



## SUBSTANCE ABUSE TRENDS IN TEXAS: JUNE 2014

BY

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### ABSTRACT

**Heroin:** The primary types of heroin in Texas are Mexican black tar and powdered brown, which is black tar turned into a powder by combining it with diphenhydramine or another ingredient. Street outreach workers report black tar heroin is being sold on street corners like crack is sold. It is packaged in baggies or balloons. The heroin is sold as brands such as “Mud”, “Dog Food”, “Ace of Diamonds”, and “Hearts. The age of persons dying from a heroin overdose has been decreasing, with the average age declining from 41 years in 2005 to 36 years in 2013. The mean age of the 2013 treatment admissions was 33 years. The number of calls to the Texas Poison Center Network involving exposures to heroin ranged from 181 in 1998 to a high of 307 in 2013. The demand for heroin in Texas also increased in the current reporting period, with supplies up and costs down, based on Drug Enforcement Administration (DEA) field division reports. The proportion of seized drugs identified as heroin among drug items analyzed by laboratories reporting to NFLIS remained level at 4 percent.

**Methamphetamine:** The decrease in methamphetamine indicators after the 2006 ban on the sale of large quantities of pseudoephedrine to produce the illicit drug reversed beginning in 2008 and the indicators are now at similar or higher levels than ever seen in Texas. The current supply with higher purity and potency is due to the P2P (phenyl-2-propanone) formula of the drug made in Mexico, based on data from the DEA’s Methamphetamine Profiling Program. The number of calls to Texas poison control centers involving human exposure to methamphetamine increased from 279 in 2012 to 356 in 2013. To aid in smuggling supplies into Texas, liquid methamphetamine is imported into Texas and then is converted to “ice.” Street outreach workers report that more psychotic episodes were occurring among methamphetamine users. They also report the old term for methamphetamine, “Tina,” or “T,” was again being used by those seeking anonymous sex partners through social media channels, and areas in Texas that traditionally have been dominated by heroin now report more methamphetamine incidents than heroin. The proportion of methamphetamine items seized, analyzed, and reported to NFLIS in Texas increased from 19 percent of all drugs in 2012 to 24 percent in 2013. Methamphetamine is now the second most frequently identified drug in forensic tests, exceeded only by cannabis

**Synthetic Cannabinoids:** The popularity of synthetic cannabinoids in Texas is dropping. Texas poison control center calls for the substances peaked in 2011 at 588 and dropped to 474 in 2012 and 464 in 2013. Seventy-one percent of the cases involved males, with the average age being 23. The 2013 data reported to NFLIS show changes in the different varieties of cannabinoids for Texas: the JWH varieties that were prevalent in 2010 have almost disappeared, and XLR varieties were dominant in 2013.

**Synthetic cathinones** also peaked in 2011 in Texas poison control center data. In Texas, there were 340 calls to poison control centers for synthetic cathinones in 2011, with 160 in 2012 and 53 in 2013. Some 73 percent of the 2013 cases involved males, with the average age being 29 years. The number of synthetic cathinones identified in NFLIS laboratories peaked in 2012 at 1240 and declined to 553 in 2013.

**MDMA (3,4-methylenedioxymethamphetamine) (Ecstasy)** calls to Texas poison centers peaked in 2009 at 310 and declined to 184 in 2013. The scientific literature has reported that mephedrone and methylone, two stimulants commonly found in synthetic cathinones, act on the brain much like MDMA. The MDMA drought continues and users may be replacing MDMA with the synthetic cathinones, although more potent versions of MDMA are now appearing in Europe.

**Cocaine** indicators (poison control center calls, treatment admissions, forensic laboratory findings, and deaths) continue to decrease, with fewer items identified in seizures, more diversion to Europe, use of levamisole as a filler, and increased prices. Some users on the street report the available cocaine is so weak that it is not worth the cost. The increase in the proportions of cocaine items identified in forensic laboratories at the three border areas may be an indication that the cocaine supply is beginning to increase.

**Cannabis** demand indicators are increasing, with 23 percent of all treatment admissions reporting primary problems with cannabis. Indoor and hydroponic grows in Texas provide large quantities of high-quality cannabis.

**Prescription Opioids/Opiates Other Than Heroin:** Indicators point to declines in problems with most of these opioids except for increases in poison control center calls about human exposure to buprenorphine. The increases in heroin use may be directly related to decreases in use of other opioids. Hydrocodone continued to be the most prevalent prescription opioid used for nonmedical purposes in Texas. Drinking codeine cough syrup continues to be driven by the rap music promoting “sippin’ syrup” and recent cases of popular singers getting in trouble because of their use of “Syrup”.

**Benzodiazepines:** Alprazolam continued to be the most frequently identified benzodiazepine in Texas forensic laboratories in 2013. Alprazolam is one of the ingredients in the “Houston Cocktail” or “Holy Trinity,” along with hydrocodone and carisoprodol.

**STD (sexually transmitted diseases)/HIV (human immunodeficiency virus)/AIDS (acquired immunodeficiency syndrome)/HCV (hepatitis C)** data show decreases over time in Texas in the proportions of cases related to injection drug use (from 6 percent of all AIDS cases reported in 2008 to 4 percent in 2013) with increases in cases related to men having sex with men (MSM) from 49 percent in 1999 to 59 percent in 2013. Increases in methamphetamine use among men who have sex with men illustrate the need to increase emphasis on the dangers of anonymous unprotected sex involving the use of social media to find partners. Additionally, outreach needs to emphasize not only the dangers of HIV/AIDS, but also the problems confronted in receiving and maintaining treatment after HIV infection. New drugs approved by the Food and Drug Administration are now available to treat those with HCV.

## INTRODUCTION

The population of Texas in 2010 was 25,145,561, with 45 percent White, 11 percent Black, 38 percent Hispanic, and 5 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

This report updates the June 2013 CEWG report. To compare the June 2014 report with earlier periods, please access <http://www.utexas.edu/research/cswr/qcattc/drugtrends.html>.

Data for this report include the following sources:

- **Student substance use data** for 2012 came from reports on the Texas School Survey of Substance Abuse: Grades 7–12, 2012, which was authored by L.Y. Liu and published by the Department of State Health Services (DSHS). For 2013, the data for high school students in grades 9–12 came from the Youth Risk Behavior Survey (YRBS)—United States, 2013, MMWR Surveillance System, downloaded July 1, 2014, at <http://www.cdc.gov/HealthyYouth/yrbs/index.htm>.
- **Data on drug use** by Texans age 12 and older came from the Substance Abuse and Mental Health Services Administration’s (SAMHSA’s) National Surveys on Drug Use and Health (NSDUH). The statewide estimates are from the 2008–2009 and 2011–2012 NSDUH. Data on the per capita prescribing of opioid pain relievers and benzodiazepines came from Morbidity and Mortality Weekly Report (MMWR), early release, vol. 63, July 1, 2014.
- **Poison control center data** came from the Texas Poison Center Network, DSHS, for 1998 through 2013, courtesy of Mathias Forrester.
- **Treatment data** were provided by the DSHS data system on clients admitted to treatment in DSHS-funded facilities from January 1, 1987, through December 31, 2013. Analysis of the 2013 data was by Lesli San Jose of the DSHS Decision Support Program and by the author. The 2013 data were downloaded on April 10, 2013
- **Information on drug mortality** through 2013 came from the Center for Health Statistics, DSHS, on July 15, 2014, courtesy of Lyudmila

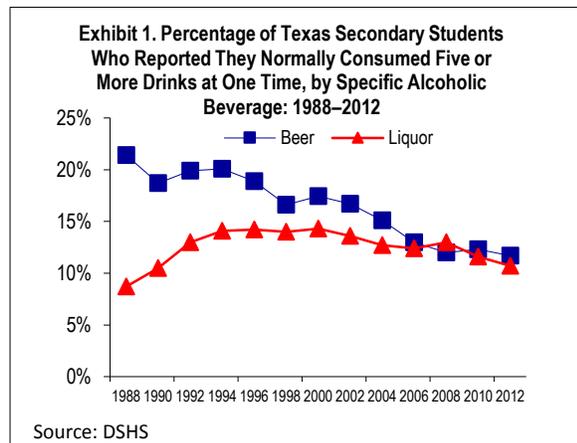
Baskin and Whitney Michael. These deaths are defined as “drug poisoning deaths,” which involve deaths with an underlying cause of poisoning from drug overdose or other misuse of drugs

- **Information on seized drugs identified by laboratory tests** came from forensic laboratories in Texas, which reported results from analyses of substances for 1998 through 2013 to the National Forensic Laboratory Information System (NFLIS) of the Drug Enforcement Administration (DEA). The drugs reported include not only the first drug reported in a case of multiple substances, but also the second and third drugs in any combination. The 2009 and 2011 data are not complete due to missing data from some reporting units, and the 2012 data are missing two months of data due to changes in the computer system at the Texas Department of Public Safety.
- **Price, trafficking, distribution, and supply information** was gathered from the January–December 2013 reports on Trends in the Traffic Report System (TTRS) from the Dallas, El Paso, and Houston Field Divisions (FDs) of the DEA.
- **Purity data** were provided by the DEA. The purity of methamphetamine nationally came from DEA’s Methamphetamine Profiling Project (MPP), and the Texas purity data for heroin came from the DEA Domestic Monitor Program (DMP).
- **Reports by users and street outreach workers** on drug trends for last quarter of 2013 and the first quarter of 2014 were reported to DSHS by workers at local HIV (human immunodeficiency virus) counseling and testing programs across the state. Information was also gathered from outreach staff at AIDS Services of Austin.
- **Sexually transmitted disease (STD), AIDS, and hepatitis C (HCV)** data through 2013 were provided by Nicole Hawkins and Kayla Boykins of DSHS.

## DRUG ABUSE PATTERNS AND TRENDS

### ALCOHOL

Alcohol is the primary drug of abuse in Texas. In 2012, 58 percent of Texas secondary school students in grades 7–12 had ever used alcohol, and 25 percent had consumed alcohol in the last month. Of particular concern is heavy consumption of alcohol, or binge drinking, which is defined as drinking five or more drinks at one time. In 2014, 12 percent of all secondary students said that when they drank, they usually drank five or more beers at one time, and 11 percent reported binge drinking of liquor (exhibit 1).



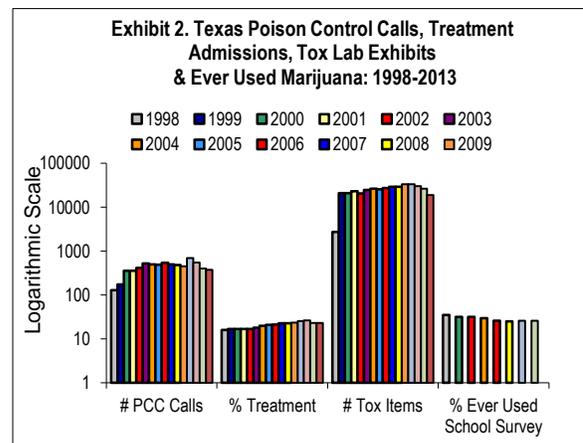
The 2013 YRBS reported that 67 percent of Texas high school students in grades 9–12 had ever drunk alcohol; 36 percent had drunk alcohol in the past month; and 21 percent had drunk five or more drinks in a row in the last month. In comparison, in 2001, 81 percent had ever drunk alcohol; 49 percent had used alcohol in the last month; and 31 percent had drunk five or more drinks at a time. In 2013, 22 percent of females and 25 percent of males reported binge drinking.

