

Connecticut SPF SIG State Epidemiological Workgroup

Alcohol

Consumption

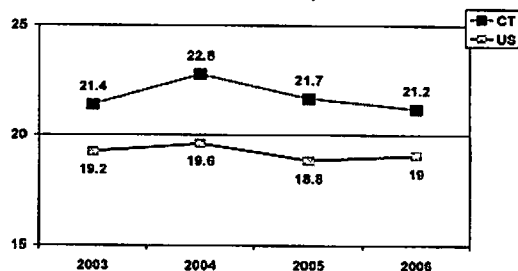
Alcohol is the most commonly used substance nationally and statewide. According to the 2006 National Household Survey of Drug Use and Health (NSDUH), 61% of people age 12 or older in Connecticut (an estimated 1,775,000 persons) were current users of alcohol. The state's rate was 10% higher than the national average (51%). Data from the 2003 Connecticut Adult Household Survey showed that use of alcohol in the state had decreased slightly since 1995, but 16% of adults could be classified as risky drinkers.

According to the 2006 NSDUH, young adults aged 18-25 in Connecticut had the highest rate of past-month alcohol use (72%), as well as the highest prevalence of binge drinking (50%) and alcohol abuse and dependence (23%). Among underage youth 12-20, 32% reported using alcohol in the past 30 days, and 21% reported binge drinking. Data from the CORE Survey conducted on Connecticut college campuses in 2006 had comparable findings: 71% of college students reported that they were current drinkers and 54% had been binge drinking within the past two weeks. Twenty-nine percent of students said that they had driven a car while under the influence of alcohol or other substance, 32% reported missing class, and 36% reported getting into a fight or an argument.

Most adults begin using alcohol in adolescence, and underage drinking remains a significant problem both in the US and in Connecticut. The rate of underage drinking and underage binge drinking in Connecticut has been above the national average from 2003 to 2006.

Data from the 2007 Youth Risk Behavior Student Survey (YRBSS) also show that 35% of 9th graders and 63% of 12th graders in Connecticut have consumed alcohol in the past 30 days. In addition, 13% of Connecticut 9th graders and 42% of 12th graders have had admitted to consuming five or more drinks within a short time on one or more occasion in the past 30 days. Among high school students, rates of recent and binge use were highest for Whites (51% and 31%) and Hispanics (43% and 24%).

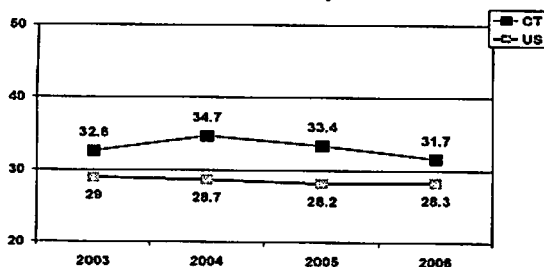
Percent Past 30 Day Binge Alcohol Use Ages 12 to 20; NSDUH Surveys



Consequences

- Approximately 100,000 deaths each year in the U.S. are attributed to alcohol misuse.
- In Connecticut, underage drinking cost the state an estimated \$621M in 2005. Nationwide during the same year, the costs of alcohol use were \$60.3 billion.
- Binge drinking, as indicated by consumption of five drinks or more within a short time span, is strongly associated with injuries, motor vehicle crashes, violence, fetal alcohol syndrome, chronic liver disease and several other chronic and acute conditions.
- Initiation of alcohol use at young ages has been linked to more problematic levels of use in adolescence and adulthood. Young people who drink are more likely than adults to be binge drinkers.
- Heavy drinkers are at increased risk for alcohol abuse and dependence. People who begin drinking before the age of 15 are four times more likely to develop alcohol dependence than those who wait until age 21. Each additional year of delayed drinking onset reduces the probability of alcohol dependence by 14 percent.
- Studies have shown that long-term alcohol abuse produces serious, harmful effects on a variety of the body's organ systems, especially the liver and the immune, cardiovascular and skeletal systems.
- Immediate adverse effects of alcohol can include: impaired judgment, reduced reaction time, slurred speech, and unsteady gait. When consumed rapidly and in large amounts, alcohol can also result in coma and death.

