

Name: \_\_\_\_\_

# So, who is using pot?

use the blank spaces on this page to write notes, comments, or draw attention to important details for the seminar.

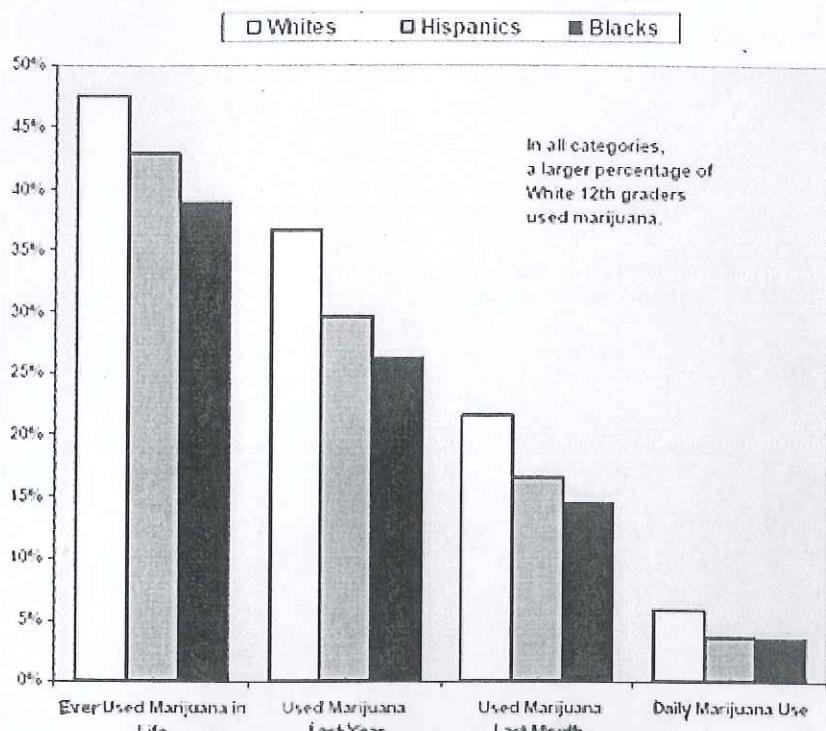
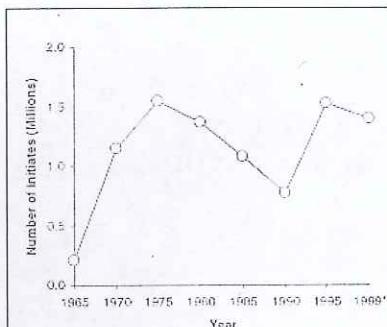
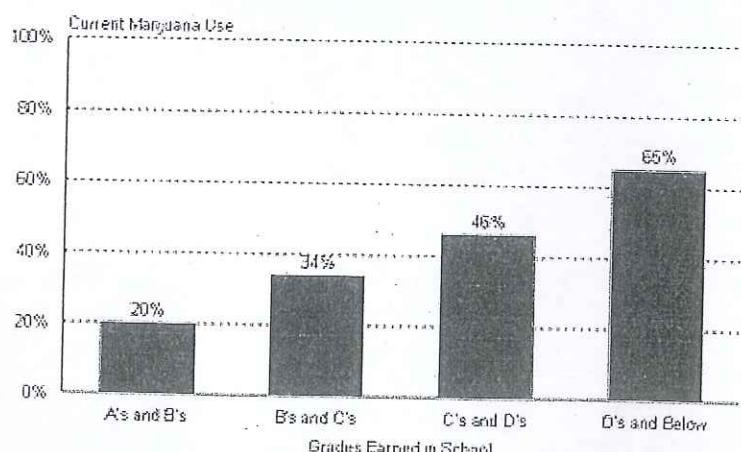
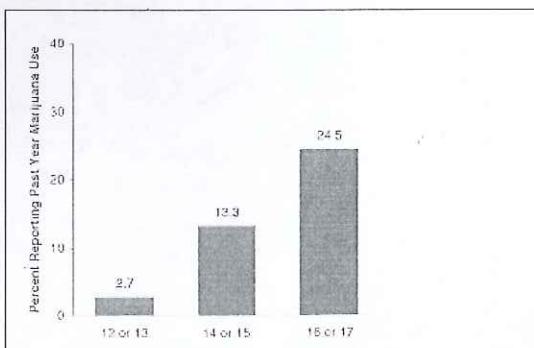


