

Trends in Analog Drug Use and Control

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More appropriate title:

Everything you ever wanted
to know about drug
scheduling
and more



Presentation Outline

- Introduction to Controlled Substance Act
- Scheduling process
 - Drug Classes
 - Placement
 - Indicators of Abuse
- Schedules
 - Temporary Schedules
 - Analog Substances
 - Examples
- Commonly seen drugs

Controlled Substance Act

- Controlled Substance Act (CSA), Title II and III of the Comprehensive Drug Abuse Prevention and Control Act of 1970
- Consolidation of many laws which regulate the manufacture and distribution of narcotics, stimulants, depressants, hallucinogens, anabolic steroids, and chemicals used in illicit production of controlled substances

- CSA also describes the method for controlling, adding, removing, decontrolling or transferring substances in the schedules
- CSA placed all substances which were regulated at that time into one of five schedules and grouped within that schedule by their drug class

Drug Classes

- Narcotics/opiates
 - Derived from Greek word meaning stupor
 - Opium, opium derivatives, and semi-synthetic derivatives
 - Used to treat pain, suppress cough
 - Sense of well-being by reducing tension, anxiety and aggression

■ Stimulants

- Referred to as “uppers”
- Decrease effects of fatigue on mental and physical tasks by stimulating the central nervous system
- Legitimate medical use for obesity, narcolepsy, and ADD
- Caffeine and nicotine are accepted stimulants in society

■ Depressants

- Referred to as “downers”
- Induce sleep, relieve stress, and anxiety by depressing the central nervous system
- Two major groups:
 - Barbiturates – similar effects to alcohol
 - Benzodiazepines – one out of every five prescriptions
- Used with other drugs to alter side effects

■ Hallucinogens

- Produce changes in perception, thought, and mood
- Biochemical, pharmacological, and physiological mechanisms are not understood
- Misnomer because they do not always produce hallucinations

■ Steroids

- Chemically and pharmacologically related to testosterone
- Promotes muscle growth
- May be associated with psychotic reactions, manic episodes, anger/hostility, and violent behavior
- Limited number of steroids have been approved for medical/veterinary use

Scheduling process

- DEA, Department of Health and Human Services (HHS) or person/group (including laboratories and law enforcement agencies) initiates proceedings to add, change, or delete substance
- DEA does an evaluation then HHS does scientific and medical testing in collaboration with the FDA, National Institute on Drug Abuse (NIDA), and the scientific community at large

- HHS then recommends whether the drug should be controlled and which schedule it should be placed
- DEA may not add the drug to its schedule if HHS says the drug should not be controlled

Drug Schedule Placement

- Based upon the substance's
 - medical use
 - potential for abuse
 - safety or dependence liability



Determining Schedule

- Criteria listed in Section 201(c), [21 U.S.C. 811 (c)] of the CSA include:
 - Drugs actual or relative potential for abuse
 - Scientific evidence of the drugs pharmacological effects
 - State of scientific knowledge
 - History and pattern of abuse
 - Scope, duration, and significance of abuse
 - Risk to public health
 - Psychic or physiological dependence
 - Immediate precursor of a substance already controlled

Potential for Abuse



- Basis for determining if the drug will be controlled, however, there is no clear definition in the CSA

- Indicators of abuse:
 - Drug is being used in amounts sufficient to be hazardous to their health/safety
 - Diversion of drug from legitimate channels
 - Users are taking drug without any medical advice
 - New drug that is similar to a drug that is already controlled

Federal Register

- Once the drug has been deemed necessary to control, decontrol, or reschedule, a proposal goes into the *Federal Register*
 - official daily publication for rules, proposed rules, and notices of Federal agencies and organizations
- Can be found on www.gpoaccess.gov

- Comments can be made about the drug or a hearing can be requested
- Hearing is heard by an Administrative Law Judge but the final ruling stays with the DEA
- Once these steps have been taken a final order is placed in the *Federal Register* which officially schedules the drug

Schedule I

- Drug has high potential for abuse
- No currently accepted medical use in US treatment
- Lack of accepted safety for use of the substance

Schedule II

- Drug has high potential for abuse
- Currently accepted medical use in US treatment or medical use with severe restrictions
- Abuse of drug may lead to psychological or physical dependence

- Physical dependence – changes that occur in the body depending after the repeated use of the drug
 - Continued use of drug or feel withdrawal
- Psychological dependence – perceived “need” or “craving” for the drug
 - Can’t function without using the drug

Schedule III

- Drug has less potential of abuse than others in Schedule I or II
- Currently accepted medical use in US treatment
- Abuse may lead to low physical dependence or high psychological dependence

Schedule IV

- Low potential for abuse relative to Schedule III substances
- Current accepted medical use in US
- Abuse may lead to limited physical dependence or psychological dependence relative to Schedule III

Schedule V

- Drug has low potential for abuse relative to Schedule IV
- Current accepted medical use in US
- Abuse may lead to limited physical dependence or psychological dependence relative to Schedule IV