Percent Past 30 Day Alcohol Use Ages 12 to 20; NSDUH Surveys



Alcohol

Consequences (continued)

- Excessive drinking, including binge and heavy drinking, has numerous chronic and acute health effects. Chronic health consequences include: liver cirrhosis, pancreatitis, various cancers, including cancer of the liver, mouth, throat, larynx, and esophagus, high blood pressure, and psychological disorders. Acute health consequences of excessive drinking can include motor vehicle injuries, falls, domestic violence, rape, and child abuse.

Selected Indicators

- DWI Arrests via DMV License Suspensions*
- Adult DUI Arrests*
- Alcohol-Related Fatal Motor Vehicle Crashes*
- Alcohol-Related Vehicle Death Rate*
- Alcohol-Involved Drivers of All Drivers in Fatal Crashes*
- Liquor Law Violations*
- Violent Crime Rate
- Alcohol Treatment Admissions*
- Alcohol-related School Suspensions/Expulsions*
- Ethanol sales per capita
- Suicide death rate
- Homicide death rate
- Chronic Liver Disease
- Alcohol Abuse or Dependence
- NSDUH
- CT Youth Risk Behavior Student Survey (YRBSSS)

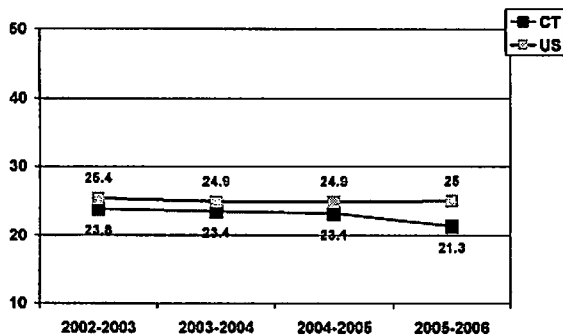
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Tobacco

Consumption

The 2006 National Survey of Drug Use and Health (NSDUH) reported a slightly lower prevalence of cigarette smoking by individuals 12 or older in Connecticut compared to the nation (21.3% vs. 25%). Data over time from the NSDUH shows that cigarette smoking in Connecticut has been steadily decreasing since 1999. The 2003 Connecticut Adult Household Survey found that 21% of the state's population age 18 or older was currently using tobacco (more than 500,000 people), including 10% who were heavy smokers. The highest rates of smoking were found among men (25%), adults aged 18-34 (33%), and Blacks (25%).

Percent Past 30 Day Cigarette Use Ages 12 or Older; United States and Connecticut, NSDUH Surveys



In the data collected from the 2007 YRBSSS, it was reported that 10% of Connecticut's high school students had smoked a cigarette before the age of 13, 13% of students 15 or younger had smoked at least one cigarette in the past 30 days, and 30% of 12th graders had smoked during the past month. Among high school students, recent tobacco use was highest for Whites (35%) and Hispanics (18%).

Consequences

- More than 400,000 deaths in the U.S. each year are attributed to cigarette smoking, making it the leading preventable cause of death. In Connecticut, more than 5,200 people annually die from smoking-related diseases.
- Smoking increases the risk of heart disease, cancer, stroke, and chronic lung disease. Heart disease is the leading cause of death in the US and in Connecticut, and the leading cause of heart disease is smoking.
- Approximately 80% of chronic obstructive pulmonary (COPD) and emphysema deaths are attributable to smoking.
- Smoking is believed to be responsible for 90% of all cancer deaths and 30% of most other cancer deaths in the United States. Connecticut's lung cancer age-adjusted mortality rate has decreased from 53.4 per 100,000 population in 2004 to a rate of 46.8 in 2006.
- Environmental tobacco smoke increases the risk for heart disease and lung cancer among nonsmokers.
- Careless smoking is the leading cause of fatal fires in the U.S.
- The economic costs per year of tobacco use in the Connecticut were estimated to be \$1.7 billion in 2002, including those costs attributed to lost productivity and medical expenditures.