Figure 1. Estimated Numbers of Youths Aged 12 to 17 Who First Used Marijuana During the Years 1965 to 1999



- In 2000, over 3 million youths aged 12 to 17 used marijuana at least once during the past year
- White youths were more likely to use marijuana than Hispanic, black, or Asian youths
- Youths with an average grade of D or below were more than 4 times as likely to have used marijuana in the past year as youths who reported an average grade of A

Figure 2. Percentages of Youths Aged 12 to 17 Reporting Past Year Marijuana Use, by Age Group: 2000



## Teens and Drugged Driving

- According to the Centers for Disease Control and Prevention, vehicle accidents are the leading cause of death among young people age 16 to 19.<sup>8</sup> It is generally accepted that because teens are the least experienced drivers as a group, they have a higher risk of being involved in an accident compared with more experienced drivers. When this lack of experience is combined with the use of marijuana or other substances that impact cognitive and motor abilities, the results can be tragic.
- Results from NIDA's Monitoring the Future survey indicate that, in 2008, more than 12 percent of high school seniors admitted to driving under the influence of marijuana in the 2 weeks prior to the survey.<sup>9</sup>
- The 2007 State of Maryland Adolescent Survey indicates that 11.1 percent of the State's licensed adolescent drivers reported driving under the influence of marijuana on three or more occasions and 10 percent reported driving while using a drug other than marijuana (not including alcohol).<sup>10</sup>

### Why is Drugged Driving Hazardous?

Drugs acting on the brain can alter perception, cognition, attention, balance, coordination, reaction time, and other faculties required for safe driving. The effects of specific drugs of abuse differ depending on their mechanisms of action, the amount consumed, the history of the user, and other factors.

#### Marijuana

THC affects areas of the brain that control the body's movements, balance, coordination, memory, and judgment, as well as sensations. Because these effects are multifaceted, more research is required to understand marijuana's impact on the ability of drivers to react to complex and unpredictable situations. However, we do know that:

*your ability  
to think & react  
on the road decreases  
in every inhale  
of pot)*

- A meta-analysis of approximately 60 experimental studies, including laboratory, driving simulator, and on-road experiments, found that behavioral and cognitive skills related to driving performance were impaired in a dose-dependent fashion with increasing THC blood levels.<sup>11</sup>
- Evidence from both real and simulated driving studies indicates that marijuana can negatively affect a driver's attentiveness, perception of time and speed, and the ability to draw on information obtained from past experiences.
- A study of over 3000 fatally-injured drivers in Australia showed that when marijuana was present in the blood of the driver they were much more likely to be at fault for the accident. And the higher the THC concentration, the more likely they were to be culpable.<sup>12</sup>
- Research shows that impairment increases significantly when marijuana use is combined with alcohol.<sup>13</sup> Studies have found that many drivers who test positive for alcohol also test positive for THC, making it clear that drinking and drugged driving are often linked behaviors.

