

# SUBSTANCE ABUSE TRENDS IN TEXAS: JUNE 2009

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## ABSTRACT

***This report updates indicators of drug abuse in Texas since the June 2008 report and describes trends by calendar year from 1987 through 2008. Important changes to drug patterns in Texas include increases in heroin inhalation by younger Hispanics. This was first noticed with the "cheese heroin" situation in Dallas, but further investigation has found that heroin inhalation is increasing statewide. Some treatment admissions are young teenagers who are not novices and are using other illicit drugs, and those in their twenties are shifting to injecting. The availability of cocaine decreased in the last half of 2008 due to violence and gang warfare on the border. The methamphetamine indicators have changed since 2005, with supplies down, prices increasing, and purity decreasing. Border security and seizures of Mexican methamphetamine have encouraged local manufacturers to return to "cooking," using over-the-counter pseudoephedrine with the "one pot" or "shake and bake" method. Other changes include continuing shifts in demographics of cocaine users and ecstasy users; severity of problems among noncoerced marijuana treatment admissions; and increasing problems with alprazolam and carisoprodol. The magnitude of the substance abuse and mental health problem on the border is of serious concern. The majority of human immunodeficiency virus (HIV) and acquired immunodeficiency syndrome (AIDS) cases continue to be people of color. The proportion due to injection drug use (IDU) continues to decrease, but the proportion due to men who have sex with men (MSM) is beginning to increase.***

## AREA DESCRIPTION

The population of Texas in 2008 was 24,326,974, with 48 percent White, 11 percent Black, 36 percent Hispanic, and 4 percent "Other." Illicit drugs continue to enter from Mexico through cities such as El Paso, Laredo, McAllen, and Brownsville, as well as through smaller towns along the border. The drugs then move northward for distribution through Dallas/Fort Worth and Houston. In addition, drugs move eastward from San Diego through Lubbock and from El Paso to Amarillo and Dallas/Fort Worth.

## DATA SOURCES

*Substance Abuse Trends in Texas* is an ongoing series that is prepared annually as a report for the Community Epidemiology Work Group meetings sponsored by the National Institute on Drug Abuse (NIDA). This report updates the June 2008 report. To compare the June 2009 report with earlier periods, please access <http://www.utexas.edu/research/cswr/gcattc/drugtrends.html>.

Data for this report include the following sources:

- **Student substance use data** for 2008 came from the *Texas School Survey of Substance Abuse: Grades 7–12, 2008* and the *Texas School Survey of Substance Abuse: Grades 4–6, 2008*, which were authored by L.Y. Liu and published by the Department of State Health Services (DSHS). Data on Texas college students came from the *2005 Texas Survey of Substance Use among College Students: Main Findings*, also written by L.Y. Liu and published by DSHS. For 2007, the data for high school students in grades 9–12 came from the Youth Risk Behavior Surveillance Survey (YRBS)—United States, 2007, *MMWR Surveillance Summaries*, June 6, 2008/57(SS-4); 1–136.
- **Data on drug use** by Texans age 12 and older came from the Substance Abuse and Mental Health Services Administration's (SAMHSA) National Surveys on Drug Use and Health (NSDUH). The statewide estimates are from the 2006-2007 NSDUH, and the substate estimates in appendix 2 are from the 2004, 2005, and 2006 NSDUH surveys. Estimates for the Dallas and Houston metropolitan areas are based on the 2005–2006 surveys.

- **Poison control center data** came from the Texas Poison Center Network, DSHS, for 1998 through 2008. Analysis was provided by Mathias Forrester, epidemiologist with the Texas Poison Center Network, and by the author.
- **Treatment data** were provided by DSHS's data system on clients admitted to treatment in DSHS-funded facilities from January 1, 1987, through December 31, 2008, in a dataset extracted May 12, 2009. For most drugs, characteristics of clients entering with a primary problem with the drug are discussed, but in the case of club drugs, information is provided on any client with a primary, secondary, or tertiary problem with that drug. Analysis was by the author.

Information on impaired drivers entering treatment was drawn from Maxwell, J.C. & Freeman, J. E. (2007), Gender Differences in DUI Offenders in Treatment in Texas *Traffic Injury Prevention*, 8:353-360 and from Maxwell, J.C., Freeman, J.E., & Davey, J.D. Too Young to Drink but Old Enough to Drive Under the Influence: A Study of Underage Offenders as Seen in Substance Abuse Treatment in Texas, *Drug and Alcohol Dependence*, available on line May 27, 2008.

Information on marijuana admissions to treatment are from Copeland, J. & Maxwell, J. C. (2007). Cannabis treatment outcomes among legally coerced and non-coerced adults. *BioMed Central Public Health*, 7:111-118.

- **Information on drug-involved deaths** through 2007 came from death certificates from the Bureau of Vital Statistics, DSHS; analysis was by the author. Because justices of the peace, who have no medical training, can sign death certificates, the actual substances involved may not be listed. Instead, a notation such as "narcotism" may be used. The 2003 death cases are incomplete.

Data on heroin overdose deaths in Dallas came from Coleman, J.J. , Special Report: Cheese-Heroin in Dallas, TX, Prescription Drug Research Center, Fairfax, VA, 2007.

- **Information on drugs identified by laboratory tests** was from the Texas Department of Public Safety (DPS), which reported results from toxicological analyses of substances for 1998 through December 2008 to the National Forensic Laboratory Information System (NFLIS) of the Drug Enforcement Administration (DEA). Analysis was by the author on data downloaded from NFLIS on May 14, 2009. Reports from the

National Clandestine Laboratory Database were downloaded on May 23, 2008 from [http://www.usdoj.gov/dea/concern/map\\_lab\\_seizures.html](http://www.usdoj.gov/dea/concern/map_lab_seizures.html).

- **Price, purity, trafficking, distribution, and supply** information was provided for July–December 2008 reports on trends in trafficking from the Dallas, El Paso, and Houston Field Divisions of the DEA and from DEA's Domestic Monitor Program (DMP).
- **Reports by users and street outreach workers** on drug trends for the first 3 quarters of fiscal year (FY) 2009 were reported to DSHS by workers at local human immunodeficiency virus (HIV) counseling and testing programs across the State.
- **Sexually transmitted disease (STD), HIV, and acquired immunodeficiency syndrome (AIDS)** data were provided by DSHS for annual periods through December 2008. The HIV cases exclude any that later seroconverted to AIDS. Data also came from Maxwell, J.C. & Spence, R.T. , An exploratory study of inhalers and injectors who used black tar heroin, *Journal of Maintenance in the Addictions*, 3(1), 61–81, 2006.

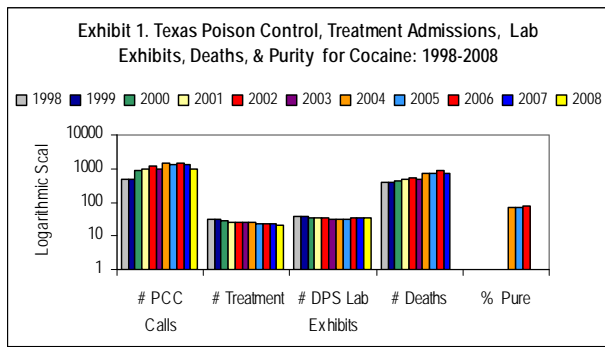
## DRUG ABUSE PATTERNS AND TRENDS

The 2006–2007 NSDUH estimated that 6.4 percent of the Texas population age 12 and older had used an illicit drug in the past month, which is below the national average of 8.0 percent, and 2.7 percent of Texans were dependent on or abused an illicit drug in the past year, as compared to 2.8 percent nationally. For the period 2004–2006, 6.5 percent of the population age 12 and older in the Dallas metropolitan area and 6.2 percent in the Houston area had used any illicit drug. The prevalence of drug use by planning region is shown in appendix 2.

With the recent problems in the economy, HIV/AIDS outreach programs have reported increases in the numbers of people engaging in sex work to support themselves and their families or to obtain drugs, which is resulting in increases in sexually transmitted diseases (STDs).

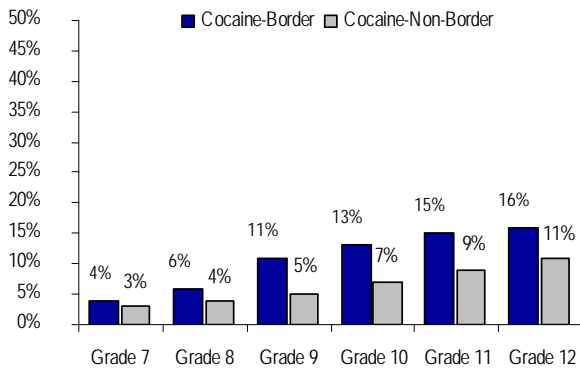
## COCAINE/CRACK

Trends in cocaine use have varied over time (exhibit 1). New terms for powder cocaine include "soft", "snow seal," and "her," with new terms for crack cocaine including "hard," "cookie," and "biscuit."



The *Texas School Survey of Substance Abuse: Grades 7–12, 2008* reported that lifetime use of powder and crack cocaine had dropped from a high of 9 percent in 1998 to 7 percent in 2008, while past-month use dropped from 4 percent in 1998 to 2 percent in 2008. Some 6 percent of students in nonborder counties had ever used powder or crack/cocaine, and 2 percent had used it in the past month. In comparison, students in schools on the Texas border reported higher levels of cocaine use—10 percent lifetime and 4 percent past month (exhibit 2).

Exhibit 2. Percentage of Border and Nonborder Texas Secondary Students Who Had Ever Used Powder or Crack Cocaine, by Grade: 2008



Source: DSHS

The 2007 YRBS reported that 12.6 percent of Texas high school students in grades 9–12 had ever used cocaine, as compared to 11.9 percent in 2005; 5.4 percent had used in the past month, as compared to 5.5 percent in 2005. The 2005 Texas college survey reported that 10 percent had ever used cocaine or crack, and 2 percent had used in the past month.

For the period 2006–2007, the NSDUH reported that 2.3 percent of the Texas population age 12 and older had used cocaine in the past year, below the national rate of 2.4 percent.

Texas Poison Center Network calls involving the use of cocaine increased from 497 in 1998 to 1,363 in 2007 and then decreased to 977 in 2008 (exhibit 1). Sixty-one percent of the cases in 2008 were male.

Cocaine (crack and powder together) represented 22 percent of all admissions to DSHS-funded treatment programs in 2008, down from 32 percent in 1995. Among all cocaine admissions, cocaine inhalers were the youngest and most likely to be Hispanic, and involved in the criminal justice or legal systems (exhibit 3). Cocaine injectors were older than inhalers but younger than crack smokers; they were the most likely to be White. While 36 percent of the powder cocaine clients reported no problem with a second substance, 30 percent reported a problem with alcohol and 20 percent with marijuana. Of the crack cocaine clients, 37 percent reported no second substance problem, with 31 percent reporting a problem with alcohol, 18 percent with marijuana, and 5 percent with powder cocaine.

Exhibit 3. Characteristics of Clients Admitted to TDSHS-Funded Treatment with a Primary Problem with Cocaine by Route of Administration: 2008

|                         | Crack Cocaine Smoke | Powder Cocaine Inject | Powder Cocaine Inhale | Cocaine All <sup>a</sup> |
|-------------------------|---------------------|-----------------------|-----------------------|--------------------------|
| # Admissions            | 10,593              | 940                   | 6,899                 | 19,247                   |
| % of Cocaine Admits     | 55                  | 5                     | 36                    | 100                      |
| Lag-1st Use to Tmt-Yrs. | 14                  | 16                    | 10                    | 13                       |
| Average Age             | 39                  | 37                    | 31                    | 36                       |
| % Male                  | 48                  | 56                    | 50                    | 50                       |
| % Black                 | 47                  | 6                     | 20                    | 35                       |
| % White                 | 36                  | 67                    | 26                    | 33                       |
| % Hispanic              | 17                  | 23                    | 53                    | 31                       |
| % CJ Involved           | 47                  | 54                    | 62                    | 54                       |
| % Employed              | 15                  | 19                    | 36                    | 24                       |
| % Homeless              | 20                  | 16                    | 5                     | 14                       |

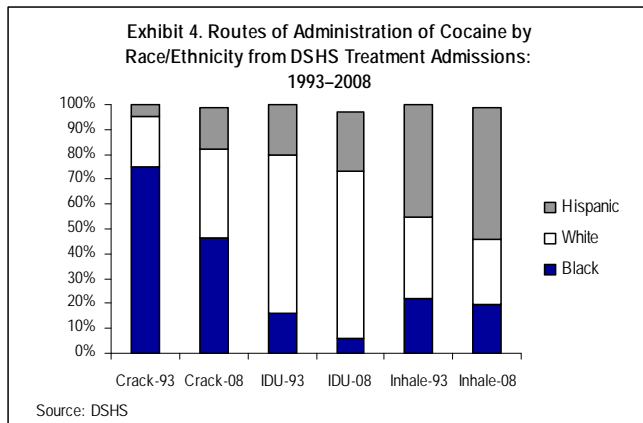
<sup>a</sup>Total includes clients with "other" routes of administration.

Source: DSHS

The term "lag" (exhibit 3) refers to the period from first consistent or regular use of a drug to the date of admission to treatment. Powder cocaine inhalers averaged 10 years between first regular use and entrance to treatment, while injectors averaged 16 years of use before they entered treatment.

Between 1987 and 2008, the percentage of Hispanic treatment admissions using powder cocaine increased from 23 percent to 50 percent, while for Whites and Blacks, the percentages dropped from 48 percent to 30 percent and from 28 percent to 19 percent, respectively. Exhibit 4 shows these changes between 1993 and 2008 by route of administration. The proportion of Blacks among crack cocaine admissions fell from 75 percent in 1993 to 47 percent in 2008, while the proportion of Whites increased from 20 percent in 1993 to 36 percent in 2008. Hispanic crack admissions rose from 5 percent to 17

percent in the same time period.



The number of deaths statewide in which cocaine was mentioned increased from 223 in 1992 to 703 in 2007 (exhibit 5). The average age of the decedents in 2007 was 41; 40 percent were White, 33 percent were Hispanic, and 25 percent were Black. Seventy-six percent were male.

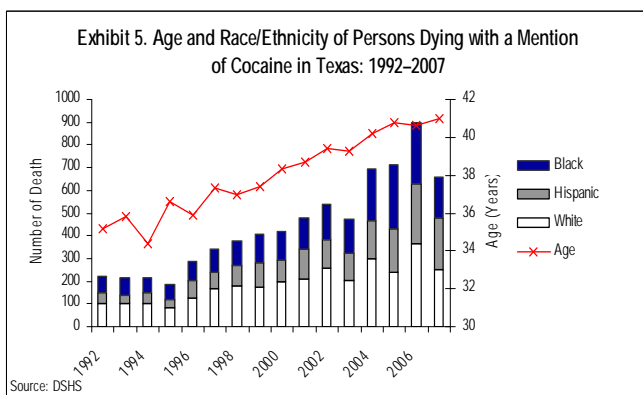
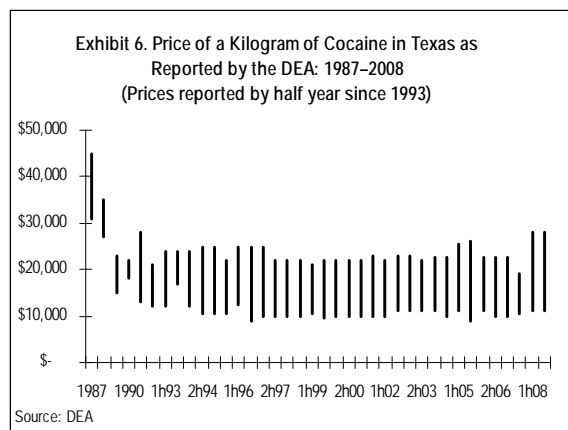


Exhibit 1 shows that the proportion of substances identified as cocaine by the DPS labs is decreasing. In 1998, cocaine accounted for 40 percent of all items examined, compared with 32 percent in 2008.