The 2011–2012 NSDUH estimated that 48.2 percent of all Texans age 12 and older had drunk alcohol in the past month, compared with 51.9 percent nationally. In 2008–2009, 49.6 percent of Texans and 51.8 percent nationally had drunk alcohol in the past month. In 2011–2012, 6.5 percent of Texans age 12 and older were estimated to be alcohol

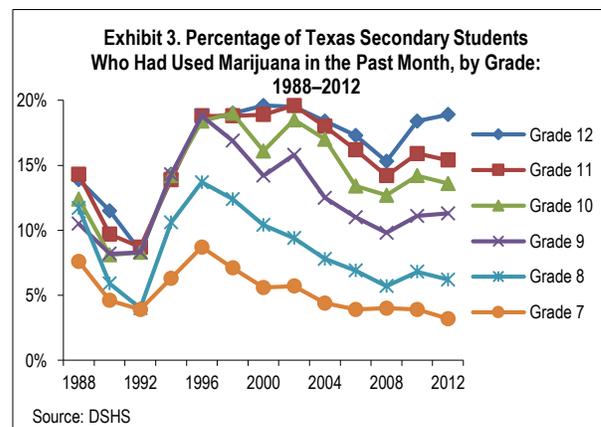
dependent or abusers in the past year, compared with 6.6 percent of the U.S. population.

In 2013, 28 percent of all clients admitted to publicly funded treatment programs in Texas had a primary problem with alcohol (Appendix). The characteristics of alcohol admissions have changed over the years. In 1988, 82 percent of the clients were male, compared with 68 percent in 2013. The average age at admission increased from 33 to 39 year in the same time period.

### Cannabis



Cannabis indicators remained mixed (exhibit 2). Among Texas secondary students (grades 7–12), 26 percent in 2012 had ever tried cannabis, and 11 percent had used in the past month. Past-month use was lowest among seventh graders (exhibit 3).

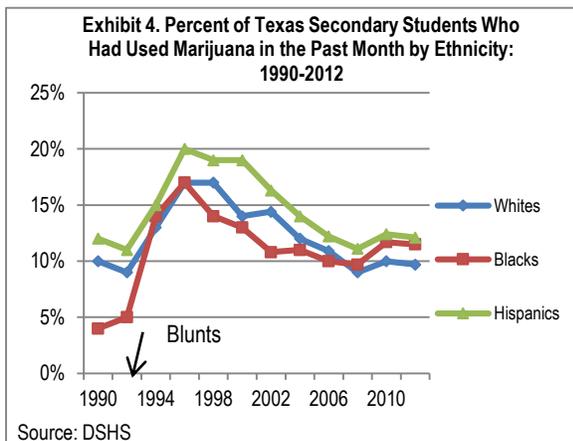


The use of blunt cigars (cheap cigars split open with cannabis replacing the tobacco) has driven

the increase in the use of cannabis. Exhibit 4 shows the impact of blunt cigars after they appeared in Texas in 1993. Since then, rates have increased for all race/ethnic groups. By 2008, however, the levels for Whites and Hispanics were back to their 1992 levels, while the levels for Black students are still above the rates prior to the introduction of blunts. The 2012 survey provided further insight into this phenomenon. Of those youths who used cannabis, 63 percent smoked “blunts” at least one-half of the time, compared with 58 percent who smoked “joints” at least one-half of the time.

The relationship between tobacco use, cannabis use, and cigars was also seen in the finding that of those youths who had ever used tobacco and never used cannabis, 5 percent had ever used cigars. In comparison, of those who had ever used tobacco and ever used cannabis, 77 percent had ever used cigars.

In 2013, the YRBS reported that 38 percent of Texas high school students in grades 9–12 had ever smoked cannabis, compared with 44 percent in 2011, 37 percent in 2009, 38 percent in 2007, 42 percent in 2005, and 41 percent in 2001.



The 2011–2012 NSDUH estimated that 5.1 percent of Texans age 12 and older had used cannabis in the past year (compared with 7.1 percent nationally); in 2008–2009, 8.3 percent reported past-year use, compared with 10.8 percent nationally.

The Texas Poison Center Network reported 133 calls of human exposure to cannabis in 1998, compared with 374 calls in 2013 (exhibit 2).

Cannabis was the primary problem for 23 percent of admissions to treatment programs in 2013, compared with 8 percent in 1995. While 44 percent of cannabis admissions in 2013 reported no second substance abuse problem, 19 percent had a problem with alcohol. The average age of cannabis clients was 23. Approximately 43 percent were Hispanic; 25 percent were White; and 28 percent were Black. Nearly three-quarters (70 percent) were male. Seventy-eight percent were involved with the criminal justice system, and only 15 percent were employed fulltime.

Cannabis was identified in 21 percent of drug reports among items analyzed by Texas forensic laboratories in 2013 (exhibit 2). It ranked third after cocaine and methamphetamine in 2013.

DEA’s System to Retrieve Information from Drug Evidence (STRIDE) statistics showed a 27 percent drop in cannabis seizure amounts between 2011 (245,219 kilograms) and 2012 (179,645 kilograms). DEA’s El Paso Intelligence Center (EPIC) data showed cannabis seizure amounts in Texas declined by 28 percent, from 1,080,426 kilograms in 2011 to 780,087 kilograms in 2012.

The DEA’s Dallas FD is a major transshipment and distribution center for cannabis imported from Mexico. Sophisticated indoor grows continue to be frequently encountered. The organizations responsible for the indoor grows have the capability to cultivate and distribute multiple hundred pounds of high-grade cannabis. During several recent seizures, elaborate indoor cannabis grow operations were found in residences. Mexican imported cannabis is a high and stable threat due to low prices, high availability, and recurring reports of substantial cannabis seizures.

Cannabis was the controlled substance most frequently seized in the DEA’s El Paso FD. Most

of the marijuana/ cannabis in the region is Mexican and is destined for transport elsewhere in the U.S.

Cannabis continued to be highly available and stable throughout the DEA's Houston FD. The popcorn variety of cannabis was also in demand, and traffickers were unable to keep up with local demands for this better quality product.

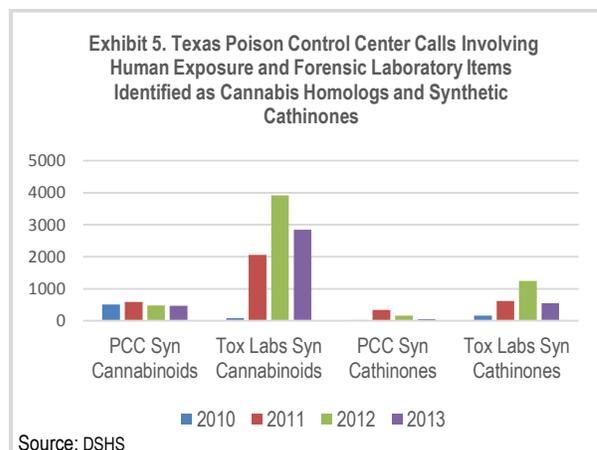
In 2013, a pound of domestic cannabis cost \$360–\$500. A pound of Mexican cost \$140–\$500 and a pound of hydroponic cost \$3,400–\$6,000.

### Synthetic Cannabis

Cannabis homologs (synthetic cannabis), which mimic delta-9-tetrahydrocannabinol (THC) but with different chemical structures, continue to be a problem. Many of the newer varieties cannot be identified in standard drug tests, so they are used by probationers, parolees, or persons required to submit to drug tests. A new problem is that these synthetic drugs are also being used by individuals in drug treatment programs to avoid testing positive for cannabis. On September 1, 2011, Texas banned many of the synthetic cannabinoids and the U.S. banned more varieties on March 1, 2011, July 9, 2012, and February 10, 2014.

The compounds had been developed by researchers to investigate the part of the brain responsible for hunger, memory, and temperature control. The products are known and sold under a wide variety of names, such as "K2," "K2 Summit," "Spice," and "Spice Gold." They have been available through the internet, gas stations and specialized stores, such as "head shops," and marketed as herbal incense.

Symptoms associated with use of the cannabis homologs include tachycardia, respiratory issues, agitation, confusion, drowsiness, hallucinations, delusions, nausea and vomiting, ocular problems, and other problems. The substances may also produce withdrawal and dependence in users.



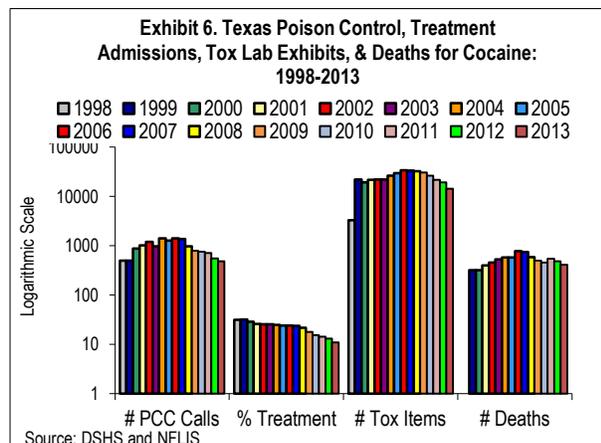
From 2010 through 2013, the Texas Poison Control Center Network received 1,793 calls involving human exposures to the substances (504 in 2010, 588 in 2011, 474 in 2012, and 464 through 2013) (exhibit 5). Of all the calls, the age range was between 7 and 75; 46 percent were younger than 20; 76 percent were male; and 89 percent had either misused or abused the substance. Of these calls, 6 percent resulted in "major" or life-threatening conditions; four deaths from synthetic cannabinoids were reported to the Texas poison control centers between 2010 and 2013.

In 2013 412 persons with a primary problem with synthetic cannabinoids entered Texas treatment programs, as compared to 156 in 2012. The average age was 23; 52 percent were White, 38 percent were Hispanic, and 6 percent were Black. Seventy-five percent were male, and 41 percent used the substance daily.

Exhibit 5 also shows the number of synthetic cannabis items seized and analyzed in forensic laboratories reporting to NFLIS between 2010 and 2013. The number of varieties of these synthetics increased from 6 in 2010 to 21 in 2011, to 28 in 2012 to 22 in 2013. In addition the varieties of the drugs changed each year. In 2010, 99 percent of the exhibits were JWH varieties but by 2013, only 1 percent were JWH. In 2011, 38 percent were the AM-2201 varieties and by 2013, all but 22 percent were the XLR-11 variety.

The DEA Field Divisions reported synthetic cannabinoids were increasing in abuse.

### Cocaine/Crack



Cocaine indicators have decreased (exhibit 6). The changes are due to increasing demand for cocaine in Europe; production declines in the Andes; and the addition of levamisole, a filler that can increase the volume and dilute the potency of the cocaine.

The 2012 Texas School Survey of Substance Abuse: Grades 7–12 reported that lifetime use of powder and crack cocaine had dropped from a high of 9 percent in 1998 to 7 percent in 2012, while past-month use dropped from 4 percent in 1998 to 2 percent in 2012. The 2011 YRBS reported that 9.4 percent of Texas high school students had ever used cocaine, compared with 8.5 percent in 2009.

In 2010–2011, the NSDUH reported that 1.4 percent of the Texas population age 12 and older had used cocaine in the past year, below the national rate of 1.7 percent.

Texas Poison Center Network abuse and misuse calls involving the use of cocaine increased from 497 in 1998, to 1,410 in 2008, and then declined to 484 in 2013 (exhibit 6).

Cocaine (both crack and powder) represented 11 percent of all admissions to DSHS-funded treatment programs in 2013, down from 35 percent in 1995. Among all cocaine admissions, cocaine inhalers were the youngest and most likely to be Hispanic (exhibit 7). Cocaine

injectors were older than inhalers but younger than crack smokers, and they were the most likely to be White. Crack smokers were more likely to be Black and more likely to be homeless. The term “lag” refers to the period from first consistent or regular use of a drug to the date of admission to treatment.