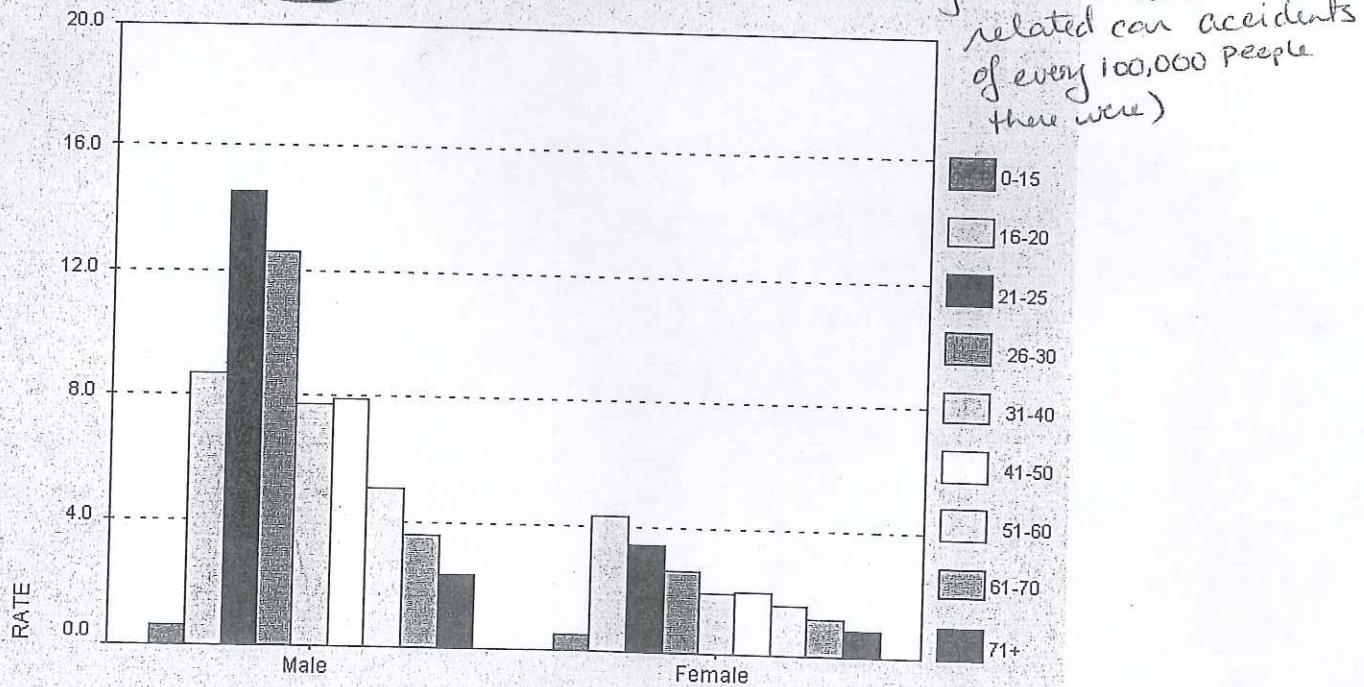
More facts on driving. Some of this is about alcohol, your notes should be focused on what you think will happen if marijuana is legalized (regarding car accidents)

Here are a few quick facts related to drunk driving : = ALCOHOL

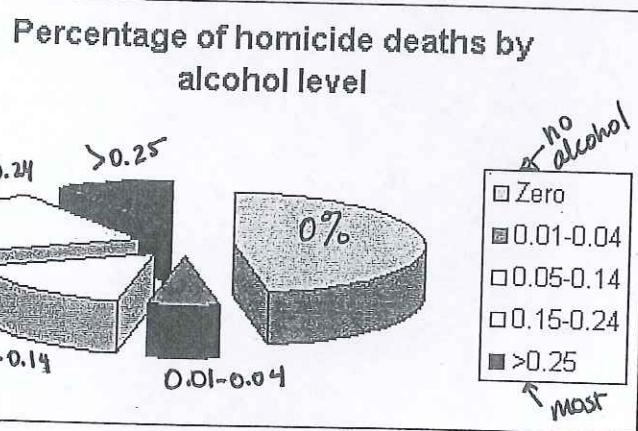
1. On average, someone is killed by a drunk driver every 40 minutes in US
2. Each day 36 people die and almost 700 more are injured in vehicle crashes that involve a drunk driver
3. The total cost of alcohol related crashes is roughly \$51 billion
4. In 2006, out of 1,746 fatality that included children one out of six was killed by an alcohol impaired driver
5. Half of all teenage fatalities is due to drunk driving
6. About 30 % of Americans are involved in an alcohol related crash sometimes in their lifetime
7. In 2007 alcohol related fatalities were 15,387 which is 37% of all fatalities. Alcohol related fatalities are down by 27% as compared to 1982.
8. Top 5 states with highest number of alcohol related fatalities are Texas, California, Florida, Pennsylvania and Illinois.
9. About 81% of all drunk drivers are male drivers

California Traffic Fatalities 2004

Alcohol by Sex and Age : Rate Per 100,000 (how many died in alcohol related car accidents of every 100,000 people there were)