The Dallas DEA Field Division (FD) reported decreased availability of cocaine between July and December, 2008. The purity of seized cocaine decreased from 69 percent in FY 2006 and 70 percent in FY 2007 to 45 percent for the second half of FY 2008. The El Paso FD reported a temporary moratorium on cocaine smuggling in Ciudad Juarez. Reluctance of Colombian sources to provide cocaine shipments on consignment to Mexican traffickers resulted in a decreased supply in west Texas in the last half of 2008. The Houston DEA FD reported the price of a kilogram of cocaine continued to increase and cocaine was less available and more expensive in San Antonio.

Cocaine continued to be available across the State (exhibit 6). A gram of powder cocaine cost \$50–\$60

in El Paso, \$50–\$80 in Dallas, and \$60–\$100 in Houston. An ounce cost \$600–\$950 in Dallas, \$600–\$1,000 in Houston, \$500–\$850 in Lubbock, \$400–\$700 in Midland, \$500 in El Paso, and \$400–\$500 in Laredo. A kilogram of cocaine cost \$17,500–\$27,500 in Dallas; \$11,000–\$22,500 in El Paso; \$15,000–\$26,500 in Houston; \$16,000–\$17,000 in Laredo; \$12,400–\$25,000 in McAllen; \$21,000–\$22,000 in Lubbock; and \$25,000–\$28,000 in San Antonio.



Across the State, a rock of crack cost \$10–\$50, with \$10–\$20 being the most common price. An ounce of crack cocaine cost \$500 in El Paso; \$650–\$750 in Fort Worth; \$500–\$700 in Lubbock; \$500 in Amarillo; \$800 in Midland; \$500–\$1,000 in Houston; \$800 in Galveston; \$400–\$700 in San Antonio; \$350–\$450 in Austin; and \$500 in Waco. A kilogram in Dallas ranged between \$18,500 and \$25,500, as compared to \$14,000 in El Paso, \$24,000–\$26,000 in San Antonio, \$16,000 in McAllen and Midland.

Street outreach workers reported that crack cocaine is the drug of choice on the streets of Galveston and Brazoria Counties as well as in Houston and Corpus Christi. Use of crack cocaine was reported increasing in parts of Austin. Lubbock reported cocaine was cheap and very potent, and inhaling cocaine was increasing in the Beaumont area.

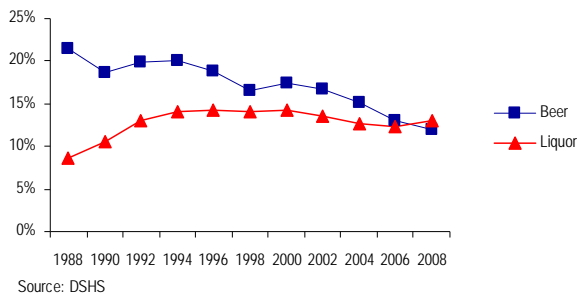
### ALCOHOL

Alcohol is the primary drug of abuse in Texas. In 2008, 63 percent of Texas secondary school students (grades 7–12) had ever used alcohol, and 30 percent had drunk alcohol in the last month. Lifetime use decreased by 5 percent and past-month use decreased by 3 percent between 2006 and 2008. Of particular concern is heavy consumption of alcohol, or binge drinking, which is defined as drinking five or more drinks at one time. In 2008, 12 percent of all secondary students said that when they drank, they usually drank five or more beers at one time, and 13 percent reported binge drinking of liquor, which has remained relatively stable since 1992 (exhibit 7).



Among students in grades 4–6 in 2008, 23 percent had ever drunk alcohol, and 15 percent had drunk alcohol in the past school year. Lifetime use of alcohol increased 4 percent and past-year use increased 12 percent between 2006 and 2008. Eleven percent of fourth graders had used alcohol in the school year, compared with 21 percent of sixth graders.

Exhibit 7. Percentage of Texas Secondary Students Who Reported They Normally Consumed Five or More Drinks at One Time, by Specific Alcoholic Beverage: 1988–2008



The 2007 YRBS reported 78 percent of Texas high school students in grades 9–12 had ever drunk alcohol, 48 percent had drunk in the past month, and 29 percent had drunk five or more drinks in a row in the last month. In 2005, 26 percent of girls and 33 percent of boys reported binge drinking as compared to 28 percent of girls and 30 percent of boys reporting binge drinking behavior in 2007.

The 2005 Texas college survey found that 84 percent had drunk alcohol in their lifetime, and 66 percent had drunk in the past month. Almost 30 percent of college students reported binge drinking (38 percent males and 23 percent females). Although the legal drinking age is 21, 58 percent of college students age 18 to 20 reported drinking an alcoholic beverage in the past month.

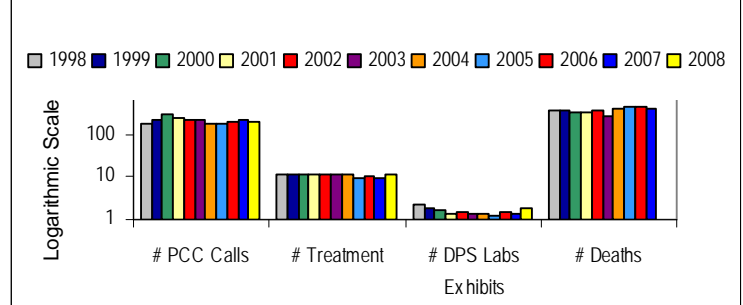
The 2006–2007 NSDUH estimated that 47.6 percent of all Texans age 12 and older had drunk alcohol in the past month, below the national average of 51.0 percent; 22.8 percent had drunk five or more drinks on at least one day (binge drinking) in the past month, below the national average of 23.2 percent. Among underage Texas drinkers (age 12 to 20), 25 percent reported past-month alcohol use, as compared to 28.1 percent nationally, and 16.3 percent of Texas underage youths reported past-month binge drinking, as compared to 18.8 percent nationally. The highest rate of binge drinking was in Region 1, and the lowest rate was in Region 4. Region 10 had the highest proportion of the Texas population who thought there was great risk in drinking five or more drinks once or twice a week, while Region 7 had the lowest perception of great risk (appendix 2).

In 2008, 27 percent of all clients admitted to publicly-funded treatment programs had a primary problem with alcohol (appendix 1). The characteristics of alcohol admissions have changed over the years. In 1988, 82 percent of the clients were male, compared with 70 percent in 2008. The proportion of White clients declined from 63 percent in 1988 to 56 percent in 2008, and the proportion of Hispanic clients increased from 28 to 30 percent. The proportion of Black clients increased from 7 to 12 percent. The average age increased from 33 to 38 years. Alcohol clients are becoming more likely to be polydrug users: the proportion reporting no secondary drug problem dropped from 67 to 52 percent, and the proportion with a problem with cocaine (powder or crack) increased from 7 to 23 percent. Consuming cocaine and alcohol at the same time produces cocaethylene, which intensifies cocaine's euphoric effects.

The characteristics of persons who entered treatment with a past-year offense for Driving Under the Influence (DUI) have changed over time. Between 1990 and 2008, the proportion of past-year DUI arrestees who went to DSHS-funded treatment who were female increased from 13 percent to 29 percent in 2008, and the proportion of DUI treatment admissions who had a primary problem with alcohol decreased from 88 to 67 percent. Of those DUI arrestees under the legal drinking age of 21 who entered treatment, the proportion reporting a primary problem with alcohol decreased from 75 percent in 1990 to 21 percent in 2008, the proportion with a primary problem of marijuana increased from 19 to 63 percent, and the proportion with a primary problem with cocaine increased from 5 to 7 percent.

## HEROIN

Exhibit 8. Texas Poison Control Calls, Treatment Admissions, DPS Lab Exhibits, and Deaths for Heroin: 1998–2008



The proportion of Texas secondary students reporting lifetime use of heroin dropped from 2.4 percent in 1998 to 1.4 percent in 2008. The 2007 YRBS found 2.4 percent of Texas high school students had ever used heroin, as compared to a

national median of 4 percent. Dallas and Houston students reported lifetime use of heroin at approximately 5 percent, as compared to a median of 3 percent among other local school districts that participated across the Nation. The 2005 college survey found 5 percent of students had ever used heroin or other opiates. The 2004–2006 NSDUH reported 0.1 percent of Texans age 12 and older had used heroin in the past year.

Calls to the Texas Poison Center Network involving confirmed exposures to heroin ranged from 181 in 1998 to a high of 296 in 2000 but dropped to 192 in 2008 (exhibit 8).

Heroin was the primary drug of abuse for 11 percent of clients admitted to treatment in 2008 (appendix 1). The characteristics of these addicts vary by route of administration, as exhibit 9 illustrates. Most heroin addicts entering treatment inject the drug, but the proportion inhaling heroin increased from 4 percent of all heroin admissions in 1996 to 20 percent in 2008. During that time, the proportion of inhalers who were Hispanic increased from 26 to 64 percent, and the average age of inhalers decreased from 30 to 27 years.

Exhibit 9. Characteristics of Clients Admitted to DSHS-Funded Treatment with a Primary Problem with Heroin by Route of Administration: 2008

|                         | Inject | Inhale | Smoke | All <sup>a</sup> |
|-------------------------|--------|--------|-------|------------------|
| # Admissions            | 7,583  | 2,023  | 80    | 9,945            |
| % of Heroin Admits      | 76     | 20     | 1     | 100              |
| Lag-1st Use to Tmt-Yrs. | 14     | 7      | 9     | 12               |
| Average Age             | 35     | 27     | 30    | 33               |
| % Male                  | 64     | 56     | 66    | 64               |
| % Black                 | 6      | 14     | 5     | 8                |
| % White                 | 38     | 21     | 53    | 35               |
| % Hispanic              | 54     | 64     | 40    | 56               |
| % CJ Involved           | 29     | 39     | 41    | 32               |
| % Employed              | 12     | 23     | 33    | 15               |
| % Homeless              | 15     | 8      | 6     | 13               |

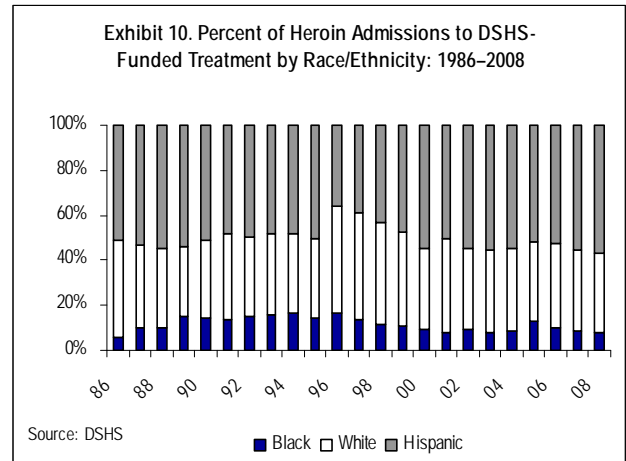
<sup>a</sup>Total includes clients with other routes of administration.

Source: DSHS

While the number of individuals who inhale heroin was small, the lag period between first use and seeking treatment for this group was 7 years, compared with 14 years for injectors. This shorter lag period means that, contrary to the street rumors that “sniffing or inhaling is not addictive,” inhalers can become dependent on heroin. They will either enter treatment sooner while still inhaling, or they will shift to injecting, thus increasing their risk of hepatitis C and HIV infection, becoming more impaired, and entering treatment later.

In addition to the decrease in the age of inhalers, the

age of all heroin admissions has decreased from 37 in 1996 to 33 in 2008. This increase in inhalers and decrease in age at admission is evidence of the emergence of younger cohort of heroin users. The proportion of all treatment clients with a primary problem with heroin who are Hispanic increased from 23 percent in 1996 to 56 percent in 2008 (exhibit 10).



Of all the 2008 heroin admissions, 45 percent reported no second substance problem and 20 percent reported a problem with powder cocaine (which shows the tendency to “speedball,” or use heroin and cocaine sequentially). Nine percent reported a second problem with marijuana, 8 percent with alcohol, 6 percent with other opiates, and 5 percent with crack cocaine.

“Cheese heroin,” a mixture of Tylenol PM® and heroin (heroin combined with diphenhydramine and acetaminophen), continues to be a problem in Dallas, and heroin inhaling is increasing across the State. Diphenhydramine has traditionally been used as a “cut” to turn tar into powder. A 2007 analysis of records from the Dallas County Medical Examiner found that only one death involved just “cheese heroin.” All the other “cheese heroin” deaths also involved combinations of cocaine, alprazolam, hydrocodone, etc., which shows that this is not a population of novice users but is a growing problem among young experienced heroin users (Coleman, 2007).

Cases of “cheese heroin” were reported in other counties in the Dallas/Fort Worth area, but the term “cheese heroin” is rarely reported elsewhere in the State, although heroin use by teenagers and persons in their twenties continued to increase statewide. The number of clients statewide under age 30 entering treatment with a primary problem with heroin increased from 3,118 in 2005 to 4,630 in 2008. Fifty-seven percent of the teenage clients were male and 85 percent were Hispanic. Sixty-two percent were

heroin inhalers, but as age increased, users shifted route of administration, with 74 percent of clients in their twenties reporting injecting the drug.

In 2007, there were 390 deaths in Texas in which the death certificate included a mention of heroin, narcotics, opiates, or morphine (terms used by justices of the peace were not always as specific as desired) (exhibit 11). Fifty-four percent were White, 38 percent were Hispanic, and 7 percent were Black, 76 percent were male. The average age was 37, down from 39 in 2007, which is another indication of a younger heroin-using population.

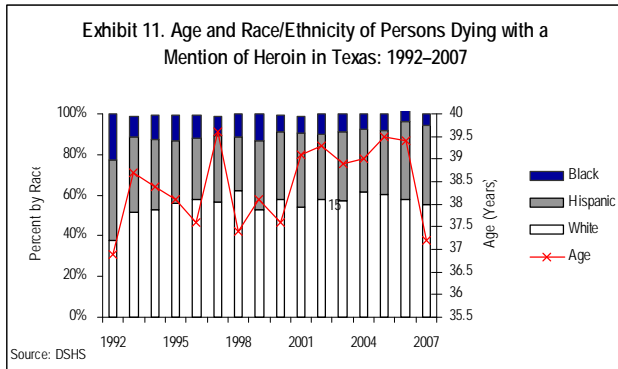


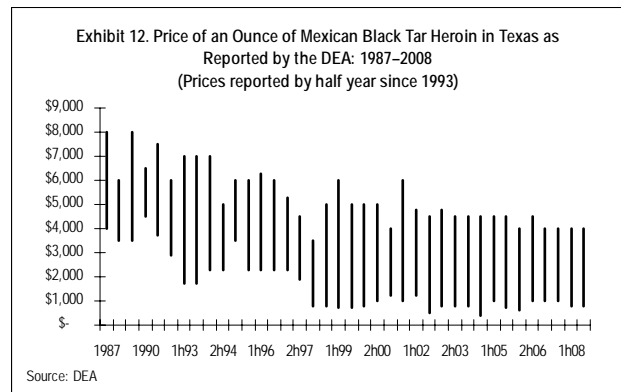
Exhibit 8 shows that the proportion of items identified as heroin by DPS labs has remained low at 1–2 percent over the years. The predominant form of heroin in Texas is black tar, which has a dark, gummy, oily texture that can be diluted with water and injected. Exhibit 12 shows the decline in price over the years. Depending on the location, black tar heroin sold on the street for \$5–\$20 per paper, balloon, or capsule; \$100–\$300 per gram; \$800–\$4,000 per ounce; and \$25,000–\$62,000 per kilogram. An ounce of black tar cost \$1,000 in El Paso; \$3,600–\$4,000 in Midland; \$1,000–\$2,500 in Houston; \$1,300 in Galveston; \$1,300 in Laredo; \$1,000 in McAllen; \$1,200–\$1,600 in Austin; \$800–\$1,300 in Fort Worth; \$1,000 in Lubbock; and \$1,200–\$2,400 in San Antonio. Black tar heroin cost \$35,000–\$50,000 per kilogram in Dallas; \$25,000 in El Paso; \$40,000–\$50,000 in Houston; \$25,000–\$40,000 in McAllen; and \$50,000–\$62,000 in San Antonio.

