Emerging Drug Trends

Marijuana: Legal Possession

9th Annual National Drug Endangered Children Conference

Des Moines Marriott Downtow Des Moines, Iowa October 23, 2012

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Psychoactive Drugs by Group/Type

- Nicotine
- Marijuana
- Stimulants
- Opiates
- Sedatives
- "Atypical" Drugs
- Hallucinogens



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Va" is a pictograph of two plants under a shelter

The herb is one of the "superior elixirs of immortality" . . . and is a "liberator of sin – good for female weakness, gout, rheumatism, malaria, beri constipation and absent mindedness".

Chinese Emperor Shennong, 2737 B.C.

Marijuana History

Archeological evidence indicates the cultivation of grain, grapes and hemp as early as 10,000 years ago -- concurrent with the development of pottery and prior to the development of metallurgy

Approximately 5,000 years ago the Egyptians were known to brew at least 5 varieties of beer, and hemp was known to be cultivated for fiber, oil, food, medicinal and herbal uses throughout Asia

Herodotus recorded Scythian use during funeral rituals in the early $5^{\rm th}$ Century B.C.

 Although there is little evidence of use among Greeks and Romans, ritual and medicinal use in noted by Persians, Hindus, Arabs and Chinese

 Hemp cultivation and cannabis use as a medicinal herb becomes common in Europe approximately 1,000 years ago, but is soon persecuted by the Church

Marijuana Policies

- Hemp is an important crop for the colonies and later for the new nation throughout the 18th and 19th centuries, cannabis widely used in medical practice but rarely for intoxication or "recreational" use
- Irish doctor William O'Shaughnessy first writes in 1839 of the effectiveness of marijuana in treating rabies, cholera and tetanus
- Pure Food and Drug Act is passed in 1906, regulating the labeling of products containing alcohol, opiates, cocaine, cannabis and other substances
- Marijuana use is noted along the Mexican border and among immigrant laborers, and states begin to pass prohibitive legislation as early as 1914 – including California (1915), Texas (1919), Louisiana (1924), New York (1927)
- In 1926 a New Orleans newspaper publishes stories of a murder committed by "Mexicans who smoked marijuana" – the stories spread up the Mississippi River and into the rest of the country

Marijuana Policies

- Harry Anslinger is named Presidential Advisor for Drug Issues in 1930, moves to eradicate hemp (cannabis) following his appointment by Treasury Secretary Andrew Mellon (banker to the DuPont family, developers of synthetic fibers)
- All 48 states have outlawed marijuana by 1936
- "Reefer Madness" produced and released in 1936
- The Marihuana Transfer Tax Act is passed in 1937 despite contradictory research and political positions, popular sentiment and animated by racial antagonisms, creating the federal prohibitions to buy, sell, barter or give away cannabis within paying a transfer tax
- 1964: 19,000 Americans arrested for marijuana offenses 1974: 450,000 arrests

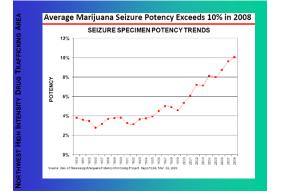
Marijuana Characteristics

- Alters brain perception and mood; described by researchers as an intoxicant, a stimulant, a psychedelic and a depressant
- Can be eaten (onset in 30-60 minutes, duration 3-5 hours) and smoked (onset in minutes, duration 2-3 hours)
- Known as weed, pot, grass, hemp, reefer, ganja, mary jane, 4-20, joint, roach, bowl, nail
- Grown outdoors (on every continent) and indoors (<u>hydroponics</u>: using nutrient-rich liquid rather than soil, totally controlled environment, yields several crops a year, and <u>hybrids</u> such as "northern lights", "white rhino", "train wreck", and B.C. bud varieties, producing seedless "Sinsemilla")

Ingredients in Cannabis Sativa

- 483 natural constituents:
- 61 cannabinoids (including THC and CBD)
- 50* Hydrocarbons
- 120* Terpenes
- 25* Phenols
- Plus: microbes, fungi, pesticides