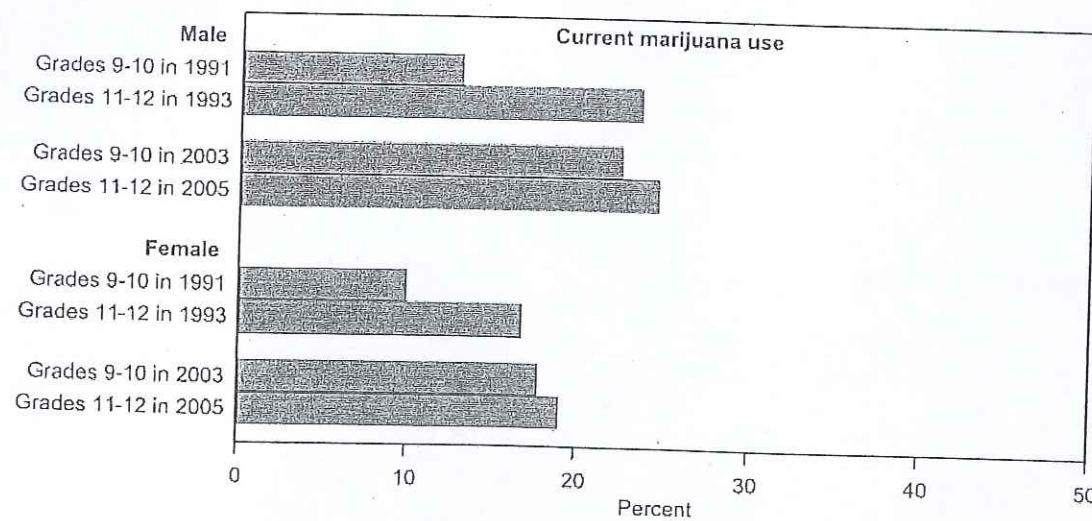
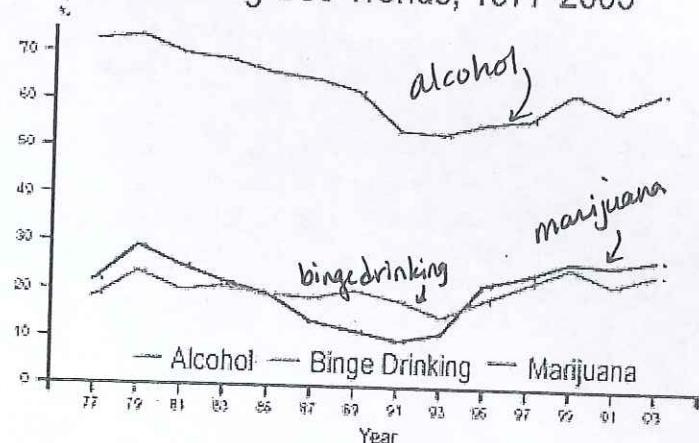


One study found that about 34 percent of motor vehicle crash victims admitted to a Maryland trauma center tested positive for "drugs only"; about 16 percent tested positive for "alcohol only." Approximately 9.9 percent (or 1 in 10) tested positive for alcohol and drugs, and within this group, 50 percent were younger than age 18.<sup>4</sup> Although it is interesting that more people in this study tested positive for "drugs only" compared with "alcohol only," it should be noted that this represents one geographic location, so findings cannot be generalized.



Estimate the total percentage of murders that involve alcohol \_\_\_\_\_

Teen Drug Use Trends, 1977-2003





## Marijuana

Usually smoked as a cigarette or joint, or in a pipe or bong, marijuana has appeared in "blunts" in recent years. These are cigars that have been emptied of tobacco and re-filled with marijuana, sometimes in combination with another drug, such as crack. Some users also mix marijuana into foods or use it to brew tea.

The main active chemical in marijuana is THC (delta-9-tetrahydrocannabinol). Short-term effects of marijuana use include problems with memory and learning; distorted perception; difficulty in thinking and problem-solving; loss of coordination; and increased heart rate, anxiety, and panic attacks.

### Health Hazards

**Effects of Marijuana on the Brain.** Researchers have found that THC changes the way in which sensory information gets into and is acted on by the hippocampus. This is a component of the brain's limbic system that is crucial for learning, memory, and the integration of sensory experiences with emotions and motivations. Investigations have shown that THC suppresses neurons in the information-processing system of the hippocampus. In addition, researchers have discovered that learned behaviors, which depend on the hippocampus, also deteriorate.