Mexican brown heroin, which is black tar heroin that has been cut with lactose, diphenhydramine, or another substance and then turned into a powder to inject or inhale, cost \$10 per cap and \$110–\$250 per gram. An ounce cost \$500–\$800 in San Antonio; \$800 in McAllen; \$800–\$1,600 in Dallas; and \$3,400–\$4,000 in Lubbock.

Colombian heroin sold for \$60–\$80 per gram and \$1,200 per ounce in McAllen and \$2,000 in Dallas. It sold for \$50,000–\$80,000 per kilogram in Houston; \$30,000 in McAllen; \$84,000–\$90,000 in El Paso; and \$65,000–\$80,000 in Dallas.

Colombian heroin sold for \$60–\$80 per gram and \$1,200 per ounce in McAllen and \$2,000 in Dallas. It sold for \$50,000–\$80,000 per kilogram in Houston; \$30,000 in McAllen; \$84,000–\$90,000 in El Paso; and \$65,000–\$80,000 in Dallas.

Southwest and Southeast Asian heroin sold for \$200–\$350 per gram, \$2,000–\$4,000 per ounce, and \$70,000 per kilogram in Dallas.



The Houston Police Department reported an increase in the availability of heroin on the street, and the Galveston DEA Regional Office reported black tar was more readily available than in previous quarters. Heroin prices in McAllen were stable. In the second quarter of 2009, the Houston DEA FD reported Mexican nationals and Mexican Americans and Blacks dominated the heroin trade, with a few Nigerians also involved in heroin trafficking. Blacks from Louisiana were trafficking quantities of Colombian heroin. Black tar was more prevalent in the north areas of Houston, while Colombian white heroin was more prevalent in the southwest areas of Houston.

Exhibit 13 shows the purity and price of heroin purchased by the DEA in four Texas cities under the DMP. Heroin is much purer at the border in El Paso and decreases in purity as it moves north, since it is “cut” with other products as it passes through the chain of dealers. Street outreach workers reported an increase in black tar heroin in areas of Corpus Christi. Lubbock outreach workers reported heroin was not as pure as in the past and it was being “cut” with alprazolam and there were mentions of cheese heroin.

Exhibit 13. Price and Purity of Heroin Purchased in Dallas, El Paso, Houston, and San Antonio by the DEA: 1995–2007

|                        | 1995   | 1996   | 1997   | 1998   | 1999   | 2000   | 2001   | 2002   | 2003   | 2004   | 2005   | 2006   | 2007   |
|------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Dallas Purity (%)      | 6.8    | 3.5    | 7.0    | 11.8   | 14.0   | 16.0   | 13.4   | 17.2   | 13.3   | 16.3   | 11.6   | 17.7   | 20.6   |
| Price/Milligram Pure   | \$2.34 | \$6.66 | \$4.16 | \$1.06 | \$1.01 | \$0.69 | \$1.36 | \$0.75 | \$0.98 | \$0.90 | \$1.11 | \$1.10 | \$1.09 |
| El Paso Purity (%)     |        |        |        |        | 56.7   | 50.8   | 41.8   | 40.3   | 44.7   | 50.5   | 44.7   | 44.8   | 39.8   |
| Price/Milligram Pure   |        |        |        |        | \$0.49 | \$0.34 | \$0.44 | \$0.27 | \$0.40 | \$0.27 | \$0.40 | \$0.33 | \$0.49 |
| Houston Purity (%)     | 16.0   | 26.1   | 16.3   | 34.8   | 17.4   | 18.2   | 11.3   | 28.2   | 27.4   | 24.8   | 24.4   | 18.1   | 7.0    |
| Price/Milligram Pure   | \$1.36 | \$2.15 | \$2.20 | \$2.43 | \$1.24 | \$1.14 | \$1.51 | \$0.64 | \$0.45 | \$0.44 | \$1.11 | \$1.90 | \$1.66 |
| San Antonio Purity (%) |        |        |        |        |        |        |        |        | 8.2    | 6.4    | 11.2   | 17.4   | 7.1    |
| Price/Milligram Pure   |        |        |        |        |        |        |        |        | \$1.97 | \$2.24 | \$0.56 | \$0.79 | \$1.88 |

Source: DEA

Exhibit 14. Hydrocodone, Oxycodone, Methadone, and Fentanyl Indicators in Texas: 1998–2008

|  | 1998 | 1999 | 2000 | 2001  | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 |
|--|------|------|------|-------|------|------|------|------|------|------|------|
| <b>Poison Control Center Cases of Abuse and Misuse</b> |      |      |      |       |      |      |      |      |      |      |      |
| Fentanyl   |      |      | 9    | 2     | 3    | 11   | 17   | 10   | 36   | 28   | 31   |
| Hydrocodone  | 192  | 264  | 286  | 339   | 429  | 414  | 516  | 505  | 657  | 703  | 723  |
| Methadone  | 17   | 15   | 30   | 27    | 50   | 41   | 69   | 69   | 73   | 91   | 217  |
| Oxycodone  | 12   | 26   | 22   | 34    | 68   | 64   | 77   | 50   | 68   | 67   | 81   |
| <b>DSHS Treatment Admissions</b>                       |      |      |      |       |      |      |      |      |      |      |      |
| Methadone  | 55   | 69   | 44   | 52    | 75   | 86   | 63   | 91   | 101  | 113  | 160  |
| "Other Opiates" <sup>a</sup>                           | 553  | 815  | 890  | 1,386 | 2084 | 2794 | 3433 | 3482 | 3903 | 4529 | 5221 |
| <b>Deaths with Mention of Substance (DSHS)</b>         |      |      |      |       |      |      |      |      |      |      |      |
| Fentanyl   | 8    | 5    | 4    | 7     | 22   | 10   | 32   | 30   | 43   | 49   |      |
| Hydrocodone  | 5    | 25   | 52   | 107   | 168  | 140  | 201  | 269  | 400  | 360  |      |
| Methadone  | 31   | 32   | 62   | 90    | 131  | 122  | 164  | 201  | 245  | 195  |      |
| Oxycodone  | 1    | 8    | 20   | 40    | 56   | 60   | 66   | 62   | 81   | 65   |      |
| <b>Drug Exhibits Identified by DPS Laboratories</b>    |      |      |      |       |      |      |      |      |      |      |      |
| Fentanyl   | 0    | 3    | 1    | 7     | 4    | 2    | 14   | 7    | 14   | 10   | 10   |
| Hydrocodone  | 52   | 479  | 629  | 771   | 747  | 1212 | 1598 | 1789 | 2324 | 2812 | 2177 |
| Methadone  | 1    | 19   | 22   | 42    | 58   | 70   | 130  | 133  | 169  | 209  | 181  |
| Oxycodone  | 10   | 36   | 72   | 115   | 106  | 174  | 270  | 237  | 264  | 244  | 258  |

<sup>a</sup> "Other Opiates" refers to those other than heroin.

## OTHER OPIATES

The "other opiates" group excludes heroin but includes opiates such as methadone, codeine, hydrocodone (Vicodin®, Tussionex®), oxycodone (OxyContin®, Percodan®, Percocet-5®, Tylox®), buprenorphine (Suboxone® and Subutex®), d-propoxyphene (Darvon®), hydromorphone (Dilaudid®), morphine, meperidine (Demerol®), and opium.

The 2008 Texas secondary school survey queried about use of other opiates "to get high", and reported that 2.0 percent had ever used hydrocodone, 1.8 percent reported ever having drunk codeine cough syrup, and 1.1 percent had ever used oxycodone in that manner.

The 2006–2007 NSDUH reported that 4.7 percent of Texans age 12 and older had used pain relievers nonmedically in the past year (as compared to 5.1 percent nationally). Region 7 reported the highest level of past-year nonmedical use of pain relievers in 2004-2006, and Region 6 had the lowest levels of use (appendix 2).

The proportion of deaths involving only methadone or methadone plus alcohol has decreased from 58 percent of all methadone deaths in 1992 to 39 percent in 2007, while those involving combinations with illicit drugs decreased from 25 to 15 percent, and those involving combinations with prescription or licit drugs increased from 17 to 46 percent. The number involving overdose deaths of clients in narcotic treatment programs has remained level, at 11 of all the methadone deaths in 1993 and 11 in 2007.

Six percent of all clients who entered publicly-funded treatment during 2008 used opiates other than heroin. Of these, 160 used illegal methadone and 5,221 used other opiate drugs (exhibit 14). Those who reported a primary problem with other opiates differed from those who reported a problem with heroin. They were much more likely to be female (58 percent), to be White (77 percent), to have sought help in an emergency department (45 percent), and to report more health and psychological or emotional problems in the month prior to entering treatment (appendix 1). Forty-five percent of these clients with problems with other opiates also reported problems with other substances such as sedatives (14 percent) and alcohol (12 percent). The clients with



problems with illicit methadone were also more likely than heroin admissions to be female (54 percent) and 79 percent were White and 12 percent were Hispanic. Only 24 percent had no second drug problem, and of those who did have other problems, 13 percent had problems with alcohol, 26 percent with other opiates, 13 percent with sedatives, and 11 percent with heroin.

Persons who died from one of the other opiates were more likely to be White and to be older than those persons whose death certificates mentioned heroin. Of the 360 deaths with a mention of hydrocodone in 2007, 54 percent were male, 78 percent were White, 9 percent were Black, 13 percent were Hispanic, and the average age was 41. Of the 65 deaths in 2007 with a mention of oxycodone, 63 percent were male, 73 percent were White, 8 percent were Black, 1 percent was Hispanic, and the average age was 41. There were 48 deaths with a mention of fentanyl in 2007. Of these, 62 percent were male, 89 percent were White, 8 percent were Hispanic, and the average age was 42. Of the 195 deaths with a mention of methadone, 62 percent were male, 87 percent were White, 2 percent were Black, 6 percent were Hispanic, and the average age was 42.

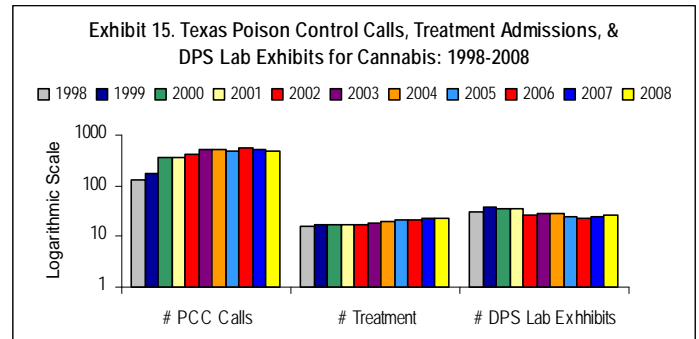
In the Dallas DEA FD, hydrocodone, alprazolam, and promethazine with codeine are the most commonly diverted drugs. Other popular drugs are carisoprodol, diazepam, Adderall®, methadone, and oxycodone. Houston DEA FD reports hydrocodone is one of the most commonly abused drugs and codeine cough syrup continues to be abused, but not as widely as in the past. The El Paso DEA FD reported morphine, Demerol®, oxycodone, and hydrocodone were the leading causes of drug poisoning deaths in El Paso.

Promethazine or phenergan cough syrup with codeine sold for \$200–\$400 per pint in Dallas and \$300–\$400 in Houston. Hydrocodone sold for \$5–\$10 per pill in Dallas and \$2–\$4 in Houston, and OxyContin® cost \$20 per pill in Dallas and \$20–\$50 in Waco. In Tyler, OxyContin® sold for \$8–\$20 for a 20 milligram tablet, \$6–\$10 for a 40 milligram tablet, and \$35 for an 80 milligram tablet. Dilaudid® sold for \$20–\$40 in Dallas, and methadone cost \$7–\$10 per tablet in Fort Worth.

DPS labs reported decreases in the number of exhibits of hydrocodone and methadone in 2008, while the number of fentanyl exhibits has varied over the years (exhibit 14).

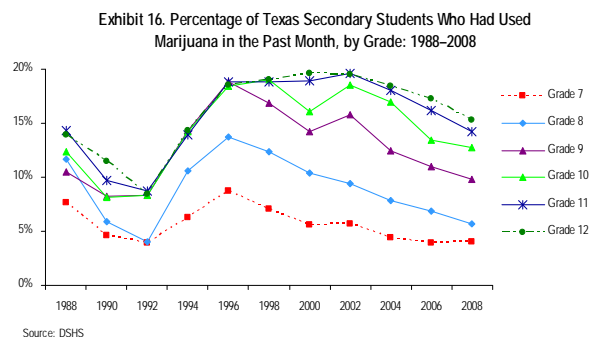
Street outreach workers in Brazoria County reported “doctor hopping” occurring, with pain clinics being sources of opioid medications. In Beaumont, there was increasing use of codeine and promethazine syrup diluted in sodas.

## MARIJUANA



New slang terms for marijuana include “Bud,” “Kill,” and “Carpet.”

Marijuana indicators have varied over the years (exhibit 15). Among Texas students in 2008 in grades 4–6, 1.7 percent had ever used marijuana, with 1.2 percent reporting use in the past school year. Among Texas secondary students (grades 7–12), 25 percent had ever tried marijuana, and 10 percent had used in the past month. From 2006 to 2008, this amounted to a 7 percent decrease in lifetime use and a 9 percent decrease in past-month use. Past-month use shown by grade level is shown in exhibit 16. The 2008 survey found that of those youths who used marijuana, 66 percent smoked “blunts” at least one-half of the time, as compared to 58 percent who smoked “joints” at least one-half of the time. The relationship between tobacco use, marijuana use, and cigars was also seen in the finding that of those youths who had ever used tobacco and never used marijuana, 2.5 percent had ever used cigars. In comparison, of those who had ever used tobacco and ever used marijuana, 72 percent had ever used cigars.

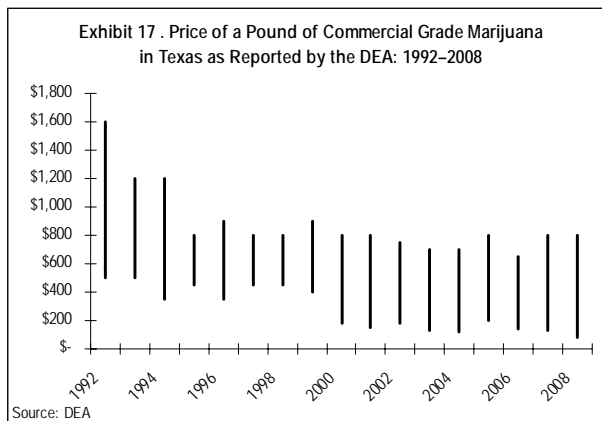


In 2007, the YRBS reported that 38 percent of Texas high school students in grades 9–12 had ever smoked marijuana, a significant decrease from 42 percent in 2005. Past-month use declined from 22 percent in 2005 to 19 percent in 2007. The 2005 Texas college survey reported that 37 percent of students had ever used marijuana, and 11 percent had used in the past month. The 2006–2007 NSDUH

estimated that 7.9 percent of Texans age 12 and older had used marijuana in the past year (compared to 10.2 percent nationally), with 4.3 percent using in the past month (compared to 5.9 percent nationally). Region 7 reported the highest level of past-year use of marijuana and Region 10 had the lowest level (appendix 2).