Selected Indicators

- Synar non-compliance rate*
- Wholesale number of cigarettes taxed*
- Lung cancer deaths
- Lung disease deaths
- Chronic Obstructive Pulmonary Disease deaths
- Cardiovascular Disease deaths
- NSDUH
- CT Youth Risk Behavior Student Survey (YRBSSS)

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Marijuana

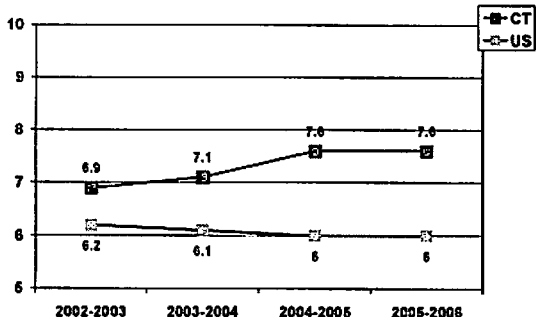
Consumption

Marijuana remains the most commonly used illicit drug in Connecticut and in the United States. Trend data from the National Survey of Drug Use and Health (NSDUH) showed that the prevalence of current marijuana use has increased in Connecticut from 6.9% in 2002 to 7.6% in 2006. The 2003 Connecticut Adult Household Survey, which found that 39% of adults 18 or older had ever used marijuana and 7.3% had used in the past year, also documented an increase in marijuana use over the past decade. The CTAHS also reported highest rates of past-month use among men (7%), young adults 18-25 (17%), and Blacks (7%).

Marijuana use is widespread among young adults and adolescents. The 2006 Core Survey of Connecticut college students showed that 37.6% of students admitted smoking marijuana in the past year and 23.2% had used marijuana in the past month. The 2006 NSDUH survey reported marijuana use among the similar age demographic of 18-25 year olds as 28% in the past year and 16.3% in the past month.

The 2007 Connecticut High School YRBSS survey results demonstrate that while fewer students report use of marijuana as compared to alcohol, there is still a significant number of students currently smoking marijuana within the past month with 15% of 9th graders and 34% of 12th graders reporting current use. The highest rates of past 30 day marijuana use for high school students are among Whites (31%), with recent use rates for Blacks and Hispanics at 21% and 22% respectively.

Percent Past 30 Day Marijuana Use Ages 12 or Older; NSDUH Surveys



Consequences

- Smoking marijuana frequently has been associated with increased reporting of health problems and more days of missed employment than nonsmokers.
- In the short-term marijuana use may cause adverse physical, mental, emotional, and behavioral changes

such as problems with memory and learning, distorted perception, difficulty in thinking and problem solving, loss of coordination, and increased heart rate.

- Longer term adverse health effects include respiratory illnesses, memory impairment, and weakening of the immune system. Long-term marijuana use causes changes in the brain similar to those seen after long-term use of other major drugs of abuse.
- Marijuana has been shown to compromise the ability to learn and remember information, often leading to deficits in accumulating intellectual, job or social skills.
- Depression, anxiety, and personality disturbances have been associated with marijuana use.
- Babies born to women who used marijuana during their pregnancies display altered responses to visual stimuli, increased tremulousness, and potential neurological problems.
- Risk of heart attack more than quadruples in the first hour after smoking marijuana.
- Initiation of marijuana use at younger ages has been linked to higher and more severe patterns of use of marijuana and other substances in adolescence and adulthood.
- The number of marijuana-related treatment admissions to publicly funded facilities in Connecticut has increased annually since 1994. In 2006, Connecticut's marijuana-related treatment admissions rate was 132 per 100,000 population.
- Although marijuana abusers generally do not commit violent crimes, the distribution of marijuana has been associated with violent crime in Connecticut, usually involving rival criminal groups and gangs.
- The social costs of marijuana use were estimated at \$9.1 billion in 2001.