**Exhibit 7. Characteristics of Clients Admitted to TDSHS-Funded Treatment with a Primary Problem with Cocaine by Route of Administration: 2013**

	Crack Cocaine Smoke	Powder Cocaine Inject	Powder Cocaine Inhale	Cocaine All <sup>a</sup>
# Admissions	5,380	250	2,887	8,628
% of Cocaine Admits	62	3	33	100
Lag-1st Use to Tmt-Yrs.	17	18	12	15
Average Age	42	38	33	39
% Male	50	54	53	51
% Black	56	17	29	46
% White	26	58	22	26
% Hispanic	15	23	49	28
% C/J Involved	40	54	62	48
% Employed Full Time	6	12	20	11
% Homeless	19	16	5	14

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

Source: DSHS

Powder cocaine inhalers averaged 12 years between first regular use and entrance to treatment, while injectors averaged 18 years of use before they entered treatment.

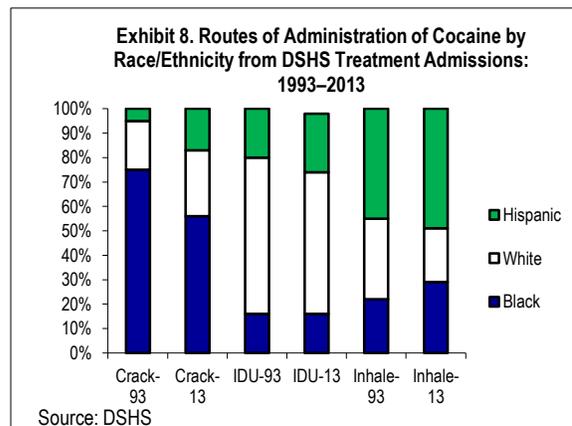


Exhibit 8 shows the changes in treatment admissions between 1993 and 2013 by route of administration and race/ethnicity. The

proportion of Blacks among crack cocaine smokers has decreased from 75 percent to 56 percent, and the proportion of Whites has increased from 20 percent to 27 percent.

The number of poisoning deaths that involved cocaine increased from 321 in 1999 to 778 in 2006, before dropping to 421 in 2013 (exhibit 6).

Exhibit 6 shows that the proportion of drug reports identified as cocaine by the forensic laboratories has decreased. In 1998, cocaine accounted for 40 percent of all reports of items examined, compared with 19 percent in 2012, but rose to 23 percent in 2013. The three forensic laboratories on the border reported the amount of cocaine examined had increased significantly in 2013, which could point to a potential return of a larger supply of cocaine. The laboratory in El Paso in 2012 reported that approximately 50 percent of the drug reports were cannabis, followed by cocaine (28 percent). In 2013, the proportion of marijuana/cannabis dropped to 32 percent and the amount of cocaine rose to 43 percent. In Laredo in 2012, 48 percent of the drug reports were cannabis and 21 percent were cocaine; in 2013, cannabis had dropped to 28 percent and cocaine had increased to 32 percent. In McAllen, the proportion of cocaine increased from 50 percent to 65 percent and cannabis remained level at 20-23 percent in 2013.

Data from the EPIC National Seizure System (NSS) for 2012 and 2013 reflected a significant decline from 2011 in cocaine seizures in the Southwest border. Cocaine seizures on the border fell, from 27,306 kilograms in 2011 to 12,823 kilograms in 2012 and 13,230 in 2013. The STRIDE seizures showed a high of 32,929 kilograms in 2011 but dropped to 11,885 kilograms in 2012 and then rose to 15,571 kilograms in 2013.

The DEA laboratories have been finding levamisole (phenylmidothiazole) ("PIT") in cocaine exhibits for a number of years, and the decrease in purity may reflect increased use of

PIT as a filler to increase the volume of the drug. There were 700 items identified as PIT in 2012 and 812 in 2013.

Street outreach workers in Austin report crack use is continuing among older Black males, but few new users are appearing. Crack users who want to inject the drug continue to use packets of lemon juice to liquefy the drug. In order to minimize vein damage, vitamin C powder dissolved in water is a harm reduction option preferred to using lemon juice. The rubber tubing or bumper on the end of the crack pipe that is used to prevent burns to the lips while smoking crack is now referred to as a "crack condom" in the Houston area. Some users in Austin also are reporting that the cocaine is so weak that it is not worth the cost. Other outreach programs around the State also reported crack use was down, and that mixing synthetic cathinones with cocaine to increase the effect is reported to cause hallucinations and paranoia.

In Houston, powder cocaine was available and the supply was stable, although there were complaints about the poor quality. In Dallas, the quality and quantity were increasing and there was a wide range of cocaine prices. In El Paso, although cocaine is readily available, due to the proximity to Mexico, its use is not as prevalent as cannabis. Crack cocaine is available and occurs in one area of that city.

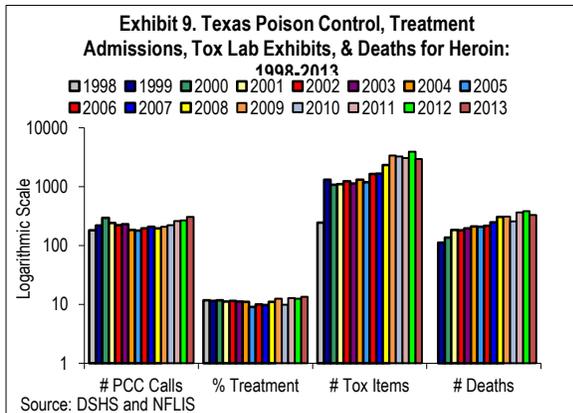
A gram of powder cocaine cost \$40-\$100 and an ounce of powder cocaine cost \$350-\$500. A rock of crack cocaine cost \$10-\$60 and an ounce cost \$400-\$1500.

### **Heroin**

Heroin indicators show a growing problem, particularly among teenagers and young adults. This was first noticed with the "cheese heroin" situation in Dallas in the mid-2000s, but heroin use indicators by youth and young adults are now increasing statewide. The primary types of heroin in Texas are Mexican black tar and powdered brown, which is black tar turned into a powder by combining it with diphenhydramine or other ingredients.

Street outreach workers report black tar heroin is very common and is being sold in baggies or balloons on street corners like crack is sold. The heroin is sold as brands such as “Mud”, “Dog Food”, “Ace of Diamonds”, and “Hearts”.

The proportion of Texas secondary students reporting lifetime use of heroin dropped from 2.4 percent in 1998 to 1.1 percent in 2012. However, the 2013 YRBS found 3.8 percent of Texas high school students reported having ever used heroin, compared with 3.3 in 2011, 2.1 percent in 2009, 2.4 percent in 2007, and 3.0 percent in 2005 and 2001.



Calls to the Texas Poison Center Network involving confirmed exposures to heroin ranged from 181 in 1998 to 307 in 2013 (exhibit 9).

Heroin was the primary drug of abuse for 13 percent of clients admitted to treatment in 2013 (Appendix). The characteristics of these users varied by route of administration, as exhibit 10 illustrates. Most heroin addicts entering treatment inject the drug, but 18 percent inhaled the drug in 2013. Smoking black tar heroin is very rare in Texas, because the chemical composition tends to flare and burn rather than smolder.

Of the 2013 heroin treatment admissions, 36 percent reported no second substance problem, and 16 percent reported a problem with cocaine, which shows the tendency to “speedball,” or use heroin and cocaine sequentially.

Exhibit 9 shows that the proportion of heroin items analyzed by forensic laboratories has remained low (4 percent in 2013).

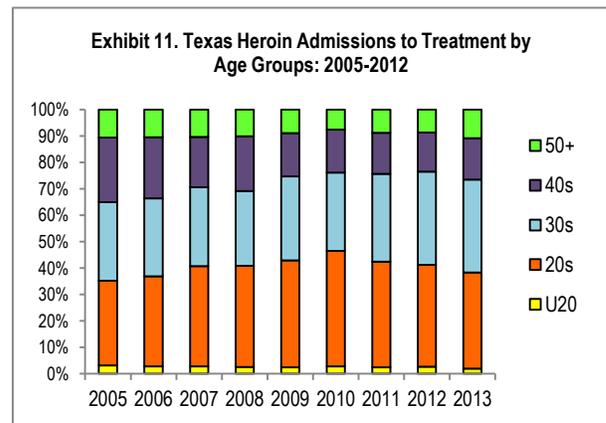
**Exhibit 10. Characteristics of Clients Admitted to DSHS-Funded Treatment with a Primary Problem with Heroin by Route of Administration: 2013**

	Inject	Inhale	Smoke	All <sup>a</sup>
# Admissions	8,287	1,815	171	10,273
% of Heroin Admits	81%	18%	2%	100%
Lag-1st Use to Tmt-Yrs.	12	8	7	11
Average Age	34	30	27	39
% Male	62	54	68	61
% Black	5	16	0	7
% White	56	31	0	51
% Hispanic	38	52	0	41
% C J Involved	33	38	41	48
% Employed Full Time	7	6	5	7
% Homeless	20	8	7	18

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

Source: Texas Department of State Health Services

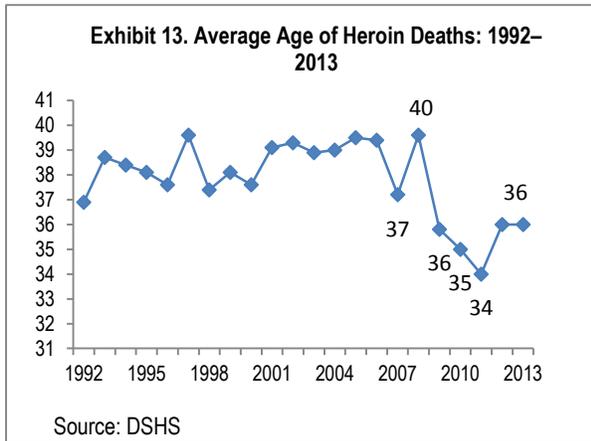
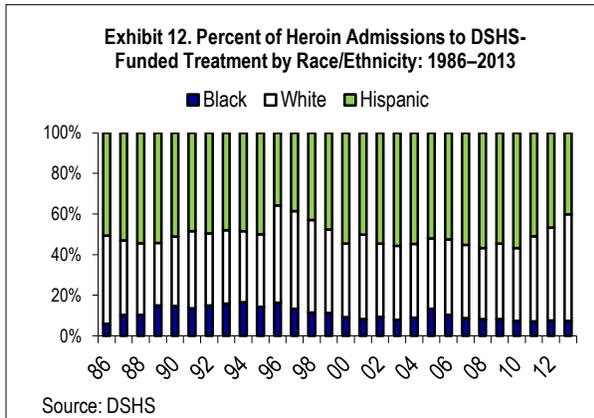
Exhibit 10 shows that while the number of individuals who inhale heroin was small, the lag period between first use and seeking treatment for this group was 8 years, compared with 12 years for injectors. This shorter lag period means that, contrary to the street rumors that “sniffing or inhaling is not addictive,” inhalers can become dependent on heroin and enter treatment sooner while still inhaling. Alternatively, they will shift to injecting—increasing their risk of hepatitis C and HIV infection, becoming more impaired, and entering treatment later.



The increase in young patients entering treatment for dependence on heroin is of concern (exhibit 11). The proportion of

teenagers entering treatment has remained low, but given the lag between first use and dependence, many of the admissions in their twenties began their heroin use as teenagers.

Over time, the proportion of White admissions for heroin has increased, and the proportion of Hispanic admissions has decreased (exhibit 12).