The Texas Poison Center Network reported there were 133 calls confirming exposure to marijuana in 1998, compared with 544 in 2006 and 502 in 2008 (exhibit 15).

Marijuana was the primary problem for 23 percent of admissions to treatment programs in 2008 (appendix 1) and while 45 percent reported no second substance abuse problem, 28 percent had a problem with alcohol, and 11 percent had a problem with powder cocaine. The average age was 24. Approximately 42 percent were Hispanic, 29 percent were White, and 28 percent were Black. Eighty-one percent had legal problems or had been referred from the criminal justice system. Those who were referred from the criminal justice system were more likely to complete treatment, compared with noncoerced clients. Referred clients were more likely to have received less intensive forms of treatment and to have not used marijuana in the month prior to 90-day post-discharge follow-up. This study concluded that more public health information is needed on marijuana dependence and there is a need for increased availability of early and brief interventions in a variety of primary health care settings to reduce the late presentations of the more severely impaired voluntary clients (Copeland & Maxwell, 2007).



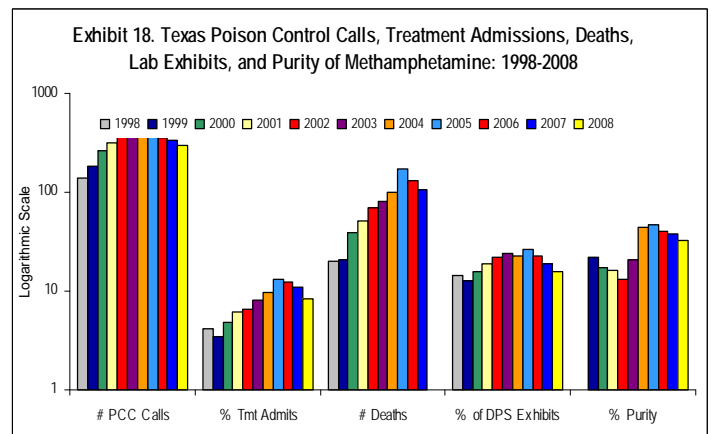
Marijuana was identified in 33 percent of all the exhibits analyzed by DPS laboratories in 2000, but in only 26 percent in 2008 (exhibit 15) and exhibit 17 shows the decline in the price of a pound of marijuana since 1992. The Houston DEA FD reported increases in indoor hydroponic grow houses in Houston; marijuana prices and quantities were stable in San Antonio and McAllen. The Houston FD reported the majority of

marijuana trafficking organizations in the Houston area were Mexican, but there was a growing trend of Vietnamese and Canadian trafficking organizations distributing marijuana in the area. In the Dallas/Fort Worth area, "Popcorn" marijuana was available at \$850 per pound. This variety is often grown in Chihuahua in shade under pine trees and it is mostly buds and is slightly greasy or oily to the touch.

Hydroponic marijuana sold for \$4,600 per pound in Galveston; \$3,000–\$4,500 in Austin; \$2,500–\$6,000 in Dallas; and \$3,000–\$5,000 in San Antonio. The average price for a pound of commercial grade marijuana was \$140–\$160 in Laredo; \$85–\$180 in McAllen; \$330–\$450 in San Antonio; \$280 in Houston; \$200 in El Paso; \$500–\$600 in Lubbock; \$375–\$600 in Midland; \$250–\$650 in Alpine; and \$300–\$800 in Dallas. Sinsemilla sold for \$750–\$1,200 per pound in the Dallas/Fort Worth area, \$300–\$500 in Houston, and \$600 in Galveston.

Outreach workers in Dallas reported increased marijuana use among the homeless. And Houston workers reported youths in middle schools were entering outpatient treatment due to their problems with marijuana.

### STIMULANTS



Amphetamine-type substances come in different forms and with different names. "Speed" ("meth," "crank") is a powdered methamphetamine of relatively low purity and is sold in grams or ounces. It can be snorted or injected. "Pills" can be pharmaceutical grade stimulants such as dextro-amphetamine, Dexedrine®, Adderall®, Concerta®, Vyvanse®, Ritalin® (methylphenidate), or phentermine, or they can be methamphetamine powder that has been pressed into tablets and sold as amphetamines, "Yaba," or ecstasy. Stimulant pills can be taken orally, crushed for inhalation, or dissolved in water for injection.

There is also a damp, sticky methamphetamine

powder of higher purity than speed that is known as “Base” in Australia and “Peanut Butter” in parts of the United States. “Ice,” also known as “crystal” or “Tina,” is methamphetamine that has been “washed” in a solvent to remove impurities; it has longer-lasting physical effects and purity levels above 80 percent. Ice can be smoked in a glass pipe, “chased” on aluminum foil, mixed with marijuana and smoked through a “bong,” or injected.

The Texas secondary school survey reported that lifetime use of stimulants, or “uppers,” was 5 percent, and past-month use was 2 percent in 2008. Two percent responded positively to a separate question regarding lifetime use of methamphetamine, and 1 percent reported past-month use. The 2007 YRBS reported lifetime use of methamphetamine by Texas high school students was 6.7 percent. The 2005 Texas college survey reported that 10 percent had ever used stimulants and 2 percent had used in the past month. The 2004–2006 NSDUH reported that past-year nonmedical use of stimulants (which included amphetamines, methamphetamine, methylphenidate, and prescription diet pills) in Texas was 1.4 percent, and past-year use of methamphetamine was 0.7 percent.

As exhibit 18 shows, all methamphetamine indicators have decreased since 2005 when the precursor regulations were implemented. There were 144 calls to Texas poison control centers involving exposure to methamphetamine in 1998; 336 in 2006; 315 in 2007; and 298 in 2008 (exhibit 18). Of the 2008 calls, 104 were for Adderall®; 77 for methamphetamine or speed; 28 for amphetamine; 72 for Vyvanse®; 21 for Concerta®; 19 for Ritalin®; and 6 for phentermine. Methamphetamine/amphetamine admissions to treatment programs increased from 5 percent of all admissions in 2000 to 11 percent in 2007 and dropped to 8 percent in 2008.

The average age of clients admitted for a primary problem with stimulants increased from 26 in 1985 to 33 in 2008 (exhibit 19). The proportion of White clients rose from 80 percent in 1985 to 85 percent in 2008, while the proportion of Hispanics remained at 11 percent, and the proportion of Blacks dropped from 9 percent to 2 percent. Unlike the other drug categories, more than one-half of the clients entering treatment were women (55 percent). Clients with a primary problem with methamphetamine reported secondary problems with marijuana (24 percent), alcohol (16 percent), and powder cocaine (8 percent); 41 percent reported no secondary substance abuse problem.

Users of amphetamines or methamphetamine tend to differ depending on their route of administration, as exhibit 19 shows. Methamphetamine injectors were more likely to have been in treatment before

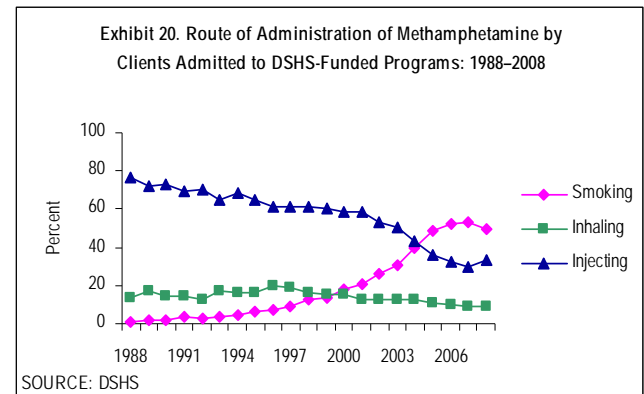
(62 percent readmissions) than amphetamine pill takers (48 percent), ice smokers, or inhalers (both at 45 percent).

Exhibit 19. Characteristics of Clients Admitted to DSHS-Funded Treatment with a Primary Problem of Amphetamines or Methamphetamines by Route of Administration: 2008

|                         | Smoke | Inject | Inhale | Oral | All <sup>a</sup> |
|-------------------------|-------|--------|--------|------|------------------|
| # Admissions            | 3,680 | 2,470  | 682    | 332  | 7,458            |
| % of Stimulant Admits   | 49    | 33     | 9      | 4    | 100              |
| Lag-1st Use to Tmt-Yrs. | 10    | 15     | 11     | 13   | 12               |
| Average Age-Yrs.        | 32    | 34     | 34     | 35   | 33               |
| % Male                  | 42    | 47     | 46     | 45   | 45               |
| % Black                 | 2     | 1      | 2      | 9    | 2                |
| % White                 | 81    | 93     | 81     | 79   | 85               |
| % Hispanic              | 15    | 5      | 15     | 9    | 11               |
| % CJ Involved           | 67    | 64     | 72     | 69   | 68               |
| % Employed              | 32    | 22     | 35     | 32   | 29               |
| % Homeless              | 7     | 11     | 3      | 7    | 8                |

<sup>a</sup>Total includes clients with “other” routes of administration

Source: DSHS



In 2008, more clients smoked ice than injected speed (exhibit 20). The proportion smoking ice increased from less than 1 percent in 1988 to 53 percent in 2007 but dropped to 49 percent in 2008. The percentage of clients injecting the drug dropped from 84 percent in 1988 to 33 percent in 2008.

Statewide, there were 17 deaths in which amphetamines or methamphetamines were mentioned in 1998, compared with 177 in 2005, 116 in 2006, and 106 in 2007 (exhibit 18). Of the decedents in 2007, 76 percent were male, 73 percent were White, 22 percent were Hispanic, 4 percent were Black, and the average age was 40.

Methamphetamine and amphetamine together represented 16 percent of all items examined by DPS laboratories in 2000 and reached a peak of 25 percent in 2005 before dropping to 16 percent in 2008 (exhibit 18). Sixteen percent of the exhibits in 2008 were

methamphetamine, and 0.5 percent was amphetamine.

The National Clandestine Laboratory Database reported that 1,773 methamphetamine laboratories were seized in Texas in 1999; 429 in 2000; 619 in 2001; 547 in 2002; 677 in 2003; 452 in 2004; 270 in 2005; 132 in 2006; 79 in 2007; and 112 in 2008.

A pound of powder methamphetamine sold for \$6,000–\$7,500 in Laredo. A pound of ice sold for \$12,000–\$21,000 in Houston; \$20,000–\$25,000 in San Antonio; \$6,000–\$7,500 in Laredo; and \$20,000–\$27,000 in Dallas. An ounce of ice sold for \$375–\$1,000 in Houston and \$1,000 in Waco.

Statewide, the purity of methamphetamine dropped from 56 percent in 2004 to 33 percent in 2008 because it is being cut with methylsulfonylmethane (MSM). MSM is available in 5-gallon quantities at local feed stores, and it is added to the ice and heated. In Tulsa, MSM cost \$17.95 per pound. The mixture of ice and MSM is spread out to dry like peanut brittle and then crushed up to look like a pure ice mixture. Pure methamphetamine from Mexico, which typically sold for \$18,000–\$20,000 per pound, sold for \$18,500 per pound when “cut” with MSM. The typical first cut of a pound of methamphetamine with MSM can yield two pounds of medium-purity methamphetamine that retains the same crystalline appearance.

Although Texas law requires purchasers of pseudoephedrine products to register when they buy the product, the registries are not computerized. Some methamphetamine organizations are returning to “smurfing” to obtain pseudoephedrine by paying hourly wages to people to purchase the product from every available outlet. The Dallas FD reports more local clandestine laboratories have been encountered. In Tyler, a case of 60 milligram, 120-count pseudoephedrine pills sold for \$28 per bottle, and in Dallas a case sold for \$2,400. Red phosphorus, which is used in making methamphetamine, sold for \$100 per ounce. A new method of producing methamphetamine was reported. In the “one pot” or “shake and bake” method, all the necessary chemicals are placed in a single container such as a 2-liter soda bottle or Coleman fuel can. The container is turned upside down or shaken to start the chemical reaction. Some recipes use dry ammonia nitrite and cough syrup rather than liquid anhydrous ammonia and pseudoephedrine pills. DEA expects this method to spread because of the ease of production and small amount of space required.

The Dallas DEA FD reported that the availability of methamphetamine and ice had declined, with the price rising because of tighter border security and increasing difficulty in obtaining precursor chemicals

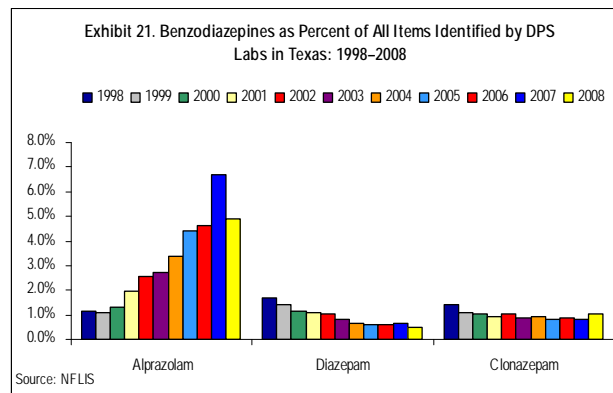
in Mexico. The price of a pound of methamphetamine increased in Dallas from \$4,500–\$18,000 in 2005 to \$20,000–\$27,000 in 2008.

The Houston DEA FD reported the price of a pound of methamphetamine increased from \$8,000–\$17,500 to \$12,000–\$21,000 between 2005 and 2008. In the past, most of the methamphetamine was produced in Mexico and most of it was ice. There has been a significant rise in methamphetamine production in the Waco area, with labs producing gram to ounce quantities per production. The majority use anhydrous ammonia. There is a small increase in the diversion of pseudoephedrine-based medications in the San Antonio area, as well as reports of a few small labs in the Houston and Galveston areas. Galveston reports an increase in the number of Hispanic users and wholesale distributors.

The El Paso FD reported that Mexico and California were the primary sources of methamphetamine, with the drug transiting through El Paso to other places in the United States.

Street outreach workers in Houston, Lufkin, and Huntsville reported methamphetamine was continuing to be abused in those areas.

## DEPRESSANTS



The depressant category includes three groups of drugs: barbiturates, such as phenobarbital and secobarbital (Seconal®); nonbarbiturate sedatives, such as methaqualone, over-the-counter sleeping aids, chloral hydrate, and tranquilizers; and benzodiazepines, such as diazepam (Valium®), alprazolam (Xanax®), flunitrazepam (Rohypnol®), clonazepam (Klonopin® or Rivotril®), flurazepam (Dalmane®), lorazepam (Ativan®), and chlor-diazepoxide (Librium® and Librax®). Rohypnol® is discussed separately in the Club Drugs section of this report.

The 2008 Texas secondary school survey reported



lifetime use of downers was 6 percent, and past-month use was 2 percent. Four percent had ever used alprazolam and 1 percent had ever used diazepam. The 2005 Texas college survey reported 9 percent had ever used sedatives, and 2 percent had used them in the past month. The 2004–2006 NSDUH reported 0.2 percent of Texans age 12 and older had used sedatives in the past year.