Emergency/Temporary Scheduling

- Comprehensive Crime Control Act of 1984 amended the CSA to include a way to temporarily place a substance into Schedule I
- This allows a drug that is displaying a hazard to public safety to be controlled while it is going through the evaluation process

- Only applies to substances with no medical use
- May be temporarily scheduled for one year with a possible extension up to six months
- The proposal can be found in the *Federal Register*

Controlled Substance Analogues

- New class of drugs created by the Anti-Drug Abuse Act of 1986
- Structurally or pharmacologically similar to Schedule I or II controlled substances with no medical use

Ohio Revised Code

- www.codes.ohio.gov
 - Click on Title 37 XXXVII Health Safety Morals
 - Click on Chapter 3719: Controlled Substances
 - 3719.41 lists the schedules
 - Look for schedule and then drug class within that schedule
 - Should have the most up to date listing

BZP/TFMPP Scheduling

- BZP = N- Benzylpiperazine
- TFMPP = Trifluoromethylphenylpiperazine



- DEA recommended placement of BZP/TFMPP into Schedule I
- Both are temporarily scheduled in September 2002
- Took six month extension in September 2003

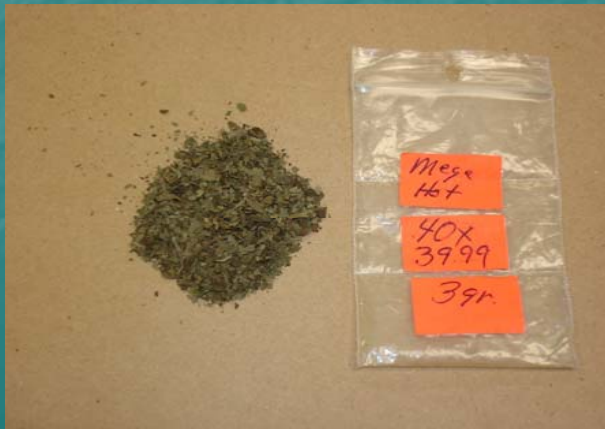
- In March 2004 BZP placed in Schedule I stimulant
- HHS did not recommend TFMPP be scheduled based on information from the FDA and NIDA
- TFMPP removed from the schedules as of March 19, 2004
- Proposals are found in *Federal Register* March 2004 volume

FYI

- In the current Ohio Revised Code BZP is not listed in the Schedule I stimulant section
- However, according to 3719.43 of the ORC “When pursuant to the federal drug abuse control laws the attorney general of the United States adds a compound, mixture, preparation, or substance to a schedule of the laws, transfers any of the same between one schedule of the laws to another, or removes a compound, mixture, preparation, or substance from the schedules of the laws then such addition, transfer, or removal is automatically effected in the corresponding schedule or schedules in section 3719.41”

Salvia Scheduling

- Salvia is not controlled federally but is controlled in Ohio as well as several other states/countries



- Controlled as a Schedule I hallucinogen as of April 7, 2009
- The schedule listing can be found as either Salvia Divinorum (plant) or Salvinorin A (active ingredient)
 - plant has no useful characteristics to aid in its identification

Schedule Switching

	Sch II	Sch III	Sch V
Codeine (solid or liquid)	X		
Codeine w/ acetaminophen		X	
Codeine in any solid form combination		X	
Codeine in liquid form		X	
Codeine in liquid form			X
Hydrocodone	X		
Hydrocodone w/ acetaminophen		X	
Hydrocodone in any combination		X	
Hydrocodone in liquid form		X	

- Codeine and hydrocodone can be found listed under several different schedules depending upon their form

Commonly Seen Drugs

Cocaine



- Schedule II
 - Legitimate medical uses, such as local anesthesia for some eye, ear, and throat surgeries
- Stimulant
- Actually listed as narcotic