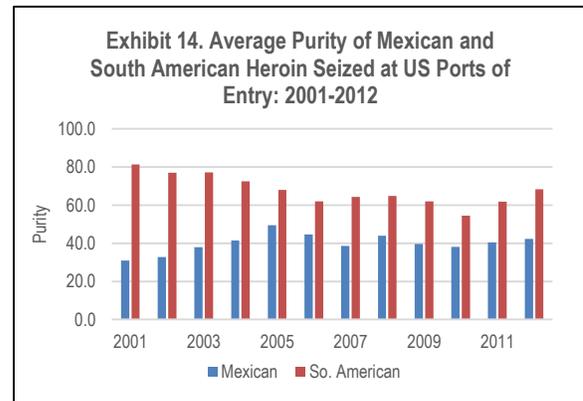


In 2013 there were 330 heroin poisoning deaths in Texas. The decline in the average age of the decedents from 40 in 2008 to 36 in 2012 and 2013 (exhibit 13) is evidence of the increasing abuse by young adults. Of the 2013 deaths, 61 percent involved only heroin, and 14 percent also involved cocaine.

The dominant form of heroin in Texas is black tar, which has a dark, gummy, oily texture that can be diluted with water and injected. It has remained the most prevalent form of heroin available in the Dallas FD. The Houston and El Paso DEA FD reported that heroin was

moderately available, but more available than a year ago. Seizures of heroin in the El Paso FD have risen recently, which could signal an increase in smuggling in the region. Users cross to Ciudad Juarez to obtain their supply.

Heroin in Texas comes from Mexico and is a lower purity than the white South American heroin which traditionally had been trafficked into the U.S. through the East Coast (exhibit 14). Recent DEA reports indicate that the white heroin is also now trafficking through Texas to the northeast and if the South American variety “spills” in Texas, overdoses will become a greater problem.



Depending on the location, black tar heroin was sold on the street in 2013 for \$5–\$20 per paper, balloon, or capsule; \$50–\$150 per gram; \$800–\$3,000 per ounce; and \$19,000–\$60,000 per kilogram.

Mexican brown heroin, which is black tar heroin that has been cut with diphenhydramine, lactose, or another substance and then turned into a powder to inject or inhale, cost \$50-\$500 per gram. An ounce cost \$500–\$3,000.

### Other Opioids

The “other opioids” group excludes heroin but includes drugs such as methadone; codeine; hydro-codone (Vicodin®, Tussionex®); oxycodone (OxyContin®, Percodan®, Percocet-5®, Tylox®); buprenorphine; hydromorphone (Dilaudid®); morphine; meperidine (Demerol®); tramadol (Ultram®); and opium. The term “synthetic narcotic” refers to drugs

such as fentanyl and dilaudid that are not made from natural materials but from chemicals.

Abuse of codeine cough syrup sweetened with jelly beans dissolved in a soft drink continues; this phenomenon has been popularized by rap music that celebrates “sippin’ syrup.” The marketing of soft drinks that imitate the codeine cough syrup pattern, such as “Lean” and “Drank,” remained a concern.

The 2012 Texas secondary school survey queried about use of other opiates “to get high,” and reported that 8 percent had ever used hydrocodone; 11 percent had ever consumed codeine cough syrup “to get high;” and 4 percent had ever used oxycodone in that manner.

The 2013 YRBS reported 19 percent of high school students in Texas have ever taken prescription pills without a doctor’s prescription, as compared to 22 percent in 2011.

The 2011–2012 NSDUH reported that 4.5 percent of Texans age 12 and older had used pain relievers nonmedically in the past year, compared with 4.6 percent nationally.

A 2014 report from the Centers for Disease Control and Prevention, Morbidity and Mortality Weekly Report compared the rates of prescribing and dispensing opioid pain relievers among the states. The mean rate for all the states for opioid pain relievers was 87.3, as compared to 74.3 in Texas; the rate for prescribing long-acting/extended-release opioid pain relievers which should be taken only 2 to 3 times a day was 12.0 nationally and 4.2 in Texas; the rate for prescribing high-dose opioid pain relievers which resulted in a total daily dosage of 100 morphine milligram equivalents was 4.5 nationally and 1.9 in Texas; and the rate for prescribing benzodiazepines was 39.2 nationally and 29.8 in Texas.

The number of reports of opioids from items analyzed by forensic laboratories has increased over time, with some variations between years. Methadone reports peaked in 2008, while hydrocodone and oxycodone reports peaked in 2010 (exhibit 15).

In Dallas, promethazine with codeine is used to soak cannabis cigarettes to give them an extra boost. Soma® (carisoprodol), Valium® (diazepam), Adderall®, methadone, and OxyContin® (oxycodone) continued to be other popular drugs used in the illicit market in the Dallas/Fort Worth area. Dallas continued to see sibutramine, a Schedule IV controlled, substance used as an appetite suppressant.

Trends in Texas center on illicit pain clinics, pharmacies, and physicians. The most desired pharmaceuticals continued to be the three that comprise the “Houston Cocktail:” hydrocodone, carisoprodol (Soma®), and alprazolam (Xanax®). Two new Texas laws designed to eliminate doctor shopping and prescription fraud became effective in September 2011.

The DEA reported prescriptions from Houston pain management clinics were filled in pharmacies as far north as Oklahoma, as far east as Alabama, and as far west as El Paso. Large numbers of patients from Louisiana and other states continued to travel to the Houston area for the purpose of prescription fraud. Furthermore, pill crews continued to recruit “patients” to fraudulently obtain multiple prescriptions from pain clinics that were subsequently filled at local area pharmacies and then given to the pill crew leader for illicit distribution. At the same time, Houston area physicians were found to be mailing prescriptions for Schedule II and Schedule III pharmaceuticals to patients in other states (primarily Louisiana and Mississippi), who then sent these medical practitioners money orders. In addition, prescription drugs and “trial” drugs not approved for human consumption in the United States are readily and legally available across the border, where some medications can be sold over-the-counter.

**Exhibit 15. Indicators of Abuse of Opiates in Texas: 1998–2013**

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
<b>Poison Control Center Cases of Abuse and Misuse</b>																
Buprenorphine			4	0	2	12	12	27	33	61	83	109	130	138	116	303
Fentanyl			9	1	3	11	17	11	139	155	120	143	109	132	110	98
Hydrocodone			236	123	348	465	747	431	657	703	723	748	838	869	814	645
Methadone			66	91	46	103	378	477	402	1081	1169	1134	1104	794	575	421
Oxycodone			62	99	68	67	112	50	68	67	81	74	101	95	129	74
<b>DSHS Treatment Admissions</b>																
Methadone <sup>a</sup>	55	69	44	52	75	86	63	91	101	113	160	145	132	180	193	170
"Other Opiates" <sup>a</sup>	553	815	890	1,386	2084	2794	3433	3482	3903	4529	5221	5844	2679	2047	1851	1972
Codeine <sup>a</sup>														109	102	81
Hydrocodone <sup>a</sup>														3102	3277	2972
Hydromorphone <sup>a</sup>														222	275	211
Oxycodone														342	323	326
<b>Deaths with Mention of Substance (DSHS)</b>																
Other Opioids	122	168	224	313	370	369	402	577	572	535	555	564	526	485	412	
Synthetic Narcotics	52	52	80	120	80	94	93	113	142	120	171	165	114	124	108	
Methadone	27	62	89	141	161	164	205	222	224	198	183	190	187	147	103	
<b>Drug Exhibits Identified by Forensic Toxicology Laboratories (NFLIS)* NOTE 2 MONTHS OF 2012 WERE NOT REPORTED</b>																
Hydrocodone	61	530	661	1,010	1162	1701	2038	2166	3201	3835	3663	4242	5365	4943	3970	2198
Methadone	4	20	23	52	62	79	150	184	204	251	302	288	318	320	236	205
Oxycodone	11	41	77	150	164	232	309	339	335	333	397	456	529	458	438	271
Buprenorphine	0	9	12	6	10	11	6	6	13	25	43	89	137	133	88	53

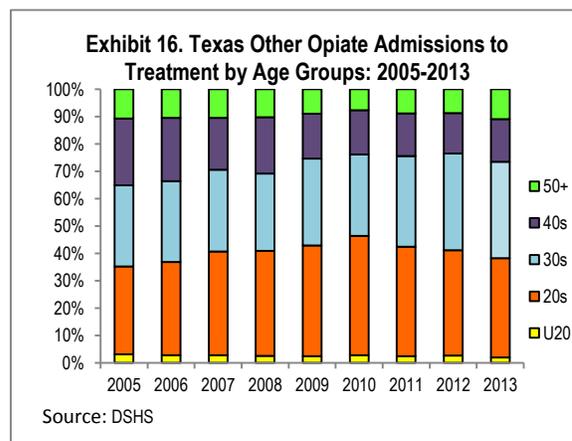
<sup>a</sup> "Other Opiates" refers to all other opioids until 2010; starting in 2011 specific opioids are reported; 2 months of data in 2012 not reported

<sup>b</sup> As of 2010 information on most common opioids reported separately

<sup>c</sup> The toxicology lab data (NFLIS) is not complete for 2009 and 2011 Sources: DSHS and NFLIS.

Exhibit 15 shows the indicators in the use of various opioids. Notice that of the poison center calls, only human exposures to buprenorphine increased Treatment admissions for other opioids have decreased from their high points in 2008-2009, and opioid items seized and identified in forensic laboratories have fallen. Deaths involving opioids dropped between 2011 and 2013.

Seven percent of all clients who entered publicly funded treatment during 2013 had a primary problem with opioids other than heroin, compared with 1 percent in 1995. The Appendix shows users of these various opioids differed in their characteristics. They tended to be White; between 31 and 35 years of age; and, other than for oxycodone, were more likely to be female. Over time, the proportion of admissions younger than 30 has increased, from 35 percent in 2005 to 38 percent in 2013 (exhibit 16).



Poisoning deaths involving “methadone,” “other opiates,” and “other synthetic narcotics” are classified based on the International Classification of Diseases (ICD) categories and, other than methadone, they do not provide details on the specific opiate drug involved. In 2013, 101 poisoning deaths involved methadone, with 19 percent of these also involving benzodiazepines. The average

age of the methadone decedent was 41. There were also 407 deaths involving other opioids and 106 involving synthetic narcotics (exhibit 15).

The number of reports of opioids from items analyzed by forensic laboratories has increased over time, with some variations between years. Methadone reports peaked in 2008, while hydrocodone and oxycodone reports peaked in 2010 (exhibit 15).

In Dallas, promethazine with codeine is used to soak cannabis cigarettes to give them an extra boost. Soma® (carisoprodol), Valium® (diazepam), Adderall®, methadone, and OxyContin® (oxycodone) continued to be other popular drugs used in the illicit market in the Dallas/Fort Worth area. Dallas continued to see sibutramine, a Schedule IV controlled, substance used as an appetite suppressant.