About 1.6 percent of the clients entering DSHS-funded treatment in 2008 had a primary problem with barbiturates, sedatives, or tranquilizers (appendix 1). Sixty-four percent of these clients were female, and 68 percent were White, 15 percent were Hispanic, and 13 percent were Black. They were users of multiple drugs: only 28 percent reported no other problem substance, as compared to 44 percent of users of all other drugs. Of the "downer" clients, 20 percent reported a secondary problem with marijuana, 18 percent with alcohol, 14 percent with other opiate drugs, and 8 percent with powder cocaine.

In 2007, there were 300 death certificates in which alprazolam was mentioned, as compared to 215 in 2006.

Alprazolam, clonazepam, and diazepam were among the 12 most commonly identified substances according to the 2008 DPS lab report, although none of them represent more than 5 percent of all items examined in a year (exhibit 21).

Alprazolam tablets sold for \$5 in San Antonio, \$2–\$3 in Houston, \$3–\$5 in Fort Worth, and \$5 in Dallas.

In the Dallas area, alprazolam was used to cut black tar heroin to produce brown heroin, and there were reports that the alprazolam was originating in Mexico. Houston DEA reports benzodiazepines are among the most commonly abused drugs. The McAllen DEA office reports most of the prescription drugs abused at "pharming parties" come from Medicaid fraud and from Mexican pharmacies catering to senior citizens and uninsured United States residents.

## **CLUB DRUGS AND HALLUCINOGENS**

Exhibit 22 shows the demographic characteristics of clients entering DSHS-funded treatment programs statewide with a problem with a club drug. The row "Primary Drug=Club Drug" shows the percentage of clients citing a primary problem with the club drug shown at the top of the column. The rows under the heading "Other Primary Drug" show the percentage of clients who had a primary problem with another drug, such as marijuana, but who had a secondary or tertiary problem with one of the club drugs shown at the top of the table. Note that the treatment data

include a broader category, "Hallucinogens," which includes lysergic acid diethylamide (LSD), dimethyltryptamine (DMT), STP (phencyclidine and 2,5-Dimethoxy-4-methylamphetamine), mescaline, psilocybin, and peyote.

Among the clients shown in exhibit 22, the gamma hydroxybutyrate (GHB) clients were the most likely to be White, phencyclidine (PCP) clients were the most likely to be Black, Rohypnol® clients were the most likely to be Hispanic and the youngest, and ketamine clients were the oldest. Users of PCP were the most likely to have a primary problem with PCP (55 percent); users of Rohypnol®, ecstasy, and hallucinogens were more likely to have primary problems with marijuana. Users of GHB tended to have a primary problem with methamphetamine (56 percent), and ketamine users were the most likely to have a history of injecting drug use, followed by GHB and steroid users.

## ***Benzylpiperazine (BZP)***

N-Benzylpiperazine (BZP) has pharmacological effects that are qualitatively similar to those of amphetamine. It is a Schedule I drug that is often taken in combination with 1-(3-trifluoromethylphenyl) piperazine (TFMPP), a noncontrolled substance, in order to enhance its effects as a substitute for MDMA. It is generally taken orally, but can be smoked or inhaled. Piperazines are a broad class of chemicals which include several stimulants (BZP, TFMPP, etc) as well as anti-vertigo agents (cyclizine, meclizine) and others (sildenafil/Viagra®).

A major seizure of 147,000 suspected MDMA tablets in Texas in 2008 found the tablets were benzylpiperazine, TFMPP, and methorphan.

There were 312 items submitted to DPS laboratories in 2008 that were identified as BZP and 66 that were TFMPP. In comparison, in 2007, there were 19 BZP exhibits and 2 TFMPP.

## ***Dextromethorphan (DXM)***

The most popular dextromethorphan (DXM) products are Robitussin-DM®, Tussin®, and Coricidin Cough and Cold Tablets HBP®, which can be purchased over the counter and can produce hallucinogenic effects if taken in large quantities. Coricidin HBP® pills are known as "Triple C" or "Skittles."

The 2008 Texas school survey reported that 3 percent of secondary students indicated they had ever used DXM, and 2 percent had used in the past year. The 2005 Texas college survey found that 5 percent had ever used DXM, and less than 1 percent had used it in the past month.

Poison control centers reported the number of abuse and misuse cases involving DXM rose from 99 in 1998 to 467 in 2008. The average age was 21. The number of cases involving abuse or misuse of Coricidin HBP® was 7 in 1998; 189 in 2005; 288 in 2006; 483 in 2007; and 158 in 2008. The average age in 2008 was 18, which shows that youth can easily access and misuse this substance. There were 12 deaths in 2007 in which DXM was one of the substances mentioned on the death certificate.

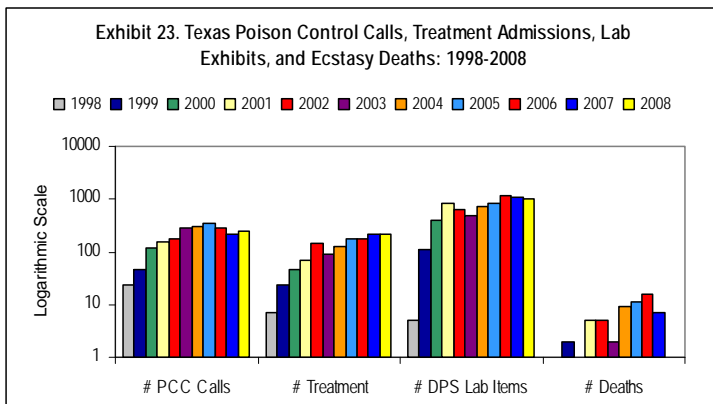
DPS labs examined 2 substances in 1998 that were DXM, compared with 13 in 1999; 36 in 2000; 18 in 2001; 42 in 2002; 10 in 2003; 15 in 2004; 10 in 2005; 12 in 2006; 5 in 2007; and 9 in 2008.

In Lubbock, street outreach workers report some youths are taking 10-16 Triple C or CCC pills at a time to achieve hallucinogenic effects.

Exhibit 22. Characteristics of Clients Admitted to DSHS-Funded Treatment with a Primary, Secondary, or Tertiary Problem with Club Drugs: 2008

| Club Drug                   | GHB | Hallucinogens | Ecstasy | PCP | Rohypnol | Ketamine | Steroids |
|-----------------------------|-----|---------------|---------|-----|----------|----------|----------|
| # Admissions                | 113 | 404           | 1189    | 880 | 207      | 14       | 20       |
| Average Age (Years)         | 32  | 25            | 24      | 28  | 20       | 35       | 31       |
| % Male                      | 50  | 68            | 57      | 48  | 77       | 71       | 85       |
| % Black                     | 6   | 29            | 38      | 85  | 1        | 7        | 5        |
| % White                     | 84  | 51            | 39      | 7   | 4        | 36       | 75       |
| % Hispanic                  | 6   | 17            | 22      | 8   | 94       | 57       | 20       |
| % History Needle Use        | 54  | 18            | 10      | 4   | 20       | 100      | 45       |
| % Criminal Justice Involved | 69  | 73            | 79      | 67  | 76       | 21       | 75       |
| % Primary Drug=Club Drug    | 20  | 35            | 18      | 55  | 18       | 50       | 35       |
| Other Primary Drug          |     |               |         |     |          |          |          |
| % Marijuana                 | 3   | 33            | 44      | 21  | 43       | 0        | 20       |
| % Alcohol                   | 5   | 10            | 7       | 5   | 4        | 0        | 25       |
| % Methamphet/Amphetamines   | 56  | 7             | 7       | 1   | 1        | 14       | 0        |
| % Powder Cocaine            | 2   | 5             | 12      | 9   | 7        | 0        | 10       |
| % Crack Cocaine             | 0   | 5             | 3       | 6   | 6        | 0        | 0        |
| % Heroin                    | 4   | 1             | 1       | 0   | 19       | 21       | 10       |
| % Other Opiates             | 9   | 2             | 2       | 1   | 1        | 0        | 0        |

**Ecstasy (MDMA, MDA)**



significant increase from 8 percent in 2005. The 2005 Texas college survey found

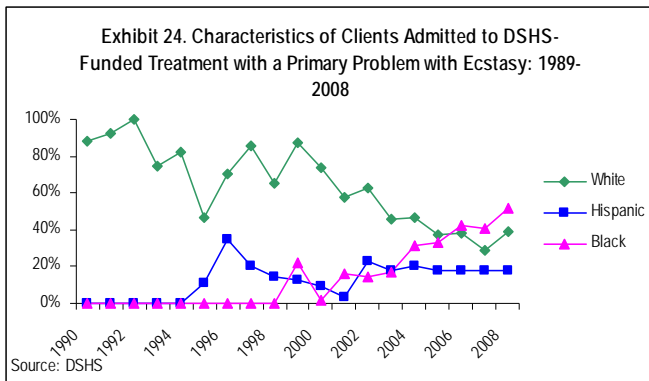
that 9 percent of college students had ever used ecstasy, and less than 1 percent had used in the past year. The 2004–2006 NSDUH survey reported 1.1 percent of Texans had used ecstasy in the past year.

The Texas Poison Center Network reported 23 calls involving misuse or abuse of ecstasy in 1998, compared with 46 in 1999; 119 in 2000; 155 in 2001; 172 in 2002; 284 in 2003; 302 in 2004; 343 in 2005; 292 in 2006; 232 in 2007; and 293 in 2008 (exhibit 23). In 2008, the average age was 22.

The 2008 Texas secondary school survey reported that lifetime ecstasy use dropped from a high of 9 percent in 2002 to 5 percent in 2008, while past-year use dropped from 3 to 2 percent during that time. The 2007 YRBS reported that 10 percent of Texas high school students had ever used ecstasy, a

Ecstasy is often used in combination with other drugs, and the increase in use and abuse of the drug is demonstrated in the increases in the numbers of clients seeking treatment who report a primary, secondary, or tertiary problem with ecstasy (exhibit 23). In 1998, there were 63 of these polydrug

admissions, as compared with 114 in 1999; 199 in 2000; 349 in 2001; 521 in 2002; 502 in 2003; 561 in 2004; 640 in 2005; 1,212 in 2006; 1,247 in 2007; and 1,189 in 2008. Exhibit 24 shows that ecstasy has spread outside the White rave scene and into the Hispanic and Black communities, as evidenced by the fact that only 39 percent of the clients in 2008 were White.



In 1999, there were two death certificates that mentioned ecstasy or MDMA in Texas. There was 1 death in 2000, compared with 5 in 2001; 5 in 2002; 2 in 2003; 9 in 2004; 11 in 2005; 15 in 2006; and 6 in 2007 (exhibit 23). Of the 2007 deaths, 67 percent were male, 50 percent were White, 17 percent were Hispanic, 33 percent were Black, and the average age was 24.

The DPS labs identified methylenedioxyamphetamine (MDMA) in 5 exhibits in 1998; 107 exhibits in 1999; 387 in 2000; 817 in 2001; 63 in 2002; 490 in 2003; 737 in 2004; 821 in 2005; 1,173 in 2006; and 1,134 in 2007; and 1,011 in 2008.

Methylenedioxyamphetamine (MDA) was identified in no exhibits in 1998; 31 in 1999; 27 in 2000; 60 in 2001; 106 in 2002; 94 in 2003; 67 in 2004; 85 in 2005; 80 in 2006; 43 in 2007; and 63 in 2008.

The Dallas DEA FD reported wholesale distribution was dominated by ethnic Vietnamese, while retail level distribution was conducted mainly by younger White males. The mid-level distributors were reported being quick to establish new sources and the availability of the drug (or counterfeits) was expected to remain readily available. According to the Houston DEA FD, ecstasy was readily available, with Vietnamese and Chinese operators controlling trafficking. The drug was imported from Canada with smaller amounts coming in from Europe.

Single dosage units of ecstasy sold for \$20 in Houston, \$4 in McAllen, \$20 in Laredo, \$12–\$20 in Dallas, and \$10–\$15 in Lubbock.

### **Gamma Hydroxybutyrate (GHB), Gamma Butyrate Lactone (GBL), 1-4 Butanediol (1,4 BD)**

The 2005 Texas college survey reported that 2 percent of the students had ever used GHB, and none reported past-month use.

The number of cases of misuse or abuse of GHB or its precursors reported to the Texas Poison Center Network was 110 in 1998; 150 in 1999; 120 in 2000; 119 in 2001; 100 in 2002; 66 in 2003; 84 in 2004; 62 in 2005; 43 in 2006; 56 in 2007; and 49 in 2008. The average age of the abusers in 2008 was 30.

Adults and adolescents with a primary, secondary, or tertiary problem with GHB, GBL, or 1,4 BD have been admitted to DSHS-funded treatment. In 1998, there were 2 clients, compared with 17 in 1999; 12 in 2000; 19 in 2001; 33 in 2002; 31 in 2003; 45 in 2004; 48 in 2005; 111 in 2006; 103 in 2007; and 113 in 2008. In 2008, clients who used GHB tended to be older (average age 32) and were more likely to be White (84 percent) (exhibit 22). GHB users were more likely to have used the so-called “hard-core” drugs: 54 percent had a history of injection drug use (IDU) and 56 percent had a primary problem with amphetamines or methamphetamine. Because of the sleep-inducing properties of GHB, users will also use methamphetamine to stay awake while they are “high” on GHB, or they use GHB to “come down” from their use of methamphetamine.

There were three deaths that involved GHB in 1999, compared with five in 2000, three in 2001, two in 2002, two in 2003, three in 2004, three in 2005, one in 2006, and two in 2007.

There were 18 items identified by DPS labs as being GHB in 1998, compared with 112 in 1999; 45 in 2000; 34 in 2001; 110 in 2002; 150 in 2003; 99 in 2004; 92 in 2005; 89 in 2006; 56 in 2007; and 57 in 2008. There were no items identified as GBL in 1998, compared with four in 1999; seven in 2000; seven in 2001; nine in 2002; five in 2003; two in 2004; one in 2005; nine in 2006; none in 2007; and three in 2008. There were no items identified as 1,4 BD in 1988, compared with 4 in 1989; 4 in 2000; 19 in 2001; five in 2002; and none in 2003, 2004, 2005, 2006, 2007, or 2008.

In Houston, GHB sold for \$5–\$10 per dosage unit and \$725–\$1,000 per gallon. In Dallas, it sold for \$20 per dosage unit and \$500–\$1,600 per gallon.

### **Ketamine**

The 2005 Texas college survey found that 2 percent of the students had ever used ketamine, and none reported past-month use.

Eight cases of misuse or abuse of ketamine were reported to Texas Poison Control Centers in 1998, compared with 7 in 1999; 15 in 2000; 14 in 2001; 10 in 2002; 17 in 2003; 7 in 2004; 5 in 2005; 3 in 2006; 1 in 2007; and one in 2008.

In 2008, there were 14 admissions to treatment with a primary, secondary, or tertiary problem with ketamine. The average age was 35, 71 percent were male, 100 percent had an IDU history, 36 percent were White, 57 percent were Hispanic, and 7 percent were Black (exhibit 22). While 50 percent had a primary problem with ketamine, 21 percent had a primary problem with heroin and 14 percent had a primary problem with methamphetamine and a secondary or tertiary problem with ketamine.

There were two deaths in 1999 that involved use of ketamine, compared with none in 2000; one in 2001; one in 2002; none in 2003; two in 2004; one in 2005; none in 2006; and two in 2007.

In 1998, two substances were identified as ketamine by DPS labs. There were 26 items identified in 1999; 49 in 2000; 120 in 2001; 116 in 2002; 85 in 2003; 79 in 2004; 19 in 2005; 140 in 2006; 154 in 2007; and 76 in 2008.

Ketamine cost \$2,200–\$2,500 per liter in Fort Worth and \$65 per vial in Tyler, with a dose selling for \$20 per pill or gram in Tyler, \$20–\$40 in Lubbock, and \$15–\$20 in San Antonio.