Selected Indicators

- Drug Related Arrests*
- Marijuana Abuse Treatment Admissions*
- Drug-related school suspensions and expulsions*
- School Drop-out Rate*
- Illicit Drug Use Death Rate
- NSDUH
- CT Youth Risk Behavior Survey (YRBSS)

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Heroin Use

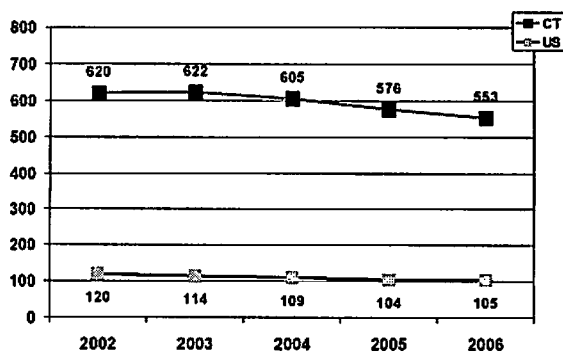
Consumption

According to the 2006 National Survey on Drug Use and Health (NSDUH), an estimated 3.8 million people had used heroin at some time in their lives, and over 338,000 of them reported using it within the month preceding the survey. The same survey data show that individuals 26 and older represent the greatest number of heroin users in the United States.

Demand for heroin increased dramatically in Connecticut in the last decade. It is now easily accessible, of high purity (an average of 70-80% purity according to the DEA) and sells at low prices. Data from Connecticut's Adult Household Survey show that the lifetime prevalence of reported heroin use among adults 18 and older rose from 1.7% in 1995 to 2.2% (more than 56,000 persons) in 2003, and Connecticut's rate of heroin use among adults exceeds the national rate. The 2007 YRBSS Student Survey found that 4.1% of 9th-12th graders reported ever using heroin.

In 2006, an estimated 13.7% of persons nationally receiving substance abuse treatment were admitted due to a heroin addiction. From 2003 to 2006, the number of treatment admissions by young adults for heroin increased by 18%. In 2006 in Connecticut, 36% of treatment admissions were due to the use of heroin as a primary substance.

Heroin Treatment Admission Rate per 100,000 Persons Age 12 and Older, United States and Connecticut 2002-2006



Consequences

Heroin is a highly addictive drug and its abuse has repercussions that extend far beyond the individual user. The medical and social consequences of drug abuse - HIV/AIDS, tuberculosis, fetal effects, crime, violence, and disruptions in family, workplace, and educational environments — have a devastating impact on society and cost billions of dollars each year. In the United States, the

cost of heroin addiction including the cost to treat, economic and social costs like loss of productivity has been estimated to be \$26.4 billion.

- Chronic heroin use can lead to serious medical consequences such as fatal overdose, scarred and/or collapsed veins, bacterial infections of the blood vessels and heart valves, abscesses and other soft-tissue infections, and liver or kidney disease. Poor health conditions and depressed respiration from heroin use can cause lung complications, including various types of pneumonia and tuberculosis.
- Addiction is the most detrimental long-term effect of heroin use because it is a chronic, relapsing disease characterized by compulsive drug seeking and use.
- Long-term effects of heroin use also can include arthritis and other rheumatologic problems and infection of bloodborne pathogens such as HIV/AIDS and hepatitis B and C (which are contracted by sharing and reusing syringes and other injection paraphernalia). It is estimated that injection drug use has been a factor in one third of all HIV and more than half of all hepatitis C cases in the United States.
- Heroin use by a pregnant woman can result in a miscarriage or premature delivery. Heroin exposure in utero can increase a newborn's risk of sudden infant death syndrome (SIDS).
- Data from the Connecticut Department of Public Health indicate that there were 122 heroin and narcotics related deaths in 2002.
- In 2002, half (49%) of law enforcement officials in Connecticut responding to the National Drug Threat Survey reported that heroin was a high threat in their jurisdiction

Selected Indicators

- Heroin Treatment Admissions*
- HIV, Hepatitis, and STI Rates*
- Property Crimes*
- Illicit Drug Use Death Rate*
- Drug Arrests
- DEA Information on Purity, Seizures, etc.
- NSDUH
- CT Youth Risk Behavior Student Survey (YRBSS)