**Effects on the Lungs.** Someone who smokes marijuana regularly may have many of the same respiratory problems that tobacco smokers have. These individuals may have daily cough and phlegm; symptoms of chronic bronchitis, and more frequent chest colds. Continuing to smoke marijuana can lead to abnormal functioning of lung tissue injured or destroyed by marijuana smoke.

Regardless of the THC content, the amount of tar inhaled by marijuana smokers and the level of carbon monoxide absorbed are three to five times greater than among tobacco smokers. This may be due to marijuana users inhaling more deeply and holding the smoke in the lungs.

**Effects of Marijuana Use during Pregnancy.** Research has shown that babies born to women who used marijuana during their pregnancies display altered responses to visual stimuli, increased tremulousness, and a high-pitched cry, which may indicate problems with neurological development. During infancy and preschool years, marijuana-exposed children have been observed to have more behavioral problems and to perform tasks of visual perception, language comprehension, sustained attention, and memory more poorly than nonexposed children do. In school, these children are more likely to exhibit deficits in decision-making skills, memory, and the ability to remain attentive.

### Effects of Heavy Marijuana Use on Learning and Social Behavior.

A study of college students has shown that critical skills related to attention, memory, and learning are impaired among people who use marijuana heavily, even after discontinuing its use for at least 24 hours. Researchers compared 65 "heavy users," who had smoked marijuana a median of 29 of the past 30 days, and 64 "light users," who had smoked a median of 1 of the past 30 days. After a closely monitored 19- to 24-hour period of abstinence from marijuana and other illicit drugs and alcohol, the undergraduates were given several standard tests measuring aspects of attention, memory, and learning. Compared to the light users, heavy marijuana users made more errors and had more difficulty sustaining attention, shifting attention to meet the demands of changes in the environment, and in registering, processing, and using information. The findings suggest that the greater impairment among heavy users is likely due to an alteration of brain activity produced by marijuana.

Longitudinal research on marijuana use among young people below college age indicates those who used have lower achievement than the non-users, more acceptance of deviant behavior, more delinquent behavior and aggression, greater rebelliousness, poorer relationships with parents, and more associations with delinquent and drug-using friends.

*Information provided by the National Institute on Drug Abuse.*

Learn more about the risks of marijuana and the dangers to kids.

✓US

IS NOW THE RIGHT TIME TO LEGALIZE MARIJUANA?

YES, UNCLG PRISONS, FIGHT REAL CRIME

How much power should some people have to punish other people for politically incorrect habits?

Since 1937, the U.S. government has been waging war against marijuana users. According to the Federal Substance Abuse and Mental Health Services Administration, 70-plus million Americans have used marijuana at least once in their lifetimes.

Yet, the federal government still considers marijuana to be the Great Satan. Nearly 700,000 people were arrested for marijuana violations in 1998 -- more people than were arrested for murder, rape, robbery and aggravated assault combined, as the National Organization for Reform of Marijuana Laws points out.

Law enforcement resources are limited: The more time cops spend on marijuana crackdowns, the less time they have to protect Americans against violent predators.

How many murders and rapes go unprosecuted because law enforcement is racking up impressive Vietnam-style body counts against potheads?

Marijuana laws are more harmful than marijuana. A recent National Academy of Science study concluded: "Except for the harms associated with smoking the adverse effects of marijuana use are within the range of effects tolerated for other medications."

A 1999 study by the University of Toronto found that marijuana has far less adverse effect on drivers than does alcohol. The British medical journal Lancet editorialized in 1995 that "the smoking of cannabis, even long term, is not harmful to health."

According to more than 100 published studies, marijuana can provide medical benefits to people suffering from multiple sclerosis, glaucoma, asthma, and the effects of a stroke.

Marijuana is also invaluable for people suffering from chemotherapy or the effects of AIDS treatment.

A 1999 Gallup poll found that almost three-quarters of Americans favored permitting the use of marijuana as medicine. Yet Doug Cigar Gen. Barry McCaffrey ridicules claims of marijuana's medical benefit as "Cheech 'n' Chong medicine."

Most people who smoke marijuana do not do so for medicinal purpose -- unless one considers alleviation of tension or boredom or unhappiness as medicinal. Marijuana may have fewer side-effects than Prozac, Zolaff or other widely used anti-depressants.