Trends in Texas center on illicit pain clinics, pharmacies, and physicians. The most desired pharmaceuticals continued to be the three that comprise the “Houston Cocktail:” hydrocodone, carisoprodol (Soma®), and alprazolam (Xanax®). The DEA reported prescriptions from Houston pain management clinics were filled in pharmacies as far north as Oklahoma, as far east as Alabama, and as far west as El Paso. Large numbers of patients from Louisiana and other states continued to travel to the Houston area for the purpose of prescription fraud. Furthermore, pill crews continued to recruit “patients” to fraudulently obtain multiple prescriptions from pain clinics that were subsequently filled at local area pharmacies and then given to the pill crew leader for illicit distribution. At the same time, Houston area physicians were found to be mailing prescriptions for Schedule II and Schedule III pharmaceuticals to patients in other states (primarily Louisiana and Mississippi), who then sent these medical practitioners money orders. In addition, prescription drugs and “trial” drugs not approved for human consumption in the United States are readily and legally available across the border, where some

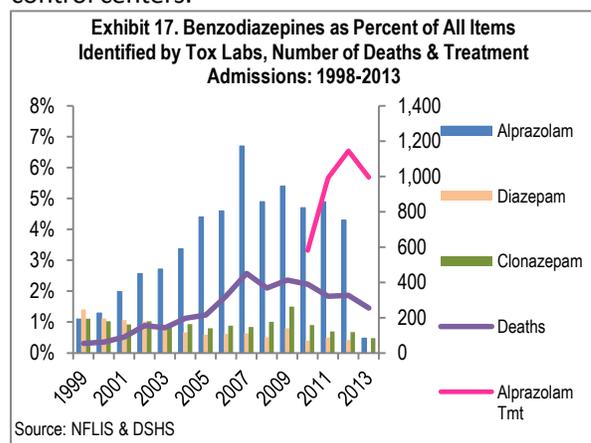
medications can be sold over-the-counter.

### Benzodiazepines

Benzodiazepines include diazepam (Valium®), alprazolam (Xanax®), flunitrazepam (Rohypnol®), clonazepam (Klonopin® or Rivotril®), flurazepam (Dalmane®), lorazepam (Ativan®), and chlordiazepoxide (Librium® and Librax®). Rohypnol® is the benzodiazepine, flunitrazepam, which 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.

The 2012 Texas secondary school survey reported lifetime use of “downers” was 6 percent, and past-month use was 2 percent. Students from the border area were more likely to report Rohypnol® use than those living elsewhere in the state (5 versus 1 percent lifetime, and 2 versus 1 percent current use). Use in both the border and nonborder areas has declined since its peak in 1998.

Exhibit 17 shows the most popular benzodiazepine items identified in forensic laboratories in Texas, as well as the number of deaths and number of treatment admissions for alprazolam. Alprazolam is also the most abused benzodiazepine in terms of calls to poison control centers.



The numbers of confirmed exposures to Rohypnol® reported to the Texas Poison Control Network were 10 in 2006, 11 in 2007, 12 in 2008, 23 in both 2009 and 2010, 22 in 2011, 10

in 2012, and 1 in 2013.

### **Amphetamine-Type Substances and Emerging Psychoactive Substances**

Amphetamine-type substances come in different forms and with different names. This section provides the latest Texas data on a range of speedy-type substances, including MDMA (3,4-methylenedioxy-methamphetamine, ecstasy); 2 C-xx phenethylamine drugs designed in the 1980s as replacements for MDMA; BZP (1-benzylpiperazine) and TFMPP (1-(3-trifluoro-2methylphenyl) piperazine), which can produce an ecstasy-like effect if taken in combination; synthetic cathinones, which are synthetic versions of the khat plant in Africa; and amphetamines; and methamphetamine. Other psychoactive substances, such as PCP, which often result in similar effects, are also reported in this section.

“Pills” can be pharmaceutical-grade stimulants, such as dextroamphetamine, Dexedrine®, Adder-all®, Concerta®, Vyvanse®, Ritalin® (methylphenidate), or phentermine, or they can be methamphetamine powder that has been pressed into tablets and sold as amphetamines, “Yaba”, ecstasy, or synthetic cathinones. Stimulant pills can be taken orally, crushed for inhalation, or dissolved in water for injection.

While pharmaceutical-grade amphetamines are quite different from the illegally manufactured methamphetamine, some reporting systems, such as the treatment data system, do not distinguish between them. However, the information from NFLIS has clarified that most of these substances in Texas are methamphetamine, not amphetamine. The forensic laboratories reported in 2013 that there were 13,615 reports of methamphetamine among items analyzed in Texas (97 percent), compared with 445 reports for amphetamine (3 percent).

#### **2 C-xx Phenethylamines**

There are a broad range of abused compounds that share a common

phenylethan-2-amine structure. Some are naturally occurring neurotransmitters (dopamine and epinephrine), while others are psychoactive stimulants (amphetamine), entactogens (MDMA), or hallucinogens (the 2C-xx series of compounds).

Common street names for 2 C-B include “Nexus,” “Bees,” “Venus,” “Bromo Mescaline,” and BDM-PEA. The drug first gained popularity as a legal ecstasy replacement in the mid-1980s. It is known for having a strong physical component to its effects and a moderate duration. Other phenethylamines include 2C drugs with a third letter of B, E, C, I, P, and T. These drugs have been extremely difficult to identify due to the lack of peer-reviewed scientific data.

The Texas Poison Control Center reported 1 case each of a 2C drug in 2005, 2006, and 2007; with 2 cases in both 2008 and 2009; 4 in 2010; 18 in 2011; 12 in 2012; and 18 in 2013. The patients were predominately adolescents and male. A variety of adverse clinical effects were reported, with the most frequent being tachycardia (45 percent), agitation (24 percent), hallucinations (24 percent), drowsiness (21 percent), mydriasis (21 percent), confusion (17 percent), and hypertension (17 percent). At least five deaths due to overdoses have been reported in the literature worldwide as of March 2013.

2C-xx can be inhaled or dissolved into a liquid and placed on blotter paper under the tongue. It may last 6–10 hours; onset takes 15–120 minutes. Street outreach workers report the 2-C drugs and DMT (dimethyltryptamine) pose problems because they are white or creamy crystalline in appearance, so it is difficult to tell what the drug is. Forensic laboratories reported that in Texas in 2012, there were 28 drug reports of a 2C-xx drug and 71 2C-NBOME items and in 2013 there were 11 2C-xx and 212 2C-NBOME items identified.

#### **BZP and TFMPP (Piperazines)**

BZP (1-benzylpiperazine) has pharmacological effects that are qualitatively similar to those of amphetamine. It is a Schedule I drug that is

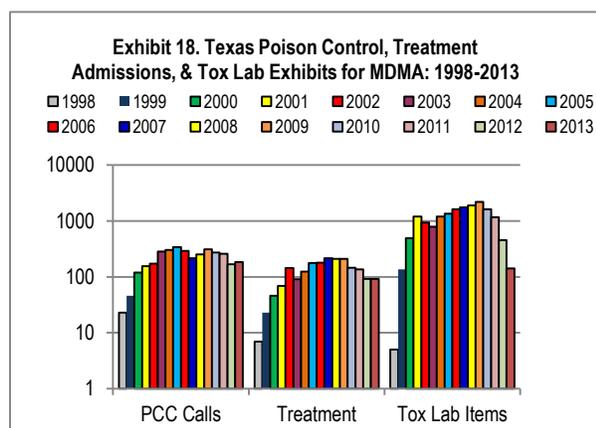
often taken in combination with TFMPP (1-(3-trifluoromethylphenyl) piperazine), a noncontrolled substance, in order to enhance its effects as a substitute for MDMA. It is generally taken orally, but it can be smoked or inhaled. Piperazines are a broad class of chemicals that include several stimulants, such as BZP and TFMPP, as well as antivertigo agents (cyclizine, meclizine) and other drugs (e.g., sildenafil/Viagra®).

The Texas forensic laboratories reported 2 BZP and 0 TFMPP exhibits in 2006 with a high of 744 BZP and 677 TFMPP reports in 2009, and a drop to 18 BZP and 72 TFMPP in 2013.

### MDMA (Ecstasy) and MDA

The 2012 Texas secondary school survey reported that lifetime ecstasy use dropped from a high of 9 percent in 2002 to 6 percent in 2012. The YRBS reported that 9 percent of students had ever used ecstasy in 2013, as compared to 12 percent in 2011, 9 percent in 2009, 10 percent in 2007, and 8 percent in 2005.

Indicators of use of MDMA have varied over time, as exhibit 18 shows. The Texas Poison Center Network reported 292 calls involving misuse or abuse of ecstasy in 2006, compared with 215 in 2007, 253 in 2008, 310 in 2009, 272 in 2010, 258 in 2011, 169 in 2012, and 184 in 2013.



Ecstasy is often used in combination with other drugs such as cannabis, alcohol, or cocaine. In 2013, the average age of MDMA treatment admissions was 26, and they had

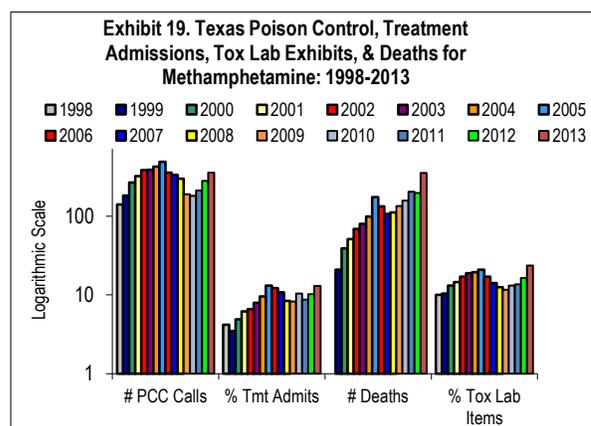
been using the drug almost 6 years before coming to treatment (Appendix).

Forensic laboratories identified MDMA in 1,626 exhibits in 2006, 1,758 in 2007, 1,898 in 2008, 2,192 in 2009, 1,534 in 2010, 993 in 2011, 453 in 2012, and 96 in 2013 (exhibit8). MDA (3,4-methylenedioxyamphetamine) was identified in 268 exhibits in 2006, 225 in 2007, 149 in 2008, 45 in 2009, 98 in 2010, 69 in 2012, and 67 in 2013.

The Dallas DEA FD reported MDMA wholesale and retail distribution continued to come from British Columbia and Ontario. The El Paso DEA FD reported an increase in rave parties where participants use ecstasy. According to the Houston DEA FD, MDMA continued to be found in gymnasiums, night clubs, restaurants, and other businesses frequented by young adults. The majority of MDMA entered the Houston area from sources of supply in Canada, Europe, and California. In 2013, single dosage units of ecstasy sold for \$5–\$25.

The European Monitoring Centre for Drugs and Drug Addiction reported in February, 2014, that tablets with “dangerously high” levels of MDMA are appearing in Europe, and with the increase in the production and availability of MDMA in Europe, there may be serious harms to users.

### Methamphetamine and Amphetamine



Methamphetamine and amphetamine indicators are increasing to levels previously seen before the precursor regulations in 2005–2006 caused a drop in reported problems

(exhibit 19). Local “cooking” of “ice” was reported, using over-the-counter pseudoephedrine (PSE) which is available only in limited amounts with the “one pot” or “shake and bake” method, in which the precursor chemicals are placed in a 2-liter soft drink bottle and then shaken to start the chemical reaction. This method has continued to be used to produce small amounts of methamphetamine, but as of the fourth quarter 2013, only 1 percent of the samples from across the United States examined in the DEA’s MPP were produced from the pseudoephedrine method.

Ninety-five percent was produced from the phenyl-2-propanone (P2P) method which is used in Mexico where it is legal. During this period, the average purity was 96.8 percent, and the average potency was 93.5 percent. Importation of liquid methamphetamine from Mexico into Texas has also increased, with the liquid being converted to ice or powder within the state.

The 2012 Texas secondary school survey reported that that lifetime use of “uppers” was 5 percent, and past-month use was 2 percent in 2012. Three percent of students surveyed responded positively to a separate question regarding lifetime use of “methamphetamine,” and 1 percent reported past-month methamphetamine use. The 2013 YRBS reported lifetime use of methamphetamine by Texas high school students was 4.8 percent, as compared to 5 percent in 2011, 4 percent in 2009 and 7 percent in both 2007 and 2005.