Prescription Drugs

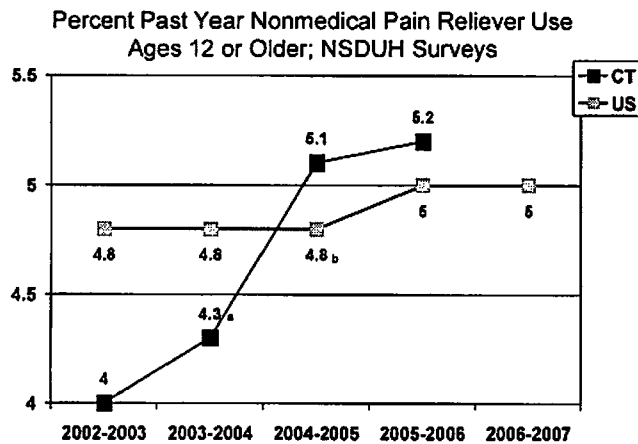
Consumption

The 2006 National Survey of Drug Use and Health (NSDUH) found that 6% of the US population aged 12 and older were currently using prescription drugs non-medically, including pain relievers (5.2 million users), sedatives and tranquilizers (2.1 million users), and stimulants (1.4 million users). Young adults represent the fastest growing segment of the population abusing prescription and over the counter drugs.

Trend data comparing 2002 to 2006 NSDUH survey responses show that nationally young persons in the age ranges of 12-17 and those aged 18-25 have shown statistically significant increases in rates of past 30 day nonmedical use of psychotherapeutics including pain relievers, tranquilizers, stimulants and sedatives.

In 2006, young adults aged 18-25 represented the highest rates of current use in all categories of illicit drugs including prescription drugs both nationally and in Connecticut. Controlled prescription drugs like OxyContin, Ritalin and Valium are now the fourth most abused substance in America behind marijuana, alcohol and tobacco.

As shown in the graph below, rates of pain reliever misuse in Connecticut had a statistically significant increase in 2005 and remained above the national average as of 2006.



^a Difference between 04-05 and 03-04 CT estimates is statistically significant at the 0.10 level.
^b Difference between 05-06 and 04-05 US estimates is statistically significant at the 0.05 level.

Misuse of prescription drugs may also be the most common form of drug abuse among the elderly who use prescription medications approximately three times as frequently as the general population and have been found to have the poorest rates of compliance with directions for taking a medication.

The 2003 Connecticut Adult Household Survey found lifetime rates for non-medical use of prescription drugs exceeded those for heroin and methamphetamines, including 8.3% for stimulants, 7.7% for pain medications, 6.0% for tranquilizers and 5.2% for sedatives. Males, young adults and Whites were especially at risk for misuse of prescription drugs.

Data from Connecticut's substance abuse treatment system show that there were 1,076 primary prescription drug abuse treatment admissions in 2003, representing 2.3% of all treatment admissions statewide. From 2001 to 2003, there was a 45% increase in synthetic opiate drug admissions.

Consequences

- Negative health consequences include the potential for developing tolerance to the drug, physical dependence.
- Severe respiratory depression, cardiovascular failure, seizures or death can follow a large single dose of a prescription drug.
- Abuse of controlled prescription drugs is implicated in at least 23% of drug-related emergency department admissions and 20% of all single drug-related emergency department deaths. Between 1994 and 2002, there was a 79% increase in the total number of controlled prescription drug related mentions in emergency department visits, with prescription opioids demonstrating the sharpest increase (168%) over this period.
- Prescription opioids accounted for more drug mentions involved in multiple drug-related deaths (19%) than cocaine (15%), heroin (13%) and marijuana (3%).
- Seven percent of all controlled prescription drug abusers report experiencing emotional or mental health problems caused or worsened by their abuse of the drugs.
- Twelve percent of adult prescription drug abusers and 15% of teenage prescription drug abusers meet DSM-IV diagnostic criteria for abuse or addiction to these drugs.
- In Connecticut during the period 2003 to 2006, other opiate (non-heroin) drug primary substance abuse treatment admissions has increased from 2.7% to 3.9%.
- It has been estimated that the cost of opioid analgesic abuse in the US in 2001 was \$9.2 billion.