### **Lysergic Acid Diethylamide (LSD) and Other Hallucinogens**

The Texas secondary school survey showed that use of hallucinogens (defined as LSD, PCP, mushrooms, etc.) continued to decrease. Lifetime use peaked at 7.4 percent in 1996 and dropped to 4.4 percent in 2008. Past-month use dropped from a peak of 2.5 percent in 1998 to 1.5 percent in 2008. The 2005 Texas college survey found that 10 percent of college students had ever used hallucinogens, and less than 1 percent had used in the past month. The 2002–2004 NSDUH reported past-year use by Texans age 12 and older at 0.3 percent.

The Texas Poison Center Network reported 82 mentions of abuse or misuse of LSD in 1998, compared with 113 in 1999; 97 in 2000; 70 in 2001; 129 in 2002; 20 in 2003; 22 in 2004; 38 in 2005; 33 in 2006; 31 in 2007; and 17 in 2008. There were also 98 cases of intentional misuse or abuse of hallucinogenic mushrooms reported in 1998; 73 in 1999; 110 in 2000; 94 in 2001; 151 in 2002; 130 in 2003; 172 in 2004; 82 in 2005; 96 in 2006; 125 in 2007; and 93 in 2008. The average age in 2008 was 20 for the LSD cases and 21 for the mushroom cases.

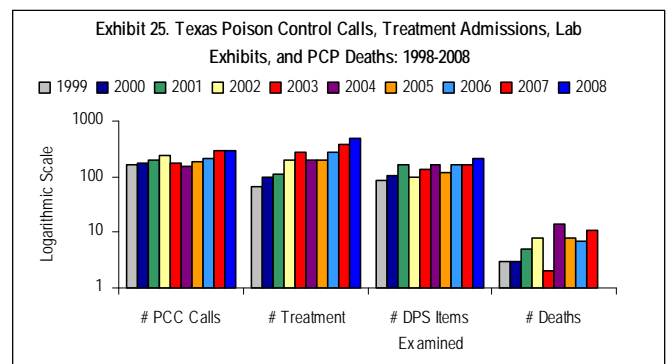
The number of adults and youths with a primary, secondary, or tertiary problem with hallucinogens entering treatment has increased since 2005. There were 636 admissions in 2000; 486 in 2001; 436 in 2002; 319 in 2003; 266 in 2004; 223 in 2005; 338 in 2006; 370 in 2007; and 404 in 2008. Of the hallucinogen admissions in 2008, the average age was 25, 68 percent were male, 51 percent were White, 17 percent were Hispanic, and 29 percent were Black. Seventy-three percent were referred from the criminal justice or legal system, and 18 percent had an IDU history (exhibit 22).

Statewide, there were two deaths in 1999 with a mention of LSD. No deaths with a mention of LSD have been reported since then.

DPS labs identified 69 substances as LSD in 1998, compared with 406 in 1999; 234 in 2000; 122 in 2001; 11 in 2002; 10 in 2003; 25 in 2004; 14 in 2005; 1 in 2006; 29 in 2007; and 19 in 2008.

A dosage unit of LSD sold for \$1–\$10 in Dallas, \$7 in Lubbock, and \$8–\$12 in San Antonio. Psilocybin mushrooms sold for \$10–\$14 per gram in Lubbock.

### **Phencyclidine (PCP)**



The 2002–2004 NSDUH reported past-year use of PCP in Texas at 0.1 percent.

The Texas Poison Center Network reported cases of “Fry,” “Amp,” “Water,” “Wet,” “Wack,” “PCP,” or formaldehyde. Often, marijuana joints are dipped in formaldehyde that contains PCP, or PCP is sprinkled on the joint or cigarette. The number of poison cases involving PCP increased from 102 in 1998 to 290 in 2008 (exhibit 25).

Exhibit 25 shows the increases in the number of clients entering treatment with a primary problem with PCP. Of the clients in 2008, 85 percent were Black, 48 percent were male, and 67 percent were involved in the criminal justice system. While 55 percent reported a primary problem with PCP,



another 21 percent reported a primary problem with marijuana, which demonstrates the link between these two drugs (exhibit 22).

There were eight death certificates in 2007 that mentioned PCP (exhibit 25).

DPS labs identified 10 substances as PCP in 1998 and 216 in 2008 (exhibit 25).

According to the DEA, PCP cost \$375–\$450 per ounce in Dallas. A gallon cost \$5,500 in Dallas and \$20,000–\$30,000 in Houston.

PCP use was reported by street outreach workers to be increasing among youths and young adults age 16-30.

### **Rohypnol®**

Rohypnol® (flunitrazepam) is a benzodiazepine that was never approved for use in the United States. The drug is legal in Mexico, but since 1996, it has been illegal to bring it into the United States. Rohypnol® continues to be a problem along the Texas–Mexico border. The 2008 secondary school survey found that students from the border area were about three times more likely to report Rohypnol® use than those living elsewhere in the State (6 percent versus 2 percent lifetime, and 2 percent versus 1 percent current use). Use in both the border and nonborder areas has declined since its peak in 1998. Among Texas college students in 2005, 1 percent reported lifetime use of Rohypnol®, and none reported past-month use.

The number of confirmed exposures to Rohypnol® reported to the Texas Poison Control Centers peaked at 102 in 1998; 22 in 2005; 10 in 2006; 11 in 2007; and 12 in 2008. The average age in 2008 was 19, 42 percent were male, and 66 percent lived in counties on the border.

The number of youths and adults admitted into treatment with a primary, secondary, or tertiary problem with Rohypnol® has varied: 247 in 1998; 364 in 1999; 324 in 2000; 397 in 2001; 368 in 2002; 331 in 2003; 221 in 2004; 198 in 2005; 278 in 2006; 272 in 2007; and 207 in 2008. In 2008, clients abusing Rohypnol® were among the youngest of the club drug clients (age 20), and they were mostly Hispanic (94 percent), reflecting the availability and use of this drug along the border. Seventy-six percent were involved with the criminal justice or legal system. While 18 percent of these clients said that Rohypnol® was their primary problem drug, 43 percent reported a primary problem with marijuana, and 19 percent had a problem with heroin (exhibit 22).

DPS lab exhibits for flunitrazepam numbered 43 in 1988; 56 in 1999; 32 in 2000; 33 in 2001; 26 in 2002; 17 in 2003; 17 in 2004; 10 in 2005; 9 in 2006; 1 in 2007; and 0 in 2008.

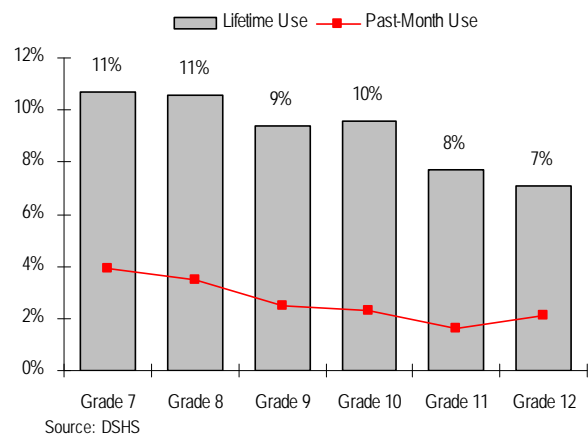
Rohypnol® sold for \$2–\$4 per pill in San Antonio in 2008.

## **OTHER ABUSED SUBSTANCES**

### **Inhalants**

The 2008 elementary school survey found that 9 percent of students in grades 4–6 had ever used inhalants, and 7 percent had used in the school year. The 2008 secondary school survey found that 9 percent of students in grades 7–12 had ever used inhalants, and 3 percent had used in the past month. Inhalant use exhibits a peculiar age pattern not observed with any other substance. The prevalence of lifetime and past-month inhalant use was higher in the lower grades and lower in the upper grades (exhibit 27). This decrease in inhalant use as students age may be partially related to the fact that inhalant users drop out of school early and are not in school in later grades to respond to school-based surveys. In addition, the Texas school surveys have consistently found that eighth graders reported use of more different kinds of inhalants than any other grade; this may be a factor that exacerbates the damaging effects of inhalants and leads to dropping out.

Exhibit 27. Percentage of Texas Secondary Students Who Had Used Inhalants Ever or in the Past Month, by Grade: 2008



The 2007 YRBS reported that 12.9 percent of Texas high school students had ever used inhalants. Respondents to the 2005 Texas college survey reported 4 percent lifetime and 0.3 percent past-month use of inhalants. The 2002–2004 NSDUH estimated that 0.7 percent of Texas age 12 and older had used inhalants in the past year.

Out of the 77 calls to the poison control centers in

2008 that involved human exposure to the inhalation of chemicals, there were 12 calls for exposure to automotive products such as carburetor cleaner, transmission fluid, and gasoline, 30 calls for misuse of air fresheners or dusting sprays containing tetrafluoroethane or difluoroethane, 20 calls for abuse or misuse of paint or toluene, and 4 calls involving gases such as butane, helium, nitrous oxide, or propane.

Inhalant abusers represented 0.1 percent of the admissions to treatment programs in 2008. The clients tended to be male (72 percent) and Hispanic (64 percent). The over-representation of Hispanics is related to the fact that DSHS developed and funded treatment programs targeted specifically to this group. The average age of the clients was 25. Forty-nine percent were involved with the criminal justice system, the average education was 10.2 years, 14 percent were homeless, and 11 percent had a history of injection drug use (appendix 1). Of the inhalant abusers, 27 percent reported no secondary drug problem, 27 percent had a second problem with marijuana, and 26 percent had a second problem with alcohol.

The categorization of inhalant deaths is difficult and leads to underreporting. In 2000, there were 12 death certificates that reported inhalants, compared with 15 in 2001; 8 in 2002; 13 in 2003; 11 in 2004; 17 in 2005; 4 in 2006; and 28 in 2007. Six of the 2007 deaths involved inhaling tetrafluoroethane or difluoroethane, ingredients used in computer dusters.

### **Steroids**

The Texas school survey reported that 1.5 percent of all secondary students surveyed in 2008 had ever used steroids, and 0.5 percent had used steroids during the month before the survey. The 2007 YRBS found lifetime use among Texas students in grades 9–12 was 3.9 percent, with 4.8 percent among boys and 3.0 percent among girls. The 2005 Texas college survey found less than 1 percent had ever used steroids, and 0.1 percent had used in the past month.

There were 20 persons admitted to DSHS-funded treatment in 2008 with a primary, secondary, or tertiary problem with steroids. Eighty-five percent were male, 75 percent were White, and 20 percent were Hispanic, the average age was 31. Seventy-five percent were involved with the criminal justice or legal system, 35 percent had a primary problem with steroids, and 25 percent had a primary problem with alcohol (exhibit 22).

The NFLIS data for Texas reported testosterone was the steroid most likely to be identified in forensic testing, although it only constituted 0.14 percent of all the items tested in 2008. Dallas DEA reported that

Mexico was the source for anabolic steroids and China was the source of human growth hormone (HGH).

### **Carisoprodol (Soma®)**

Poison control centers confirmed that exposure cases of intentional misuse or abuse of the muscle relaxant carisoprodol (Soma®) increased from 83 in 1998 to 390 in 2008. Fifty-three percent were male and average age was 34.

In 2007, carisoprodol was mentioned on 208 death certificates, up from 51 in 2003. Only four of the 2007 death certificates mentioned only carisoprodol; all the others listed combinations of drugs. Hydrocodone and alprazolam were substances most often mentioned on the other carisoprodol death certificates. Of the 2007 deaths, 50 percent were male and the average age was 39.

DPS lab exhibits of carisoprodol reported to NFLIS increased from 13 in 1998 to 90 in 1999; 153 in 2000; 202 in 2001; 232 in 2002; 277 in 2003; 253 in 2004; 336 in 2005; 558 in 2006; 700 in 2007; and 471 in 2008. According to the Dallas DEA Field Division, Soma® and Soma® with codeine sold for \$2–\$5 per tablet.

### **DRUG ABUSE PATTERNS ON THE TEXAS-MEXICO BORDER**

The 2008 Texas Secondary School Survey reported that students living in counties along the Texas border were more likely to report lifetime use of tobacco (33 percent versus 31 percent nonborder), powder cocaine (10 percent versus 6 percent), crack cocaine (3 percent versus 2 percent), and Rohypnol® (6 percent versus 2 percent), while nonborder students were more likely to report use of marijuana (25 percent versus 22 percent border), alcohol (63 percent versus 61 percent), alprazolam (14 percent versus 8 percent), ecstasy (5 percent versus 4 percent), and methamphetamine (4 percent versus 3 percent). One percent of each group reported lifetime use of heroin.

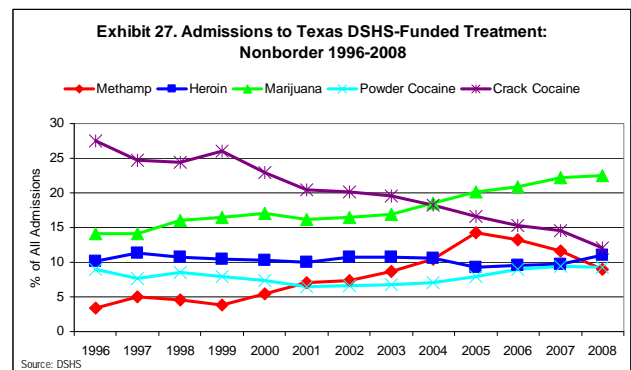
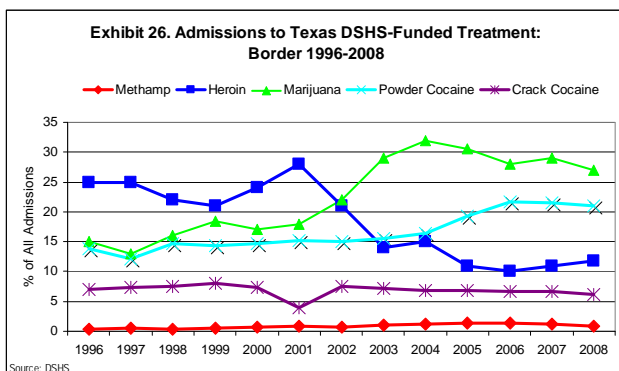
When asked which substances were very easy to obtain, border students reported Rohypnol® (12 percent versus 6 percent), powder cocaine (16 percent versus 11 percent), and crack cocaine (11 percent versus 8 percent), while nonborder students reported tobacco (40 percent versus 32 percent), alcohol (47 percent versus 39 percent), and marijuana (26 percent versus 23 percent).

Different patterns were also seen in border and nonborder admissions to DSHS-funded treatment in 2008. While the proportion of admissions with a primary problem with heroin was similar (12 percent

border versus 11 percent nonborder), border clients were more likely to report problems with alcohol (31 percent versus 27 percent nonborder), powder cocaine (21 percent versus 9 percent), and marijuana (27 percent versus 23 percent). Nonborder clients were more likely to report problems with other opiates (6 percent versus 1 percent nonborder), methamphetamine (9 percent versus 1 percent), and crack cocaine (12 percent versus 6 percent). In addition to differences in primary problem, nonborder clients were older (33 years versus 30 years), less likely to be first admissions (48 percent versus 62 percent), less likely to be male (60 percent versus 64 percent), less likely to be employed (31 percent versus 40 percent), more likely to be homeless (11 percent versus 5 percent), and more likely to have a history of injection drug use (27 percent versus 17 percent). The nonborder clients reported more days of problems on the ASI Index in the month prior to admission than did border admissions.