There were 356 calls to the Texas Poison Center Network involving exposure to methamphetamine in 2006, 332 in 2007, 298 in 2008, 168 in 2009, 180 in 2010, 212 in 2011, 279 in 2012, and 356 in 2013 (exhibit 19). Of the 2013 methamphetamine exposures, the average age was 29. There were also 215 calls for exposure to pharmaceutical amphetamines or phentermine. More than one-half (57 percent) involved males, and the average age was 23, which shows the problems with misuse of these drugs by children and youth.

**Exhibit 19. Treatment with a Primary Problem of Amphetamines or Methamphetamines by Route of Administration: 2013**

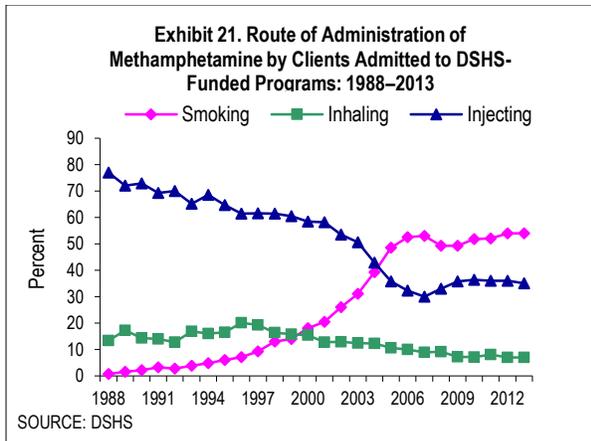
	Inject	Ice	Smoke	Other	All
# Admissions	3,549	720	5,565	325	10,159
% of Stimulant Admits	35%	7%	55%	3%	100%
Lag-1st Use to Tmt-Yrs.	13	12	17	16	16
Average Age-Yrs.	33	33	32	33	32
% Male	43	43	39	38	41
% Black	1	3	3	2	2
% White	88	75	75	85	80
% Hispanic	9	20	21	11	16
% CJ Involved	53	50	51	53	51
% Employed Full Time	8	15	12	14	11
% Homeless	20	9	11	10	14

<sup>a</sup>Total includes clients with "other" routes of administration  
Source: Texas Department of State Health Services

Methamphetamine/amphetamine admissions to treatment programs increased from 3 percent of all admissions in 1995 to 11 percent in 2007, dropped to 8 percent in 2009, and then rose to 13 percent of admissions in 2013 (exhibit 19). The average age of clients admitted for a primary problem with these stimulants increased from 26 in 1985 to 32 in 2013. Unlike most other drug categories, more than 59 percent of the clients entering treatment were female. Clients with a primary problem with methamphetamine reported secondary problems with cannabis and alcohol.

Users of methamphetamine tend to differ depending on their route of administration. Methamphetamine injectors were more likely to be homeless and to not be employed fulltime.

Since the precursor bans, the availability of the different forms of methamphetamine changed. This was demonstrated among treatment admissions: the percentage smoking ice decreased after the ban took effect, but by 2013, ice was more available and smoking had increased to a slightly higher level than in 2006 (exhibit 21).



Street outreach workers report more crystal methamphetamine use among both young men who have sex with men and among high-risk heterosexual populations. Most of the users report use of the drug through smoking, snorting, or insertion into the anus. The outreach program in Corpus Christi, a city which has always had large problems with heroin, now reports there are 10 stories on local TV about methamphetamine incidents for every one story on heroin.

Exhibit 19 shows the number of deaths that involved poisoning by psychostimulants, which include methamphetamine and amphetamine. There were 128 in 2006, 114 in 2007, 111 in 2008, 134 in 2009, 157 in 2010, 203 in 2011, 248 in 2012, and 354 in 2013.

Methamphetamine represented 21 percent of all items analyzed by forensic laboratories in 2005. In 2011, methamphetamine comprised only 13 percent of all items analyzed in Texas forensic laboratories; in 2013, methamphetamine comprised 24 percent of all items analyzed (exhibit 19). Amphetamine was present in less than 1 percent of the drug reports of items examined in 2013.

With regard to methamphetamine, HIV outreach workers in Austin in the spring of 2014 were reporting more psychosis, better “highs,” and more use of needles, particularly in closed social groups of men who have sex with men. Outreach programs elsewhere in the state reported methamphetamine use was increasing and was considered by some as more popular

than alcohol or cocaine. There were also reports of increasing syphilis cases among those using crystal methamphetamine, especially in social circles that engage in risky sex. Some of these individuals were injecting methamphetamine and also using GHB (gamma hydroxybutyrate), Rohypnol© (flunitrazepam), and ketamine.

STRIDE statistics comparing 2011 with 2012 showed methamphetamine seizure amounts decreased slightly, from 397 to 356 kilograms. However, EPIC data comparing 2011 with 2012 showed methamphetamine seizure amounts in Texas rose 65 percent, from 1,966 to 3,251 kilograms, respectively.

The Dallas DEA FD reported a high availability of methamphetamine, with crystal methamphetamine predominate. Less liquid was seized in 2013 and the prices are reported decreasing. In El Paso, methamphetamine is reported as moderately available but with increased levels of trafficking. The small “one pot” and “micro labs” are still seen in El Paso. In the Houston Field Division, seizures have decreased but a laboratory to convert the liquid methamphetamine into crystal was seized.

The cost of pound quantities of powder methamphetamine decreased from \$11,000–\$17,500 to \$8,000–\$15,000

### **Molly**

“Molly” was originally a slang term for a very pure crystalline form of MDMA. Given the shortage of MDMA in 2013, laboratories that test for MDMA are reporting that the drug that is sold as Molly actually contains 4-MEC (4-Methyl-N-Ethylcathinone), cocaine, MDA, or methylone, since MDMA is still scarce. It is often sold in a powder-filled capsule or in an Eppendorf tube, which is a small pipette. Desired effects include euphoria, but there are also reports of increased paranoia, agitated delirium, hallucinations, psychotic episodes, or violent or destructive self-harm behavior. Street outreach workers report that Molly was making a comeback, particularly in bars, gay clubs, and in the hip-hop scene. Because of the scarcity of MDMA, most Molly capsules contain

little MDMA.

### **Synthetic Cathinones**

Emerging psychoactive substances include the substituted or synthetic cathinones, as well as mephedrone (3-MMC), methylone (4-MMC), and MDPV (methylenedioxypropylvalerone), and Alpha-PVP (alpha-pyrrolidinopentio-phenone). These are designer substances of the phenethylamine class and are cathinone derivatives from the khat plant. Its pharmacology and structure is similar to MDMA and amphetamine.

These drugs are usually supplied as white crystalline powders, although they also are available in tablet form. They are sold over the Internet and through head shops, convenience stores, gas stations, tattoo parlors, and truck stops. They are often labeled as “bath salts,” “plant food,” or “insect repellent.” Their street names include “bubbles,” “snow,” “bath salts,” “M-cat,” and “meow.” They are usually ingested or inhaled, and they are reported to produce euphoria, increased energy, empathy, talkativeness, intensification of sensory experiences, as well as sexual arousal. There is no information on the contents or dosing instructions and the ingredients may vary from package to package.

Final orders to temporarily schedule these drugs under the Federal Controlled Substances Act went into effect on July 9, 2012 and March 7, 2013 and it became Penalty Group 2 in Texas on September 1, 2011.

The Texas Poison Center Network shows the number of human exposures to synthetic cathinones peaked in 2011 (exhibit 5). Between 2010 and 2013, 15 percent of the cases were younger than 20, with an age range of 12–67. Nearly three-quarters (74 percent) were male; 87 percent intended to abuse or misuse the drug; and common symptoms included tachycardia, hypertension, agitation, confusion, and hallucinations. For 47 percent of the cases, a moderate effect was reported (patient returns to pre-exposure state). For 12 percent of the

cases, there was a “major” effect that was life-threatening or caused significant residual disability. Four deaths were reported by the Texas poison control centers between 2010 and 2013.

Street outreach workers reported that people were using bath salts when they could not find or afford methamphetamine and were suffering abscesses and pain from injecting bath salts.

The forensic laboratories in Texas identified 156 drug items that were synthetic cathinones in 2010, 615 in 2011, 1240 in 2012, and 555 in 2013 (exhibit 5). In 2010, there were 5 variations of the cathinones, compared with 15 varieties in 2011, 28 in 2012, and 15 in 2013. Methylone was the most common variety seen over these years.

Doses of synthetic cathinones sold for \$5–\$25 in Houston and \$20–\$70 in El Paso.

### **DXM (Dextromethorphan)**

The most popular DXM products are Robitussin-DM<sup>®</sup>, Tussin<sup>®</sup>, and Coricidin Cough and Cold Tablets HBP<sup>®</sup>, which can be purchased as over-the-counter drugs and can produce hallucinogenic effects if taken in large quantities. Coricidin HBP<sup>®</sup> pills are known as “Triple C” or “Skittles.”

The 2012 Texas school survey reported that 5 percent of secondary students indicated they had ever used DXM, and 2 percent had used in the past year. Highest past-month use was among students in the eighth grade.

The Texas Poison Center Network reported the number of abuse and misuse cases involving DXM increased from 99 in 1998 to 637 in 2013. The average age of these cases was 17. The number of cases involving abuse or misuse of Coricidin HBP<sup>®</sup> was 288 in 2006 and rose to 294 in 2013; the average age in 2013 was 19.

Forensic laboratories analyzed 15 substances in 2006 that were DXM items, compared with 9 in 2007, 20 in 2008, 47 in 2009, 62 in 2010, 30 in

2011, 16 in 2012, and 15 in 2013.

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

Cases of misuse or abuse of GHB or its precursors reported to the Texas Poison Center Network totaled 43 in 2006, 56 in 2007, 49 in 2008, 99 in 2009, 55 in 2010, 36 in 2011, 52 in 2012, and 61 in 2013. In 2013, 14 clients were admitted to DSHS-funded treatment with a primary problem with GHB; their average age was 31. All were White, and 50 percent were female (Appendix).

There were 88 items identified by forensic laboratories as being GHB in 2006, compared with 64 in 2007, 63 in 2008, 99 reports in 2009, 72 in 2010, 64 in 2011, 76 in 2012, and 19 in 2013. There were nine items identified as GBL in 2006, compared with none in 2007, five in 2008, four in 2009, none in 2010, three in 2011, six in 2012, and 19 in 2013. There were no items identified as 1,4-BD in 2006, 2007, or 2008; two reports were identified in 2009, along with six in 2010, three in 2011, three in 2012, and one in 2013.

The Dallas DEA FD reported GHB availability was stable, as did the Houston FD. In Dallas, a gallon sold for \$1,200–\$1,600, and in Houston, a dose cost \$20–\$65 and a 16-ounce bottle of GHB cost \$100. HIV outreach workers reported that GHB was readily available, with users “stacking” the drug with other steroids every 3 hours.

### ***Ketamine***

Three cases of misuse or abuse of ketamine were reported to the Texas Poison Center Network in 2006, compared with 1 each in 2007, 2008, and 2009; 3 in 2010; 7 in 2011; 10 in 2012, and 6 in 2013.

In 2006, 161 substances were identified as ketamine by forensic laboratories. There were 235 items identified in 2007, compared with 129 in 2008, 123 in 2009, 60 in 2010, 16 in 2011, 12 in 2012, and 6 in 2013.

Abuse of ketamine is low in Texas, unlike areas

in the Northeastern U.S. where ketamine is added to the white South American heroin to increase its potency.