*Known carcinogens



Acute Effects

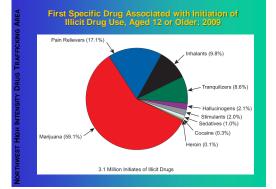
- Euphoria
- Calmness
- Increased concentration, eliminates boredom
- Appetite stimulation (munchies)
- Decreased saliva (cotton mouth)
- Analgesia
- Altered perception of time
- Impaired coordination and balance
- Anxiety, panic
- Increased heart rate
- Impaired short-term memory
- Difficulty with learning and complex tasks
- Impaired decision-making

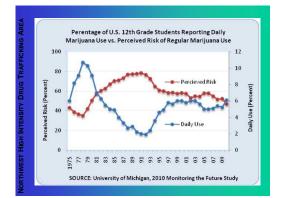
Long-Term Effects

- Cognitive Impairment (learning, memory, attention)
- Affects REM (dream) sleep
- Interferes with the maturation process, has the capacity to induce regression, "irreversible immaturity" – may affect brain development during adolescence
- Produces tolerance and dependence (15%+ in several studies)
- Withdrawal: irritability, restlessness, poor concentration, decreased appetite

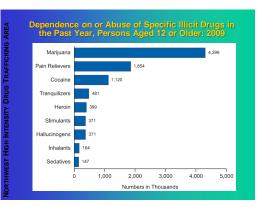
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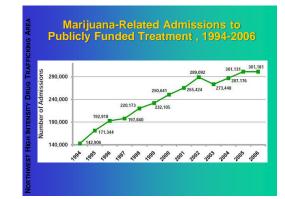
- Impairs lung function
- Immunosuppressant (colds, flu)
- Research is accumulating that it prompts or exacerbates signs of thought disorders in those with a predisposition
- Research has indicated that long-term use may have an impact on I.Q.
- Pregnancy: THC crosses the placental barrier and can be passed in breast milk; some evidence of low birth weight and Apgar scores; withdrawal in newborns





| AREA | Marijuana Use Among 9 th -12 th Graders | | | | | |
|---|---|------|---------------------------|--|--|--|
| NORTHWEST HIGH INTENSITY DRUG TRAFFICKING | | 2008 | 2011 | | | |
| | Lifetime Use | 39% | 47% (8,000,000) | | | |
| | Past-year Use | 31% | 39% (6,000,000) | | | |
| | Past-month Use | 19% | 27% | | | |
| | Use 20+ Times per Month | 5% | 9% (1,500,000) | | | |
| | Friends Who Use Regularly | 64% | 71% | | | |
| | Schoolmates Who Don't Smoke | 37% | 26% | | | |





Drugs in Combination

- Additive Effect: When two or more drugs are taken at the same time, and the action of one plus the action of the other results in an action as if just one drug had been given. An example would be a barbiturate and a benzodiazepine given together before surgery to relax a patient.
- Remetation: Occurs when tow drugs are taken an one of them intensifies the action of the other. An example would be an antihistamine given with an opiate to intensify its effect, lessening the amount of the opiate needed.
- Synappen: When two drugs with similar actions are taken together resulting in an exaggerated action, out of proportion to that of each drug taken separately. An example would be alcohol taken together with an opiate.

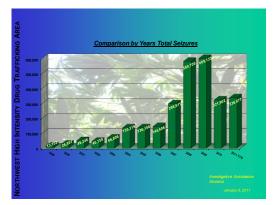
Marijuana Production

- "M-7" States (indoor and outdoor cultivation):
 - California
 - Washington
- Tennessee
- Kentucky – West Virginia
- Hawaii
- Oregon