Over time, the drug use problems have changed on the border and in the nonborder areas. Exhibit 26 shows the increase in use of marijuana and powder cocaine, the decrease in heroin, and the low levels of use of crack cocaine and methamphetamine on the border. In comparison, in the nonborder areas, the use of crack cocaine was high but has decreased, while the use of marijuana has increased. Use of methamphetamine peaked in 2005 (exhibit 27).

The drug problem also differs in cities along the border. The primary problems at treatment admission in El Paso in 2008 were marijuana and cocaine (24 percent each), and heroin (14 percent). In Laredo, 38 percent of the admissions were for marijuana, 22 percent for cocaine, and 21 percent for heroin. In McAllen, 38 percent of the admissions were for cocaine, 23 percent for marijuana, and 11 percent for heroin. These variations were due both to historical funding decisions (the largest methadone program in El Paso is not state-funded and does not report treatment data and there is an adolescent residential program in Laredo) and to trafficking patterns.



The DPS laboratory in El Paso in 2008 reported 69 percent of the items examined were marijuana, 20 percent cocaine, and 1 percent heroin. In Laredo, 59 of the items examined were marijuana, 26 percent were cocaine, and 5 percent heroin. In McAllen, 62 percent of the items examined were cocaine, 17 percent were marijuana, and 0.3 percent heroin.

While poverty, unemployment, lack of social services and drug treatment programs to meet the increasing demand, drug trafficking, and cartels and gangs are not new to the border, street outreach workers have reported increasing fear, trauma, and mental health issues related to loss of partners and parents. There is less ability to coordinate services across the border, while at the same time there is an increasing need for greater collaboration. There were growing concerns by workers about their personal safety in providing substance abuse services in communities which are experiencing increases in violence and crimes related to drugs. The workers also reported increasing numbers of youth involved in drug trafficking and fewer options for these youth. Choosing whether or not to become involved in drugs and gangs seemed less like a choice and more like a decision based on threats and fear. There was also concern that people in need of substance abuse and mental health services were becoming more “closeted” and afraid to ask for help due to repercussions related to the safety of their families and/or immigration issues.

### INFECTIOUS DISEASES RELATED TO DRUG ABUSE

Forty-eight percent of the 200 clients in Texas narcotic treatment programs said they were positive for hepatitis C (HCV), and 54 percent said a doctor had told them they had liver problems (Maxwell & Spence, 2006). DSHS estimates that 1.8% of Texans are infected with HCV. There are approximately 368,000 cases of hepatitis C in Texas, 80 percent of which (about 300,000) are chronic (long-lasting) infections. In Texas, estimates also indicate that there may be a greater disease burden among Blacks (2.2%), and Hispanics (2.0%) people. Whites have the lowest estimated infection rate (1.4%).

Although most cases of infection occur in and around large urban areas, a disproportionate amount of the disease happens along the Texas/Mexico border.

The case rate for syphilis increased from 3.5 per 100,000 in 1997 to 4.9 in 2007. The case rate for Chlamydia increased from 260.7 per 100,000 in 1997 to 562.0 in 2007, and the case rate for gonorrhea decreased from 136.9 per 100,000 in 1997 to 133.0 in 2007.

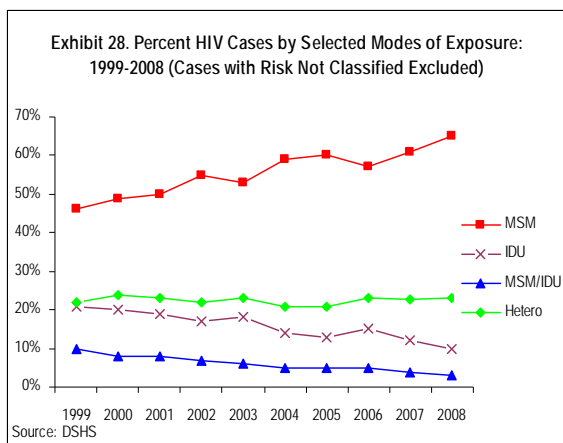
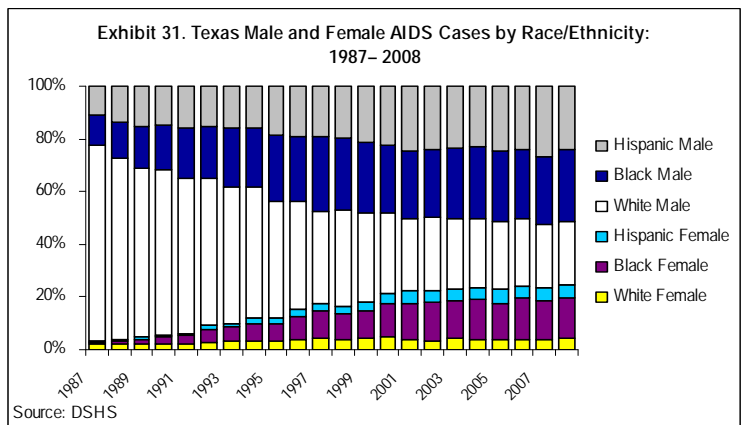
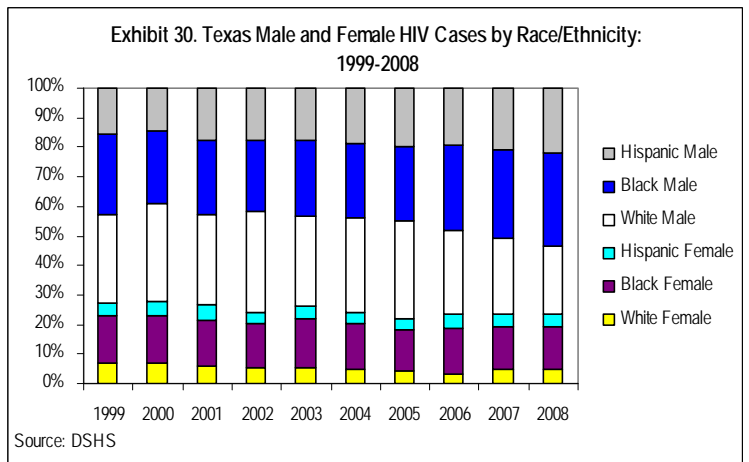
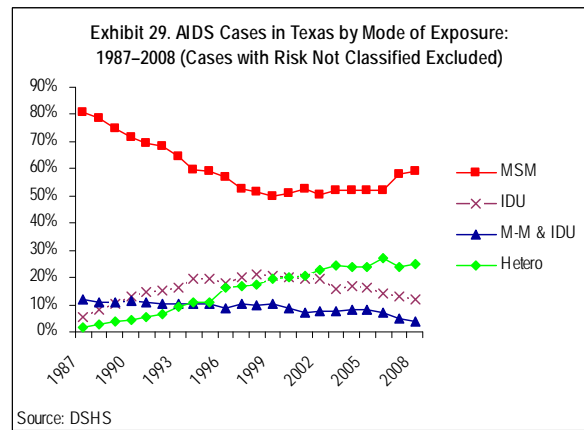
HIV/AIDS outreach workers were reporting increasing numbers of cases of syphilis and untreated HCV and HIV cases.

### HIV/AIDS Cases

The proportion of HIV cases among men having sex with men (MSM) increased from 46 percent in 1999 to 65 percent in 2008 (exhibit 28), and the proportion of AIDS cases among MSM decreased from 81 percent in 1987 to 59 percent in 2008 (exhibit 29). Of the HIV cases in 2008, 23 percent were heterosexual mode of exposure, and 10 percent were IDUs. Of the 2008 AIDS cases, 25 percent were heterosexual and 12 percent were IDUs. HIV cases that later seroconverted to AIDS are excluded from the HIV exhibits. The proportions of cases involving IDU or IDU/MSM have decreased over time.

Persons infected with HIV or AIDS were increasingly more likely to be people of color. Among HIV cases in 2008, 45 percent were Black, 27 percent were White, and 26 percent were Hispanic (exhibit 30). Among AIDS cases in 2008, 42 percent were Black, 28 percent were White, and 28 percent were Hispanic (exhibit 31).

The proportion of adult IDUs entering DSHS-funded treatment programs decreased from 32 percent in 1988 to 16 percent in 2008. In 2008, 60 percent of heroin injectors were people of color (exhibit 9), while injectors of cocaine (exhibit 3) and of stimulants (exhibit 19) were far more likely to be White.





**Appendix 1. Characteristics of Clients at Admission to DSHS-Funded Treatment Programs by Primary Problem Substance that Caused Them to Seek Treatment: January-December 2008**

| Primary substance | Total Admissions | Percent Of All Admissions | Average Age | Average Age 1st Use | Ave Lag 1st Use to Admission | Pct No Prior Treatment | Percent Married | Percent Male |
|-------------------|------------------|---------------------------|-------------|---------------------|------------------------------|------------------------|-----------------|--------------|
| Total             | 88871            | 100                       | 32.9        | 18.7                | 14                           | 48.9                   | 18.1            | 60.4         |
| Heroin            | 9945             | 11.2                      | 33.4        | 20.9                | 12                           | 27.0                   | 16.0            | 62.2         |
| Non-Rx Methadone  | 160              | 0.2                       | 34.3        | 24.7                | 8                            | 22.5                   | 11.9            | 45.6         |
| Other opiates     | 5221             | 5.9                       | 34.4        | 24.3                | 10                           | 38.2                   | 21.4            | 42.3         |
| Alcohol           | 23928            | 26.9                      | 38.2        | 15.6                | 23                           | 46.9                   | 18.2            | 69.9         |
| Barbiturates      | 70               | 0.1                       | 30.0        | 22.0                | 8                            | 51.4                   | 20.0            | 48.6         |
| Other sedatives   | 1201             | 1.4                       | 29.2        | 21.6                | 8                            | 47.4                   | 16.7            | 35.1         |
| Amphet/Methamph   | 7458             | 8.4                       | 32.8        | 21.1                | 12                           | 48.3                   | 16.8            | 44.9         |
| Cocaine(powder)   | 8087             | 9.1                       | 31.6        | 21.0                | 11                           | 55.3                   | 20.8            | 52.2         |
| Marijuana         | 20257            | 22.8                      | 23.5        | 14.4                | 9                            | 68.8                   | 19.8            | 71.0         |

| Primary substance | Percent Using Needles | Percent w/ History of IV Drug Use | Percent Black | Percent White | Percent Hispanic | Percent Employed | Avg Months Employed Over Last 12 | Pct Involved Crim Just/ Legal |
|-------------------|-----------------------|-----------------------------------|---------------|---------------|------------------|------------------|----------------------------------|-------------------------------|
| Total             | 15.6                  | 26.3                              | 19.8          | 46.0          | 32.8             | 32.1             | 3.9                              | 57.5                          |
| Heroin            | 76.5                  | 80.5                              | 8.1           | 34.7          | 56               | 14.5             | 2.1                              | 32.0                          |
| Non-Rx Methadone  | 18.1                  | 48.8                              | 8.1           | 79.4          | 11.9             | 23.8             | 3.2                              | 30.6                          |
| Other opiates     | 13.7                  | 32.7                              | 9.3           | 76.7          | 12.7             | 17.8             | 3.4                              | 35.1                          |
| Alcohol           | 4.5                   | 18.5                              | 11.9          | 56.1          | 30.3             | 33.3             | 4.8                              | 53.2                          |
| Barbiturates      | 7.1                   | 24.3                              | 15.7          | 58.6          | 21.4             | 30               | 3.4                              | 57.1                          |
| Other sedatives   | 4.1                   | 17.8                              | 12.5          | 68.1          | 17.6             | 20.1             | 3.1                              | 53.6                          |
| Amphet/Methamph   | 33.8                  | 46.1                              | 2             | 85            | 11.4             | 29.2             | 3.6                              | 67.5                          |
| Cocaine(powder)   | 10.9                  | 17                                | 18.5          | 30.1          | 50.1             | 35               | 4.1                              | 62.9                          |
| Marijuana         | 1.4                   | 5.1                               | 28.3          | 28.7          | 41.5             | 53.3             | 4.9                              | 80.9                          |

| Primary substance | Average Education | Percent Homeless | Average Income At Adm | # Women Pregnant at Admission | Percent on Medication | Percent Emergency Room Visit | Pct Sickness or Health Problems |
|-------------------|-------------------|------------------|-----------------------|-------------------------------|-----------------------|------------------------------|---------------------------------|
| Total             | 11.4              | 10.3             | \$7,135               | 1718                          | 22.7                  | 29.4                         | 22.9                            |
| Heroin            | 11.3              | 13.1             | \$3,266               | 262                           | 28.6                  | 29.2                         | 29.7                            |
| Non-Rx Methadone  | 11.7              | 10.6             | \$5,570               | 4                             | 25.0                  | 38.1                         | 42.5                            |
| Other opiates     | 12.1              | 6.9              | \$6,613               | 60                            | 31.8                  | 44.5                         | 35.7                            |
| Alcohol           | 11.9              | 13.0             | \$10,012              | 169                           | 24.0                  | 34.0                         | 25.4                            |
| Barbiturates      | 11.8              | 8.6              | \$4,633               | 2                             | 41.4                  | 40.0                         | 30.0                            |
| Other sedatives   | 11.7              | 6.3              | \$6,776               | 46                            | 31.7                  | 42.8                         | 26.7                            |
| Amphet/Methamph   | 11.7              | 7.8              | \$6,347               | 216                           | 20.9                  | 30.9                         | 21.1                            |
| Cocaine(powder)   | 11.3              | 5.6              | \$7,526               | 255                           | 18.5                  | 28.3                         | 18.0                            |
| Marijuana         | 10.5              | 4.7              | \$7,699               | 396                           | 13.2                  | 15.1                         | 12.1                            |

| Primary substance | Pct w/ Employment Problems | Pct w/Family and/or Marital Problems | Pct w/ Social/Peer Problems | Pct w/ Psych/Emot. Problems | Pct w/ Drug/Alcohol Problems |
|-------------------|----------------------------|--------------------------------------|-----------------------------|-----------------------------|------------------------------|
| Total             | 45.7                       | 44.1                                 | 37.5                        | 35.7                        | 58.6                         |
| Heroin            | 70.5                       | 66.3                                 | 61.4                        | 46.1                        | 83.6                         |
| Non-Rx Methadone  | 60.6                       | 58.8                                 | 56.9                        | 63.1                        | 85.6                         |
| Other opiates     | 59.5                       | 60.9                                 | 53.6                        | 54.1                        | 78.3                         |
| Alcohol           | 47.5                       | 46.0                                 | 40.9                        | 39.2                        | 60.6                         |
| Barbiturates      | 42.9                       | 35.7                                 | 21.4                        | 40.0                        | 41.4                         |
| Other sedatives   | 50.1                       | 50.7                                 | 42.2                        | 44.0                        | 62.1                         |
| Amphet/Methamph   | 43.2                       | 41.3                                 | 32.6                        | 37.2                        | 55.0                         |
| Cocaine(powder)   | 35.8                       | 37.4                                 | 26.9                        | 29.8                        | 47.7                         |
| Marijuana         | 28.6                       | 25.8                                 | 19.6                        | 17.0                        | 40.3                         |