Heroin

- Schedule I
- Opiate



Marijuana

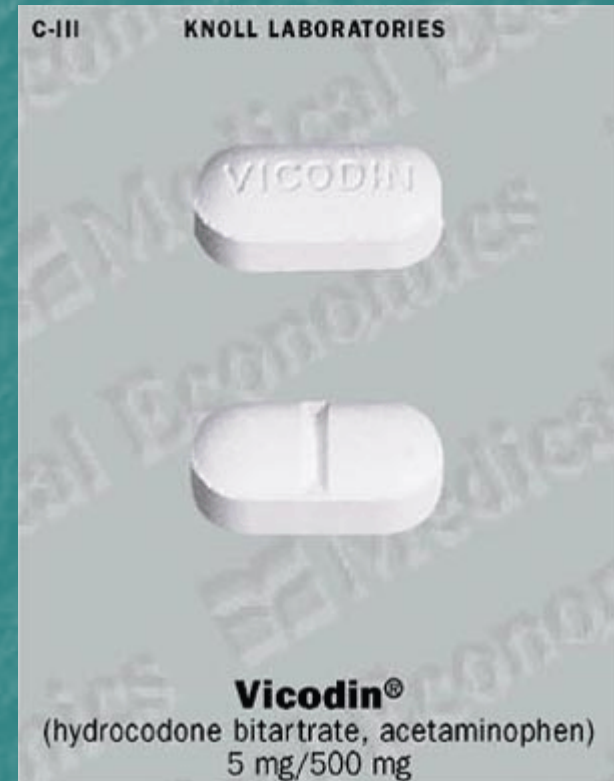
- Schedule I
- Hallucinogen

Tetrahydrocannabinol
(THC) – active
ingredient, also Schedule I



Vicodin

- Hydrocodone w/acetaminophen
- Schedule III
- Opiate



Psilocyn Mushrooms



- Schedule I
- Hallucinogen

Xanax



- Alprazolam
- Schedule IV
- Depressant

Methamphetamine

- Schedule II
 - Limited medical uses for the treatment of narcolepsy, attention deficit disorders, and obesity
- Stimulant



Ecstasy

- Brand name
- Various schedules and drug classes
- Common mixtures:
 - MDMA – Sch I
 - BZP – Sch I
 - Ketamine – Sch III
 - Methamphetamine – Sch II



Stanozolol

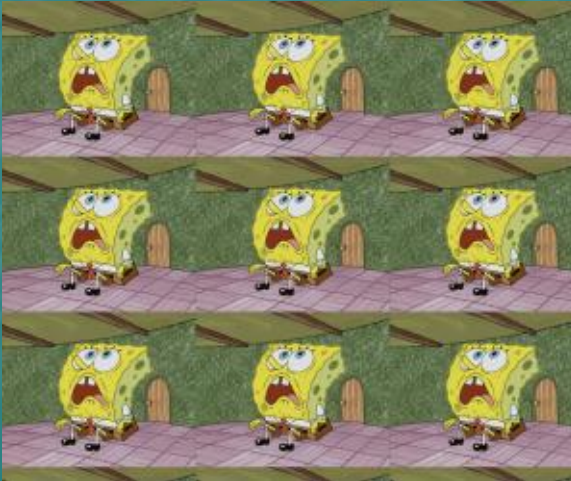


- Schedule III
- Steroids



LSD

- Schedule I
- Hallucinogen



Blue LSD Gel Tabs
Anonymous Photographer, © 2006 Erowid.org

Phencyclidine (PCP)

- Schedule II
 - Human anesthetic and later produced only as a veterinary anesthetic, no longer produced or used for legitimate purposes
- Hallucinogen



Khat

- Schedule I - Cathinone
- Schedule IV – Cathine
- Stimulant



Thomson West: Controlled Substance Reference Table

- Highly recommended
- Lists *most* of the drugs, schedules, preparations, and bulk amount
- Ordered from West 1-800-344-5008 or www.west.thomson.com, approximately \$37.00

PRODUCT NAME *INGREDIENTS	C.S.A. SCHEDULE	DISTRIBUTOR	STRENGTH	MAXIMUM DAILY DOSE	BY WGT	--BULK AMOUNTS-- BY DOSE
OXYCODONE - continued						
<i>Endocet - continued</i>						
*Acetaminophen 325 mg *Oxycodone Hydrochloride *			10 mg	60 mg	20 Gm	30 tablets
*Acetaminophen 650 mg *Oxycodone Hydrochloride *			10 mg	60 mg	20 Gm	30 tablets
ETH-Oxycodone *Oxycodone Hydrochloride *	II	Ethex	20 mg/ml	USPDI 90 mg	n/a	23 ml oral solution
<i>Magnacet</i>						
*Acetaminophen 400 mg *Oxycodone Hydrochloride *	II	Mallinckrodt	2.5 mg	25 mg	20 Gm	50 tablets
*Acetaminophen 400 mg *Oxycodone Hydrochloride *			5 mg	50 mg	20 Gm	50 tablets
*Acetaminophen 400 mg *Oxycodone Hydrochloride *			7.5 mg	60 mg	20 Gm	40 tablets
*Acetaminophen 400 mg *Oxycodone Hydrochloride *			10 mg	60 mg	20 Gm	30 tablets
Oxycodone *Oxycodone Hydrochloride *	II	various	5 mg	USPDI 90 mg	20 Gm	90 capsules
			5 mg	90 mg	20 Gm	90 tablets
			10 mg	90 mg	20 Gm	45 tablets
			15 mg	90 mg	20 Gm	30 tablets
			20 mg	90 mg	20 Gm	23 tablets
			30 mg	90 mg	20 Gm	15 tablets
			n/a	n/a	20 Gm powder	n/a
			10 mg	90 mg	20 Gm	45 extended release tablets
			20 mg	90 mg	20 Gm	23 extended release tablets
			40 mg	90 mg	20 Gm	12 extended release tablets
			80 mg	90 mg	20 Gm	6 extended release tablets

DRUG LAWS OF OHIO

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Websites

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