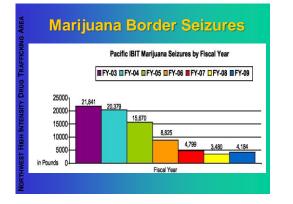


| Northwest High Intensity Drug Trafficking Area | "Domestication" Asian-Constraints Domestication | lifornian, M Canadian D1 Os operate tic marijuan | ates the regic exican and o rOs operate i outdoor gro a ranked 1 st mine) in <u>prev</u> | ther varietie ndoor grow ws (tied with | s are availa s; Mexican | ble | | |
|--|---|---|--|---|----------------------------|------------------|--|--|
| EST | NW HIDTA TAS Cannabis Prices | | | | | | | |
| ≩ | | | 2007 | 2008 | 2009 | 2010 | | |
| Ē | 0 | Gram | \$21 | \$15 | \$18 | \$19 | | |
| ē | Cannabis | Ounce Pound | \$233 \$2,537 | \$245 \$2,593 | \$250 \$2,838 | \$261 \$2,698 | | |
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Drug Distribution Originating in Washington State



Medicinal Marijuana

FDA has approved pill form (Marinol) for nausea associated with chemotherapy and the wasting disease that appears with AIDS

Inhaling burnt leaves impairs lung function, increases the risk of bronchitis, asthma and other chronic respiratory diseases and may damage the immune system

Not proven to help: glaucoma, multiple sclerosis



National Overview – State Legislation

- 110 pieces of pro-drug legislation introduced in 37 states
- 27 are bills to establish medical marijuana programs
- 16 seek to decriminalize marijuana
- 6 seek to tax and/or regulate marijuana
- 28 seek to expand current medical marijuana programs
- Remaining are proposals regarding hemp, rescheduling marijuana, and restructuring criminal penalties

Initiative 502

Creates a Dedicated Marijuana Fund

- Healthy Youth Survey
- DBHR for prevention (evidence-based and emerging best practices) in consultation with SDRG
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- DOH for hotline, grants to local health departments for coordinated intervention strategies, and media campaign
- UW Alcohol & Drug Abuse Institute for web-based public education materials
- WSIPP for cost-benefit analysis
 WSLCB for administration
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 UW & WSU for research on effects of marijuana
- WA Basic Health Plan
- OSPI Building Bridges Program

Access and Use Rates

- Difficult to predict; price a key variable
- RAND study projects a 5% to 50% increase independent of price influence – and mentions that in the Netherlands, where the drug is sold openly at "coffee shops", use among young adults increased almost 300% after a wave of commercialization
- WA OFM assumes 10% increase in use
- Increased availability = increased use
- Decreased perception of harm = increased use
- Some analysts predict use will be as high as alcohol

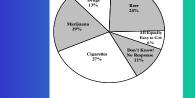
Access at home



With the demise of legal sanctions against use, some parents may choose to begin using marijuana, acting as an important new source of exposure for their adolescents. Parental use of marijuana in the last year is associated with their adolescent's use during the same period.*

nana: Potential Impact on Youth, American Academy of Pediatr

Percentage of Youths Reporting Which Substance is Easiest for Someone Their Age to Obtain



SOURCE: Adapted by CESAR from The National Center on Addiction and Substance Abuse at Columbia University (CASA), National Survey of American Attitudes on Substance Abuse XVII: Teens, 2012, Available online at http://www.casacolumbia.org/upload/2012/2018/0822teensurvey.pdf

Potential Legal Issues

- I-502 puts Washington at odds with the DOJ and presents a risk to federal funding (including education, reads, farm subsides, etc.) while rendering any state or local revenues from marijuana sales susceptible to seizure under the Federal Forfeiture Program.
- Because banks, insurance carriers, credit companies and other financial institutions/services will not do business with commercial manjuana activities, I-502 will create a cash-only industry.
- State employees involved with the industry will be at risk.
- It also creates legal conflicts with the DEA, ATF, IRS, and USDA, none of which would be remedied by I-502.
- The Federal response is unknown, but it is unlikely that no action(s) will be taken in in response to attempting to ignore or preempt the supremacy of the CSA.

QUESTIONS?

Contact Information/Resources

Tel: 206.352.3603 sfreng@nw.hidta.org "M-Files": <u>www.mfiles.org</u> ONDCP: <u>whitehousedrugpolicy.gov</u>