule I or II; and

(A) which have a stimulant, depressant or hallucinogenic effect on the central nervous system that is substantially similar to the effect of a controlled substance in Schedule I or II; or

(B) with respect to a particular individual, which the individual represents or intends to have a stimulant, depressant, or hallucinogenic effect on the central nervous system substantially similar to that of a controlled substance in Schedule I or II.

The definition specifically excludes any substance (1) which is already a controlled substance; (2) which is subject to an approved new drug application; (3) which is subject to an exemption for investigational use by a particular person to the extent of conduct that is pursuant to that exemption; and (4) which is not intended for human consumption before such an exemption takes effect with respect to the substance. Moreover, Section 214 specifically provides that a controlled substance analog may only be treated as a substance included in Schedule I "to the extent [it is] intended for human consumption."

It is important to note, first of all, that the exceptions specified in Section 101(3)(i) insure that no prosecution is brought because of use of controlled substance analogs for legitimate scientific research or for purposes other than human consumption. This is as it should be since the motivating concerns behind these provisions are to protect the public health and safety and to allow for prosecution only of those unauthorized "chemists" and their "clients" who intentionally produce, distribute, and use "designer drugs" for purposes of human consumption. Likewise, this provision would not allow prosecution for the production of a controlled substance analog which was produced accidentally during the course of chemical research because such an "accidental analog" would not be produced for purposes of human consumption. (Such a prosecution would also be barred by the requirements in the controlled substance offense provisions that an offense be committed "knowingly or

intentionally.") Equally important is the fact that this provision would apply only to substances which are structurally similar to a controlled substance in Schedule I or II and which are either substantially similar in their pharmacological effect or which are intended or have been represented by the defendant to have such a substantially similar effect.

Moreover, the USCA (1990) contains safeguards against unfair prosecution and conviction even in the limited class of cases which falls within the scope of the statutes. Section 214 requires a prosecutor to notify the state scheduling agency of information relevant to "emergency scheduling" of a controlled substance analog within a certain number of days after initiating a prosecution with respect to that analog. Section 201(g) specifies that the state agency must initiate an "emergency scheduling" proceeding upon receipt of such notice. More importantly, Section 214 specifically provides that no prosecution relating to an analog may continue or take place following a final determination by the state agency that the substance should not be scheduled. Thus, the statutes insure that the final determination of what should be treated as a controlled substance will be made by the agency possessing the expertise to make such determinations scientifically and objectively.

It is also very important to note that the UCSA (1990) is much narrower than the comparable provisions of the Federal Controlled Substance Analogue Enforcement Act of 1986, which Congress enacted as Subtitle E of the Anti Drug Abuse Act of 1986. The federal provisions, which are codified as 21 U.S.C. 802(32) and 813, resemble the UCSA (1990) in that they limit prosecutions only to cases involving analogs intended for human consumption and contain definitional exceptions which safeguard legitimate scientific research and production or use of analogs for purposes other than human consumption. However, where the USCA (1990) allows only two alternative theories of prosecution (i.e., the state must show in all cases that the analog has a chemical structure that is substantially similar to a controlled substance in Schedule I or II and must also show either that the analog, in fact, has a pharmacological effect that is substantially similar to that of a controlled substance in Schedule I or II or that the analog was represented or intended to have such a substantially similar effect by the particular defendant), the federal provisions allow three alternative and greatly simplified theories of prosecution.

Thus, a person may be convicted of an analog offense under the federal provisions if the government establishes either (1) that the alleged “analog” is substantially similar in structure to a controlled substance in Schedule I or II; (2) that the “analog” has a substantially similar pharmacological effect on the central nervous system as a controlled substance in Schedule I or II; or (3) that the “analog” has been represented or intended to have such a substantially similar effect by the particular defendant in a case. See 21 U.S.C. 802(32)(a).

Thus there is no requirement under the federal provisions, as there is under the UCSA (1990), that an analog be shown to be substantially similar in chemical structure to a controlled substance in Schedule I or II in every case. Moreover, the federal statute does not require a prosecutor to notify the DEA of information relevant to “emergency scheduling” proceedings with respect to a particular substance after an analog prosecution is initiated based upon that substance, and does not provide that an analog prosecution shall not commence or continue if DEA makes a final determination not to schedule a controlled substance.

It should be noted that the federal analog provisions are being used extensively — and with considerable success — by federal prosecutors. A unanimous panel of the United States Court of Appeals for the Fifth Circuit upheld the federal statute against a vagueness challenge in a prosecution involving MDMA. See *United States v. Desurra*, 865 F.2d 651 (5th Cir. 1989).

Finally, it is simply specious to claim, as some have, that enactment of either the analog provisions or the emergency scheduling statute would violate the ex post facto clause. None of the sections would authorize prosecution for activities involving analog substances which occur prior to their enactment by the states. Once

the analog provisions are adopted, it would thereafter be illegal to manufacture, distribute or possess “controlled substance analogs” for purposes of human consumption with the exception of legitimate scientific research. Similarly, once a substance is added to Schedule I on an “emergency basis” it will thereafter be illegal to manufacture, distribute or possess the substance at least during the term of the emergency scheduling order. Furthermore, once the UCSA (1990) is enacted, persons will be on fair notice of what the law requires for the reasons previously stated.

To summarize, there is no provision in the UCSA (1970) to deal with the “designer drug” problem. Thus, state law enforcement officials are powerless in combatting the manufacture and abuse of such “uncontrolled” substances. Section 201(g) of the UCSA (1990) would go part of the way toward resolving this problem by giving state scheduling agencies authority to do “emergency scheduling” of substances on a temporary basis to avoid “an imminent hazard to the public safety.” Section 101 (3) and Section 214 of the UCSA (1990) would give state and local law enforcement personnel the power to bring “analog” prosecutions in limited numbers of cases while at the same time, protecting legitimate scientific research and use of analogs for purposes other than human consumption. Finally, these provisions would provide adequate safeguards against criminal prosecution for the accidental production of a controlled substance analog and would insure that the final determination of whether an analog should be treated as a controlled substance be made by the state scheduling agency.