It is also debatable whether moderate marijuana use is more mind-numbing than an addiction to television. Excessive marijuana use can, like excessive alcohol consumption, sap a person's will and undermine the person's character. But simply because some substance is harmful in some circumstances does not justify allowing politicians to seize more power over everyone.

The war on marijuana is dismally failing to protect children. The percentage of eighth-graders who used marijuana tripled between 1991 and 1997. More high school students (90 percent) reported that marijuana was "fairly easy" or "very easy" to get in 1998 than ever before, according to a federally funded anti-drug survey.

There is no proof that legalizing marijuana would result in increased usage. Marijuana is legal for adults in the Netherlands. The percentage of Americans who have used marijuana during their lifetime, or in the last month, is more than double the percentage of Dutch who have used marijuana. Marijuana should be legalized. The same type of restrictions that currently prohibit the sale of alcohol to minors could be enforced as well on marijuana. The system would not be foolproof -- but it would certainly be far less ludicrous than the status quo.

Yes, unclog prisons, fight real crime.

Bovard is the author of the just-published "Feeling Your Pain: The Explosive Abuse of Government Power in the Clinton-Gore Years" (St.

No!

NO, MEDICAL MARIJUANA IS A HOAX

Tell your congressman that you're among the 85 percent of Americans opposed to legalizing drugs. Help him or her understand there's a campaign of misinformation to legalize drugs beginning with the "marijuana cigarettes are medicine" hoax.

We've fought drug legalization since 1977 when "legalizers" were a few stoned disciples of LSD advocate Timothy Leary. We stopped them in 1978 by defeating Rep. Newton Steers, a Maryland Republican who supported weaker drug controls.

In fact, legalization was "dead" until the legalizers convinced four wealthy fat cats -- financier George Soros, Progressive Insurance CEO Peter Lewis, Apollo Group President John Sperling and Men's Warehouse CEO George Zimmerman -- that legalizing marijuana was the answer to America's drug problem.

Soros and his cronies are pouring millions into misinformation campaigns aimed at passing state initiatives that would violate the Federal Controlled Substances Act. States simply do not have the authority to legalize marijuana, heroin and ecstasy, no matter how many signatures are gathered.

The legalizers chose to support state initiatives knowing the U.S. Food and Drug Administration will not approve marijuana cigarettes as medicine. And voters, of course, aren't allowed to approve medicines. Under existing law, only the FDA has that authority.

The National Organization for the Reform of Marijuana Laws (NORML) has led the legalization march. Concerned parents call its founder, Keith Stroup, the "father of the Teen Marijuana Epidemic."

And no wonder! In High Times, a magazine that chronicles the marijuana subculture, Stroup wrote that "there's no particular evidence that even those few young people who smoke a great deal of marijuana necessarily hurt their level of performance, academic or otherwise."

The legalizers touted marijuana reclassified medically. If we do that, we'll be trying to get marijuana reclassified medically. If we do that, we'll be using the issue as a red herring to give marijuana a good name."

The legalizers touted marijuana cigarettes as a medicine long after the National Institutes of Health warned: "People with HIV and others whose immune system is impaired should avoid marijuana use."

Another legalizing group, the Drug Policy Foundation, recently merged with Soros' Lindesmith Center. DPF's idea of prevention was to develop a "safe crack smoking pipe." Apparently it's OK to crack to burn out your brain as long as it doesn't burn your lips in the process.

Unfortunately, the efforts of anti-drug parents are no match for the likes of Soros and his associates. They've literally poured money into the campaign coffers of numerous politicians, including Vice President Al Gore. Gore, it should be noted, has withdrawn his support for the use of "medical marijuana cigarettes." He should return Soros' campaign contributions as well. Other prominent politicians backing legalization are Gov. Gary Johnson, R-N.M., and Rep. Tom Campbell, R-Calif., who is running for the Senate this fall against Democratic incumbent Dianne Feinstein.

Americans should go to the polls next month and vote to send lawmakers who favor legalization into political exile where their bizarre ideas can't hurt America's children. That would be real harm reduction.

Nalepka is president of America Cares Inc. and Drug-Free Kids -- America's Challenge.

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