### ***LSD and Other Hallucinogens***

The Texas secondary school survey showed that use of hallucinogens (defined as LSD, PCP, or mushrooms) continued to decrease. Lifetime use peaked at 7.4 percent in 1996 and dropped to 4.1 percent in 2012. Past-month use dropped from a peak of 2.5 percent in 1998 to 1.3 percent in 2012.

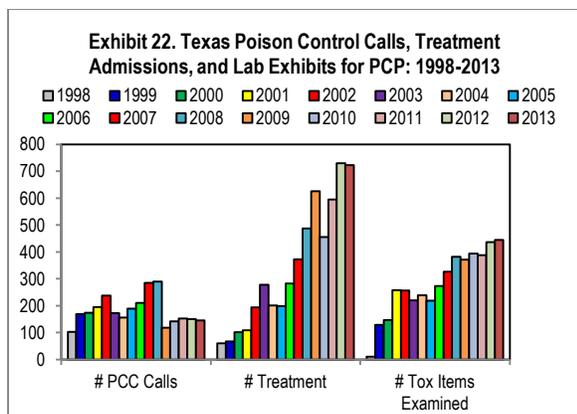
The Texas Poison Center Network reported 33 mentions of abuse or misuse of LSD in 2006, compared with 31 in 2007, 17 in 2008, 26 in 2009, 18 in 2010, 16 in 2011, 58 in 2012, and 75 in 2013. There were also 96 cases of human exposure to mushrooms reported in 2006, 125 in 2007, 93 in 2008, 96 in 2009, 85 in 2010, 59 in 2011, 108 in 2012, and 107 in 2013. The average age in 2013 was 19 for the LSD cases.

Of the 80 hallucinogen treatment admissions in 2013, the average age was 27; 54 percent were male; and 57 percent were involved in the criminal justice system. Another 24 individuals entered treatment with a primary problem with LSD. The average age was 20. For both groups, cannabis was the second most common drug of abuse.

Forensic laboratories identified 34 substances as LSD in 2006, as compared with 41 in 2007, 36 in 2008, 59 in 2009, 71 in 2010, 19 in 2011, 18 in 2012, and 2 in 2013.

### ***PCP (Phencyclidine)***

Although PCP is not usually associated with the use of the new psychoactive drugs, it is included in this section because the reactions from its use are often compared with the serious reactions to synthetic cathinones, and with the difficulty in quickly identifying cathinones, there may be confusion as to which drug is actually being seen on the street, based on reports from street outreach workers and emergency personnel.



PCP is known as “Wet,” “Wack,” “PCP,” or formaldehyde (exhibit 18). Often, cannabis joints are dipped in formaldehyde that contains PCP, or PCP is sprinkled on the joint or cigarette. The number of poison control center cases involving PCP declined from 290 in 2008 to 150 in 2013; the average age in 2013 was 31.

Exhibit 22 shows an increase in the number of clients entering treatment statewide with a primary problem with PCP, from 487 in 2008 to 723 in 2013. Of the clients in 2013, 82 percent were Black; 42 percent were male; 55 percent were involved in the criminal justice system; and 11 percent were employed fulltime (Appendix).

Forensic laboratories identified 273 PCP items in 2006, compared with 326 in 2007, 382 in 2008, 371 in 2009, 394 in 2010, 388 in 2011, 426 in 2012, and 445 in 2013 (exhibit 22).

The El Paso FD reported 16 pounds of PCP was seized in route from California to Fort Worth, with another large seizure in Arizona, which may indicate a resurgence of the drug. PCP cost \$20 per dipped cigarette and \$700–\$1,200 per gallon in San Antonio.

### ***Psilocybin and Psilocin***

Psilocybin and psilocin (Magic Mushrooms”) are naturally occurring psychedelics with a long history of human use. Both are present in “psychedelic” or “magic” mushrooms. Psilocybin, the better known of these two chemicals, is metabolized after ingestion into psilocin, which is the primary active chemical.

These two drugs are in the tryptamine family, are hallucinogenic, and are found in plant sources and toad and shamanic brews such as the ayahuasca brew. 5-MeO-DMT and 4-AcO-DMT are also tryptamines.

In 2006, there were 96 cases of human exposure to hallucinogenic mushrooms, as compared to 126 in 2007, 93 in 2008, 96 in 2009, 85 in 2010, 59 in 2011, 108 in 2012, and 107 in 2013. The average age of these cases in 2013 was 25, and 77 percent were male.

There were also four treatment admissions in 2012 and 5 in 2013 with a primary problem with psilocybin mushrooms. Average age in 2013 was 29 and 80 percent were white and 100 percent were males.

Forensic laboratories reported 136 psilocin items in 2006, 155 in 2007, 192 in 2008, 241 in 2009, 242 in 2010, 173 in 2011, 269 in 2012, and 156 in 2013. There was 1 psilocybin/psilocin report in 2007, 3 in 2008, 12 in 2009, 12 in 2010, 6 in 2011, 13 in 2012, and 10 in 2013. Psilocybine reports totaled 11 in 2006, 18 in 2007, 7 in 2009, 3 in 2009, 4 in 2010, 4 in 2011, 2 in 2012, and 2 in 2013.

### **Other Abused Substances**

#### ***Inhalants***

The 2012 secondary school survey found that 16 percent of students in grades 7–12 had ever used inhalants, and 5 percent had used in the past month. Inhalant use has 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. This decrease in inhalant use as students’ age may be partially related to the fact that some inhalant users drop out of school early and are not in school in later grades to participate in later surveys. In addition, the Texas school surveys have consistently found that eighth graders reported use of more kinds of inhalants than any other grade, which may be a factor that exacerbates the damaging effects of inhalants and leads to dropping out of school.

The 2013 YRBS reported that 9.5 percent of Texas high school students had ever used inhalants, compared with 11.4 in 2011, 11.9 percent in 2009, 12.9 percent in 2007, 13.2 percent in 2005, and 13.9 percent in 2001.

Inhalant abusers represented 0.1 percent of the admissions to treatment programs in 2013 (Appendix).

**Steroids**

The Texas school survey reported that 1.7 percent of all secondary students surveyed in 2012 had ever used steroids, and 0.5 percent had used steroids during the month before the survey. The 2013 YRBS found lifetime use among Texas high school students was 4.6 percent, compared with 4.8 percent in 2011, 2.9 percent in 2009, and 3.9 percent in 2007.

**Carisoprodol (Soma®)**

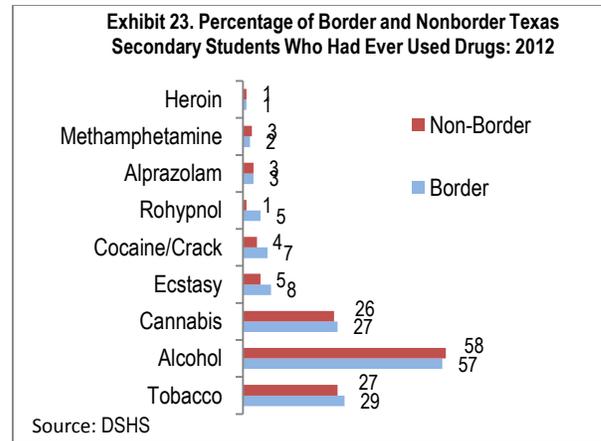
On January 11, 2012, carisoprodol became a Schedule IV drug nationally. Texas poison control centers confirmed that exposure cases of intentional misuse or abuse of this muscle relaxant increased from 83 in 1998 to 151 cases in 2013; the average age in 2013 was 35.

Forensic laboratory exhibits identified as carisoprodol have fluctuated. The number of items identified were 1,047 in 2006, compared with 1,256 in 2007, 902 in 2008, 1,098 in 2009, 1,471 in 2010, 1,122 reports in 2011, 838 reports in 2012, and 511 in 2013.

Carisoprodol is one of the most popular drugs in the illicit drug market in the Dallas/Fort Worth area and is part of the combination with hydrocodone and alprazolam that is known as the “Houston Cocktail” or “Holy Trinity.”

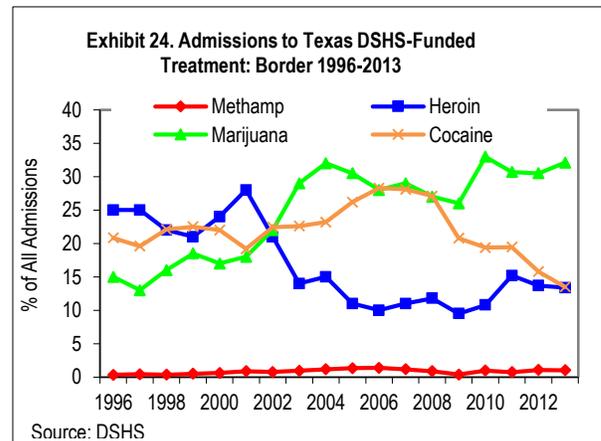
**Drug Abuse Patterns on the Texas–Mexico Border**

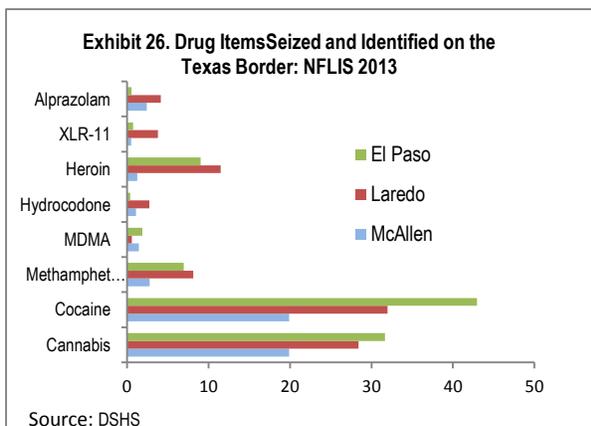
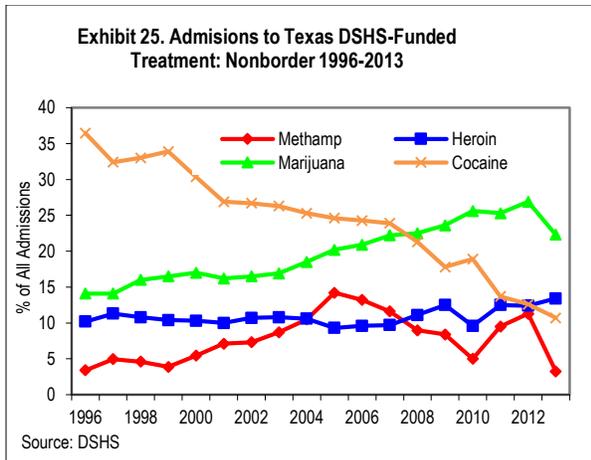
Exhibit 23 shows the lifetime prevalence of use of different drugs by Texas secondary school students. Border students were more likely to report use of Rohypnol, cocaine or crack, and ecstasy than nonborder students.



When asked which substances were very easy to obtain, border students were more likely than nonborder students to report Rohypnol® (5 versus 1 percent), cocaine or crack (7 versus 4 percent), and ecstasy (8 versus 5 percent). Both groups reported powder cocaine was easy to obtain, as was crack cocaine.

Different patterns were also seen in border and nonborder admissions to DSHS-funded treatment in 2013 (exhibits 24 and 25). Border clients were more likely to report problems with cannabis (31 versus 27 percent), cocaine (15 versus 13 percent), and heroin (14 versus 12 percent). Nonborder clients were more likely to report problems with methamphetamine (11 versus 1 percent).





Reports from the three forensic laboratories on the border show different trafficking patterns in 2013, with cocaine and cannabis dominating in the El Paso portion of the border (exhibit 26).