Selected Indicators

- Other Opiates Substance Abuse Treatment Admissions*
- Emergency Room Mentions
- NSDUH

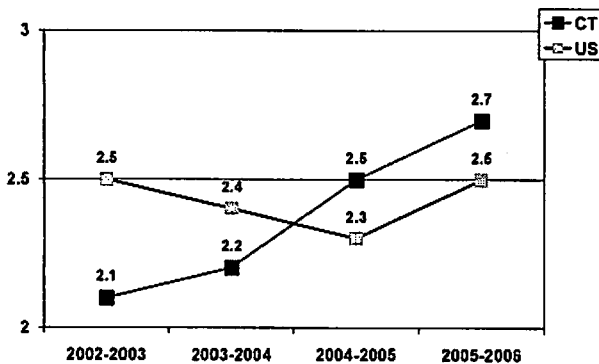
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Cocaine

Consumption

In 2006 data from the National Survey of Drug Use and Health (NSDUH), an estimated 2.4 million persons (1%) nationwide were current cocaine users, 702,000 of whom used crack. It was estimated that during the past year 2.7% of Connecticut residents used cocaine compared to 2.5% nationally. However, as the national annual average has remained relatively constant, the rate of use in Connecticut has consistently risen from a rate of 2.1% in 2003.

Percent Past Year Cocaine Use Ages 12 or Older;
NSDUH Surveys



The state's 18-25 year olds remain the greatest consumers of cocaine at 9% of all users. Also, data from the 2006 Core Survey of Connecticut college students found that the prevalence of current cocaine use increased from 2.7% in 2001 to 3% in 2006.

The 2007 YRBSS data report that 4% of 9th graders in Connecticut used cocaine within the past 30 days as compared to 9.2% of 12th graders in the same year. The 2003 Connecticut Adult Household Survey found that lifetime rates for cocaine use had increased from 8.6% in 1995 to 14.6% in 2003. Males and Caucasians had the highest rates of lifetime cocaine use.

According to a 2003 report from the National Drug Intelligence Center of the US Department of Justice, powdered cocaine and crack cocaine pose the greatest drug threat to Connecticut. Cocaine is readily available with relatively high purity levels in Connecticut according to DEA, and its distribution and abuse are associated with more violent crime than any other drug.

Consequences

There are significant physical, mental and social problems associated with cocaine use, abuse and addiction. In 2001, the social cost of cocaine consumption was estimated to be \$62.6 billion — the third largest cost for any drug after both tobacco and alcohol.

- Negative physical consequences include: cardiovascular disease, including hypertension, arrhythmia, cardiomyopathy, myocarditis, myocardial ischemia, myocardial infarction, erosion of dental enamel, rhinitis, perforation of nasal septum, seizures, lung damage, pneumonia, chronic cough, acute renal failure, sexual dysfunction, spontaneous abortion in pregnant women, and infections (HIV, hepatitis B or C, tetanus) from sharing needles.
- Psychological consequences include: anxiety, depression, suicidal feelings and behaviors, insomnia, emotional instability, irritability, aggressive behavior, and psychotic symptoms. Symptoms of psychiatric disorders such as schizophrenia, panic disorder, depression, or mania can be triggered or exacerbated by cocaine use or withdrawal.
- Cocaine use is associated with damaged family and social relationships, child abuse or neglect, lost jobs, accidents, prostitution, spread of infections, criminal behaviors, violence and homicide.
- In 2001, data from the Connecticut Office of the Chief Medical Examiner indicated that cocaine was a factor 16.6% of all deaths statewide involving drugs.
- Data from Connecticut's substance abuse treatment system show that there were 5,754 primary cocaine abuse treatment admissions in 2003, representing 12.6% of all treatment admissions statewide. The number of cocaine-related treatment admissions remained higher than the number of treatment admissions for any other illicit drug except heroin.

Selected Indicators

- Cocaine Abuse Treatment Admissions*
- Violent Crimes*
- Drug Arrests
- Illicit Drug Use Death Rate
- Homicide Rate
- Child abuse/neglect Rate
- NSDUH
- CT Youth Risk Behavior Student Survey (YRBSS)