|                        | Total      | Percent | Average | Average | Ave Lag    | Pct No | Percent | Percent |
|------------------------|------------|---------|---------|---------|------------|--------|---------|---------|
| Primary substance      | Admissions | Of All  | Age     | Age     | 1st Use to | Prior  | Married | Male    |
| Hallucinogens          | 141        | 0.2     | 27.2    | 18.9    | 9          | 44.7   | 11.3    | 59.6    |
| Inhalants              | 81         | 0.1     | 25.0    | 16.8    | 9          | 45.7   | 18.5    | 71.6    |
| Over-the-counter drugs | 25         | 0.0     | 26.0    | 20.9    | 5          | 60.0   | 16.0    | 60.0    |
| Tranquilizers          | 105        | 0.1     | 28.2    | 19.1    | 8          | 52.4   | 17.1    | 25.7    |
| Other                  | 187        | 0.2     | 34.2    | 11.0    | 22         | 74.9   | 19.3    | 40.6    |
| Ecstasy                | 214        | 0.2     | 24.9    | 19.8    | 5          | 53.7   | 15.0    | 53.7    |
| Anabolic steroids      | 7          | 0.0     | 32.0    | 18.7    | 13         | 57.1   | 42.9    | 85.7    |
| Rohypnol               | 37         | 0.0     | 19.1    | 14.6    | 4          | 62.2   | 27.0    | 59.5    |
| Crack                  | 11160      | 12.6    | 39.1    | 25.4    | 14         | 37.6   | 15.0    | 48.7    |
| Ephedrine              | 2          | 0.0     | 44.0    | 31.5    | 13         | 0.0    | 0.0     | 50.0    |

|                   | Percent | Percent w/ | Percent | Percent | Percent  | Percent  | Avg Months | % Involved |
|-------------------|---------|------------|---------|---------|----------|----------|------------|------------|
| Primary substance | Using   | History of | Black   | White   | Hispanic | Employed | Employed   | Crim Just/ |
| Hallucinogens     | 14.2    | 22.7       | 47.5    | 34.0    | 14.9     | 25.5     | 2.7        | 65.2       |
| Inhalants         | 8.6     | 11.1       | 6.2     | 25.9    | 64.2     | 30.9     | 2.0        | 49.4       |
| Over-the-counter  | 4.0     | 16.0       | 8.0     | 72.0    | 16.0     | 32.0     | 3.5        | 56.0       |
| Tranquilizers     | 2.9     | 22.9       | 15.2    | 70.5    | 13.3     | 14.3     | 2.6        | 57.1       |
| Other             | 0.5     | 4.8        | 27.3    | 47.1    | 22.5     | 20.3     | 2.4        | 34.8       |
| Ecstasy           | 1.9     | 6.1        | 51.9    | 29.4    | 17.8     | 33.2     | 2.6        | 81.8       |
| Anabolic steroids | 14.3    | 28.6       | 0.0     | 71.4    | 28.6     | 28.6     | 4.6        | 57.1       |
| Rohypnol          | 2.7     | 8.1        | 0.0     | 5.4     | 94.6     | 51.4     | 2.1        | 75.7       |
| Crack             | 5.6     | 26.3       | 46.4    | 35.8    | 16.8     | 15.3     | 2.5        | 47.1       |
| Ephedrine         | 0.0     | 0.0        | 100.0   | 0.0     | 0.0      | 0.0      | 0.0        | 0.0        |

|                   | Average   | Percent  | Average | # Women  | Percent on | Percent   | % Sickness |
|-------------------|-----------|----------|---------|----------|------------|-----------|------------|
| Primary substance | Education | Homeless | Income  | Pregnant | Medication | Emergency | or Health  |
| Hallucinogens     | 11.0      | 7.1      | \$3,230 | 2        | 24.1       | 28.4      | 19.9       |
| Inhalants         | 10.2      | 13.6     | \$3,401 | 0        | 30.9       | 21.0      | 18.5       |
| Over-the-counter  | 10.6      | 8.0      | \$5,298 | 0        | 32.0       | 12.0      | 32.0       |
| Tranquilizers     | 11.0      | 15.2     | \$5,730 | 2        | 42.9       | 44.8      | 30.5       |
| Other             | 11.2      | 10.7     | \$2,753 | 4        | 42.2       | 38.0      | 42.8       |
| Ecstasy           | 11.4      | 2.8      | \$3,547 | 8        | 16.4       | 18.7      | 10.3       |
| Anabolic steroids | 10.6      | 0.0      | \$6,499 | 0        | 14.3       | 14.3      | 0.0        |
| Rohypnol          | 9.6       | 5.4      | \$1,392 | 1        | 21.6       | 21.6      | 13.5       |
| Crack             | 11.6      | 19.4     | \$4,717 | 280      | 30.4       | 36.4      | 28.8       |
| Ephedrine         | 11.5      | 0.0      | \$3,600 | 0        | 100.0      | 50.0      | 0.0        |

|                   | Pct w/     | Pct w/Family   | Pct w/      | Pct w/      | Pct w/       |
|-------------------|------------|----------------|-------------|-------------|--------------|
| Primary substance | Employment | and/or Marital | Social/Peer | Psych/Emot. | Drug/Alcohol |
| Hallucinogens     | 34.8       | 30.5           | 27.0        | 35.5        | 43.3         |
| Inhalants         | 42.0       | 48.1           | 33.3        | 40.7        | 63.0         |
| Over-the-counter  | 36.0       | 52.0           | 28.0        | 32.0        | 40.0         |
| Tranquilizers     | 38.1       | 40.0           | 33.3        | 52.4        | 58.1         |
| Other             | 66.3       | 66.3           | 66.3        | 70.1        | 29.9         |
| Ecstasy           | 31.3       | 26.2           | 20.1        | 22.0        | 35.0         |
| Anabolic steroids | 57.1       | 42.9           | 28.6        | 42.9        | 71.4         |
| Rohypnol          | 43.2       | 51.4           | 35.1        | 27.0        | 73.0         |
| Crack             | 52.6       | 52.1           | 44.5        | 45.8        | 67.1         |
| Ephedrine         | 50.0       | 50.0           | 50.0        | 100.0       | 100.0        |

| Primary substance | Total Admissions | Percent Of All Admissions | Average Age | Average Age 1st Use | Ave Lag 1st Use to Admission | Pct No Prior Treatment | Percent Married | Percent Male |
|-------------------|------------------|---------------------------|-------------|---------------------|------------------------------|------------------------|-----------------|--------------|
| GHB               | 22               | 0.0                       | 32.0        | 24.1                | 9                            | 18.2                   | 4.5             | 27.3         |
| PCP               | 487              | 0.5                       | 28.0        | 19.4                | 8                            | 53.6                   | 9.7             | 39.4         |
| Ketamine          | 7                | 0.0                       | 33.4        | 24.2                | 11                           | 14.3                   | 28.6            | 71.4         |
| Klonopin          | 69               | 0.1                       | 32.4        | 24.6                | 9                            | 31.9                   | 15.9            | 62.3         |

| Primary substance | Percent Using Needles | Percent w/ History of IV Drug Use | Percent Black | Percent White | Percent Hispanic | Percent Employed | Avg Months Employed Over Last 12 | % Involved Crim Just/ Legal |
|-------------------|-----------------------|-----------------------------------|---------------|---------------|------------------|------------------|----------------------------------|-----------------------------|
| GHB               | 18.2                  | 50.0                              | 4.5           | 72.7          | 9.1              | 9.1              | 2.0                              | 86.4                        |
| PCP               | 0.2                   | 1.4                               | 89.5          | 4.7           | 5.5              | 20.3             | 3.1                              | 64.5                        |
| Ketamine          | 100.0                 | 100.0                             | 0.0           | 14.3          | 85.7             | 14.3             | 5.1                              | 0.0                         |
| Klonopin          | 1.4                   | 26.1                              | 8.7           | 56.5          | 27.5             | 33.3             | 1.9                              | 42.0                        |

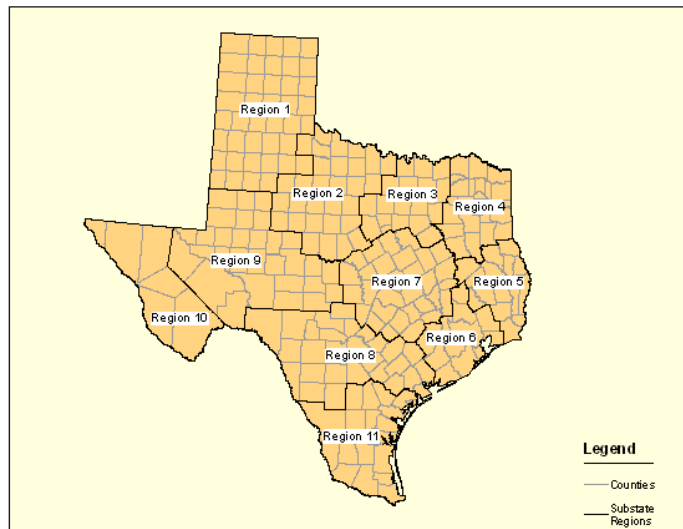
  

| Primary substance | Average Education | Percent Homeless | Average Income At Adm | # Women Pregnant at Admission | Percent on Medication | Percent Emergency Room Visit | % Sickness or Health Problems |
|-------------------|-------------------|------------------|-----------------------|-------------------------------|-----------------------|------------------------------|-------------------------------|
| GHB               | 12.3              | 9.1              | \$2,227               | 1                             | 50.0                  | 36.4                         | 45.5                          |
| PCP               | 11.3              | 4.9              | \$3,774               | 10                            | 23.4                  | 35.5                         | 18.9                          |
| Ketamine          | 12.7              | 14.3             | \$2,041               | 0                             | 71.4                  | 14.3                         | 42.9                          |
| Klonopin          | 11.3              | 17.4             | \$3,636               | 0                             | 50.7                  | 36.2                         | 31.9                          |

| Primary substance | Pct w/ Employment Problems | Pct w/Family and/or Marital Problems | Pct w/ Social/Peer Problems | Pct w/ Psych/Emot. Problems | Pct w/ Drug/Alcohol Problems |
|-------------------|----------------------------|--------------------------------------|-----------------------------|-----------------------------|------------------------------|
| GHB               | 68.2                       | 68.2                                 | 54.5                        | 68.2                        | 77.3                         |
| PCP               | 41.3                       | 38.0                                 | 30.6                        | 30.4                        | 49.3                         |
| Ketamine          | 57.1                       | 42.9                                 | 57.1                        | 57.1                        | 71.4                         |
| Klonopin          | 50.7                       | 60.9                                 | 58.0                        | 62.3                        | 73.9                         |

Appendix 2



**Marijuana Use in Past Year, Cocaine Use in Past Year, and Nonmedical Use of Pain Relievers in Past Year among Persons Aged 12 or Older, by Substate Region: Percentages, Annual Averages Based on 2004, 2005, and 2006 National Surveys on Drug Use and Health**

|                     | Marijuana Use in Past Year |                         | Cocaine Use in Past Year |                         | Nonmedical Use of Pain Relievers in Past Year |                         |
|---------------------|----------------------------|-------------------------|--------------------------|-------------------------|---|-------------------------|
|                     | Estimate                   | 95% Prediction Interval | Estimate                 | 95% Prediction Interval | Estimate                                      | 95% Prediction Interval |
|                     |                            |                         |                          |                         |   |                         |
| Total United States | 10.47                      | (10.24-10.69)           | 2.38                     | (2.26-2.49)             | 4.89  | (4.75-5.03)             |
| Texas               | 8.49                       | (7.91-9.11)             | 2.46                     | (2.16-2.80)             | 4.66  | (4.25-5.10)             |
| Region 1            | 9.92                       | (8.02-12.22)            | 2.84                     | (2.06-3.90)             | 5.71  | (4.47-7.28)             |
| Region 2            | 8.21                       | (6.37-10.53)            | 2.38                     | (1.64-3.45)             | 4.92  | (3.73-6.47)             |
| Region 3            | 8.59                       | (7.67-9.60)             | 2.06                     | (1.63-2.59)             | 4.98  | (4.31-5.75)             |
| Region 4            | 6.95                       | (5.50-8.75)             | 2.24                     | (1.61-3.11)             | 4.82  | (3.77-6.16)             |
| Region 5            | 8.67                       | (6.74-11.08)            | 2.55                     | (1.77-3.67)             | 5.02  | (3.81-6.57)             |
| Region 6            | 7.93                       | (6.84-9.19)             | 2.21                     | (1.76-2.77)             | 3.78  | (3.16-4.53)             |
| Region 7            | 11.96                      | (10.49-13.61)           | 3.26                     | (2.59-4.08)             | 5.82  | (4.91-6.89)             |
| Region 8            | 7.73                       | (6.44-9.25)             | 2.80                     | (2.13-3.68)             | 4.42  | (3.52-5.54)             |
| Region 9            | 6.88                       | (5.23-9.00)             | 2.43                     | (1.69-3.50)             | 4.79  | (3.58-6.38)             |
| Region 10           | 6.82                       | (5.23-8.86)             | 2.66                     | (1.83-3.85)             | 4.18  | (3.08-5.66)             |
| Region 11           | 7.26                       | (5.96-8.81)             | 2.81                     | (2.14-3.69)             | 4.12  | (3.30-5.13)             |

**Alcohol Use in Past Month, Binge Alcohol Use in Past Month, and Perceptions of Great Risk of Having Five or More Drinks of an Alcoholic Beverage Once or Twice a Week among Persons Aged 12 or Older, by Substate Region: Percentages, Annual Averages Based on 2004, 2005, and 2006 National Surveys on Drug Use and Health**

|                     | Alcohol Use in Past Month |                         | Binge Alcohol Use in Past Month <sup>1</sup> |                         | Perceptions of Great Risk of Having 5 or More Drinks Once or Twice a Week |                         |
|---------------------|---------------------------|-------------------------|--|-------------------------|---|-------------------------|
|                     | Estimate                  | 95% Prediction Interval | Estimate                                     | 95% Prediction Interval | Estimate  | 95% Prediction Interval |
|                     |                           |                         |  |                         |   |                         |
| Total United States | 51.01                     | (50.44-51.58)           | 22.84  | (22.52-23.16)           | 41.45   | (41.06-41.84)           |
| Texas               | 49.14                     | (47.75-50.53)           | 24.02  | (22.96-25.11)           | 44.15   | (42.80-45.51)           |
| Region 1            | 47.53                     | (42.17-52.95)           | 26.89  | (23.31-30.80)           | 41.42   | (37.20-45.76)           |
| Region 2            | 46.30                     | (40.85-51.84)           | 22.79  | (19.25-26.76)           | 41.52   | (37.18-45.99)           |
| Region 3            | 49.68                     | (47.31-52.05)           | 22.69  | (21.05-24.43)           | 42.98   | (40.91-45.08)           |
| Region 4            | 43.24                     | (38.02-48.61)           | 21.14  | (17.91-24.78)           | 41.46   | (37.34-45.70)           |
| Region 5            | 42.75                     | (37.61-48.06)           | 21.47  | (18.13-25.24)           | 43.14   | (38.99-47.38)           |
| Region 6            | 52.46                     | (49.76-55.14)           | 24.10  | (22.04-26.29)           | 44.36   | (41.84-46.91)           |
| Region 7            | 54.78                     | (51.54-57.97)           | 25.84  | (23.58-28.24)           | 40.88   | (38.15-43.67)           |
| Region 8            | 47.96                     | (44.29-51.66)           | 25.07  | (22.28-28.07)           | 45.89   | (42.63-49.18)           |
| Region 9            | 42.60                     | (36.85-48.55)           | 22.21  | (18.51-26.41)           | 47.29   | (42.60-52.03)           |
| Region 10           | 43.75                     | (38.30-49.35)           | 25.34  | (21.37-29.77)           | 51.31   | (47.10-55.51)           |
| Region 11           | 43.32                     | (39.37-47.36)           | 26.07  | (23.27-29.09)           | 50.02   | (46.91-53.12)           |

<sup>1</sup> Binge Alcohol Use is defined as drinking five or more drinks on the same occasion (i.e., at the same time or within a couple of hours of each other) on at least 1 day in the past 30 days.