## INFECTIOUS DISEASES RELATED TO DRUG ABUSE

### Hepatitis C

Hepatitis C virus (HCV) is the leading cause of liver failure and liver transplantation in the United States, and injection drug users (IDUs) are particularly susceptible to this disease, with as many as 70 percent or more of this population testing positive for the virus. In addition, many IDUs have little, if any, consistent health care and are largely unaware of their HCV infection status. Those who are successful in accessing health care and are diagnosed with hepatitis C are rarely offered antiviral treatment. If they are offered HCV treatment, they often face additional treatment challenges, since many

suffer from mental disorders and/or HIV in addition to HCV and drug addiction. Street outreach workers are reporting increasing numbers of HCV-positive cases, particularly among younger populations.

The Texas DSHS estimated in 2011 that 1.8 percent of Texans were infected with HCV. The number of acute HCV cases has fluctuated from 57 in 2006, to 68 in 2007, to 598 in 2008, to 36 in 2009, to 35 in 2010, to 37 in 2011, to 44 in 2012, and to 22 in 2013. Acute HCV is primarily a disease of adults but can affect all ages.

### Sexually Transmitted Diseases

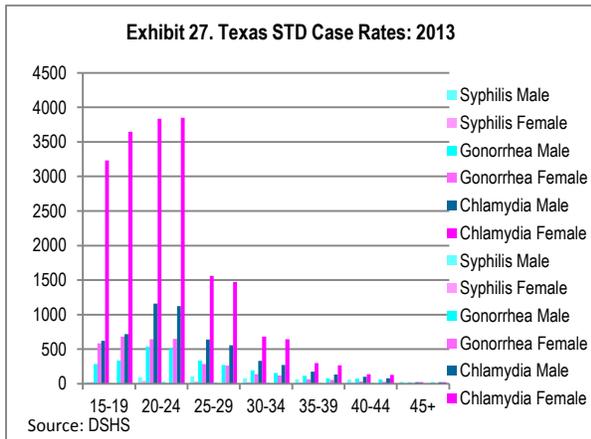
Outreach workers report increasing numbers of syphilis cases among young males engaging in homosexual activity, along with reports of both males and females selling their bodies for drugs or to obtain money for other needs, including food and housing. There were more reports of people using the Internet and classified ads to market their services, as well as use of smart phone applications such as GRNDR and Craig's List.

From 2007 to 2013, the number of chlamydia cases reported in the state increased each year, from 84,784 to 125,114 cases, respectively. The number of gonorrhea cases reported during this same time period averaged 31,000 cases annually.

Primary and secondary syphilis peaked in 2009, with 1,644 cases reported. The case numbers decreased in 2010 (1,231) and 2011 (1,162), but they increased in 2012 (1,624) and decreased in 2013 (1,468). Reflecting the similar trend in primary and secondary syphilis cases, total syphilis cases peaked in 2009, with 6,989 cases reported, and the case numbers decreased in 2010 (6,382) and in 2011 (6,142), increased in 2012 (7,058) and decreased in 2013 (7,019).

The case rates for chlamydia were higher for females through age 44 and the case rates for gonorrhea were highest for young women under age 25. The case rates for syphilis were

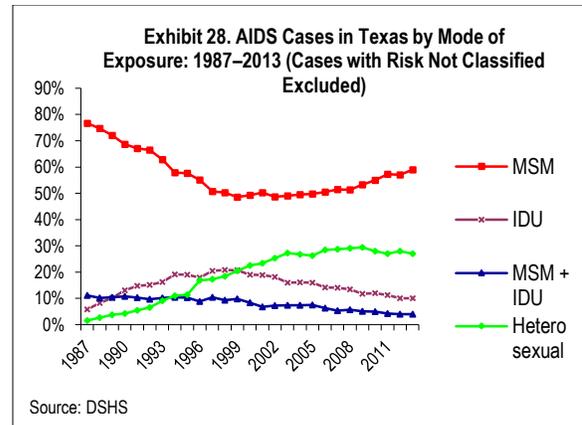
higher for males in all age groups.



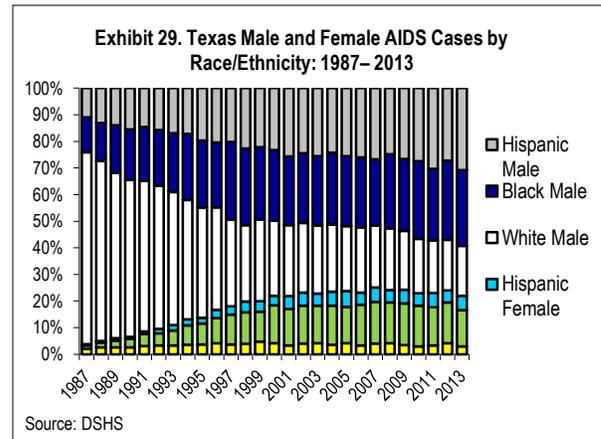
### HIV/AIDS

The proportion of AIDS cases among men who have sex with men (MSM) decreased from 81 percent in 1987 to 49 percent in 1999 before rising to 59 percent in 2013 (exhibit 28). Of the 2013 cases, another 27 percent reported heterosexual mode of exposure, and 10 percent were IDUs. The proportions of cases involving IDUs or IDUs/MSM have decreased to 4 percent over time.

Decreases in injecting drugs is also shown in the treatment data, where the proportion of IDUs entering DSHS-funded treatment programs decreased from 32 percent in 1988 to 16 percent in 2013.



Persons infected with AIDS were increasingly likely to be people of color. Of the AIDS cases in 2013, 42 percent were Black, 36 percent were Hispanic, and 22 percent were White (exhibit 29).



Appendix. Characteristics of Clients at Admission to DSHS-Funded Treatment Programs: 2013														
	Total Admissions	% of All Admissions	Average Age	(Yrs) 1st Use to Admission	% Black	% White	% Hispanic	% Male	% Injecting	% Use Daily	% Work Full Time	No Legal Problem	% Homeless	Av. Yrs. Education
All Drugs	78299	100%	32.9	14.2	17.9	48.6	30.7	59.6	16.2	36.9	14.4	43.2	11.2	11.5
Aerosols	13	0.0%	29.2	7.5		38.5	53.8	38.5				46.2		11.5
Alcohol	21846	27.9%	39.0	23.0	12.6	54.0	30.7	68.3	0.0	37.6	21.9	45.0	14.8	12.1
Amphetamines or Methamphetamine	10217	13.0%	32.1	10.8	2.3	80.0	15.5	40.5	34.7	28.4	10.9	43.8	13.7	11.6
Ativan (Lorazepam)	16	0.0%	41.3	2.4		75.0	25.0	43.8		62.5		75.0		12.6
Barbiturate Sedatives	16	0.0%	44.3	12.6		62.5		43.8		25.0	37.5	43.8		12.8
Benzodiazepines	125	0.2%	31.3	10.4	8.8	64.0	21.6	44.0		41.6	11.2	45.6	3.2	12.6
Buprenorphine	27	0.0%	37.6	3.1		63.0	33.3	33.3		74.1		74.1		12.5
Cocaine or Crack	8641	11.0%	39.0	15.3	45.6	25.9	26.1	51.3	2.9	25.6	10.7	47.8	14.5	11.3
Codeine	81	0.1%	28.8	8.3	45.7	35.8	16.0	64.2		23.5	8.6	27.2	7.4	11.6
Cough Syrup	32	0.0%	23.4	6.5	21.9	50.0	28.1	78.1		46.9		28.1		11.1
Darvocet Darvon (D-Propoxyphene)	15	0.0%	37.5	12.3		73.3				46.7		73.3		12.9
Demerol (Meperidine Hcl)	7	0.0%	43.0	14.6								85.7		11.7
Dilaudid (Hydromorphone)	211	0.3%	33.1	6.6		93.8	5.2	49.3	84.4	54.5	9.5	58.8	7.6	12.5
GH/GBL (Gamma-Hydroxybutyrate)	14	0.0%	30.7	7.8		100.0		50.0		57.1			28.6	10.9
Hallucinogens	80	0.1%	26.7	6.4	11.3	58.8	27.5	53.8		30.0	11.3	42.5	11.3	11.2
Heroin	10459	13.4%	33.0	11.2	7.0	50.8	38.9	60.7	79.2	72.4	7.0	62.9	17.9	11.5
Inhalants	20	0.0%	24.6	9.8		40.0	45.0	45.0				50.0		10.5
Klonopin (Clonazepam)	80	0.1%	34.6	8.8		82.5	16.3	33.8		65.0	7.5	51.3	15.0	12.3
LSD	24	0.0%	19.9	5.6	16.7	37.5	45.8	62.5		16.7		37.5		11.0
MDMA/Ecstasy (Methylenedioxy)met	92	0.1%	25.8	5.9	27.2	51.1	18.5	68.5		19.6	13.0	23.9	8.7	11.0
Marijuana/Hashish	18278	23.3%	23.2	9.0	27.9	26.4	42.7	70.3		19.8	15.2	21.7	1.5	10.7
Mescaline	9	0.0%	27.9	13.1	44.4			55.6						11.1
Methadone (Non-Prescription)	170	0.2%	36.6	7.2	7.6	74.7	15.9	49.4	2.4	68.8	11.8	63.5	10.6	12.3
Opiates and Synthetics	1972	2.5%	34.5	11.8	5.7	73.5	19.2	52.6	17.1	53.1	11.8	59.4	11.5	12.2
Other Cannabinoids	412	0.5%	23.1	2.5	6.1	52.2	38.3	75.2		41.0	8.3	38.1	5.8	11.2
Other Drugs	192	0.2%	28.7	3.6	8.9	64.6	22.4	57.8	3.1	59.9	10.4	57.8	12.5	11.7
Other Sedatives	27	0.0%	35.3	8.6		85.2		44.4		51.9		40.7		11.8
Over-the-counter	12	0.0%	24.0	8.3		66.7		58.3		41.7		75.0		10.7
Oxycodone	326	0.4%	32.0	8.4		85.0	9.8	47.2	12.0	56.7	9.2	66.9	10.4	12.6
PCP (Phencyclidine)	723	0.9%	31.1	10.4	81.7	8.7	7.1	42.3		22.5	11.1	45.0	6.4	11.1
Psilocybin Mushrooms	5	0.0%	28.8	11.6		80.0		100.0						12.6
Ritalin (Methylphenidate)	10	0.0%	25.4	7.0		70.0		40.0				60.0		10.9
Rohypnol (Flunitrazepam)	20	0.0%	15.7	2.0		25.0	75.0							9.0
Sedatives	56	0.1%	30.4	8.0		71.4	23.2	35.7		21.4	12.5	21.4		11.8
Solvents (Paint Thinner, Gasoli	18	0.0%	34.5	6.4		44.4	50.0	50.0		22.2		55.6	27.8	8.8
Special K (Ketamine)	13	0.0%	26.5	2.2		92.3		84.6		38.5		38.5		12.0
Stimulants	10	0.0%	30.2	7.7		60.0		60.0		40.0		40.0		12.5
Ultram (Tramadol)	38	0.0%	35.1	4.9	21.1	50.0	21.1	34.2		60.5	21.1	76.3	21.1	12.3
Valium (Diazepam)	25	0.0%	34.9	9.3		84.0		36.0		44.0	16.0	56.0		11.3
Vicodin (Hydrocodone)	2972	3.8%	34.7	9.8	8.1	73.1	16.9	35.6	0.6	58.9	11.5	63.0	7.5	12.0
Xanax (Alprazolam)	995	1.3%	28.3	8.3	13.4	57.8	26.0	38.7		36.5	9.0	37.1	8.3	11.6

Cells with small numbers ar masked to comply with HIPAA