SUBSTANCE ABUSE TRENDS IN TEXAS: JUNE 2012

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ABSTRACT

This report updates indicators of drug abuse in Texas since the June 2011 report and describes trends by calendar year from 1987 through first quarter 2012. Important changes included increases in heroin use by a younger population. This was first noticed with the "cheese heroin" situation in Dallas, but heroin admissions of young persons have continued to increase statewide. The proportion of persons in their twenties has increased from 35 percent of all heroin admissions in 2005 to 45 percent in 2011. Availability and seizures of heroin have increased and prices are lower. The primary types of heroin in Texas are Mexican black tar and powdered brown.

Cocaine indicators have decreased over time, but the DEA Field Divisions report availability is higher than in the past. There is no explanation for these changes other than the possible influence of trafficking wars in Mexico; the demand for cocaine in Europe; production being down in the Andes; and the addition of levamisole, which could dilute the cocaine purity.

The methamphetamine market has changed, with local "cooking" using over-the-counter pseudoephedrine with the "one pot" or "shake and bake" method to produce small amounts declining. In first quarter of 2012, 89 percent of the methamphetamine examined was produced in Mexico using the P2P method with a potency of 83 percent and a purity of 95 percent based on samples analyzed by DEA's Methamphetamine Profiling Program. Only 8 percent was from the pseudoephedrine method.

The pain pill problem continued to increase; the indicators for hydrocodone were 10 times greater than for oxycodone.

Cannabis (marijuana) availability was reported high and stable, with domestic, Mexican, hydroponic, and BC Bud available, according to the DEA Field Divisions. Cannabis homologs (cannabamimetic agents) are a growing problem, with 504 human exposure calls to poison centers in 2010, 587 in 2011, and 183 through April, 2012.

Alprazolam was the primary benzodiazepine that was misused, based on treatment admission and toxicology laboratory data. Ecstasy indicators have varied over time, with no clear pattern of change except the spread from the Rave scene to the street. BZP (1-benzylpiperazine) and TFMPP (1-(3-trifluoromethylphenyl) piperazine) indicators have decreased. Based on the school survey and poison control data, dextromethorphan continued as a problem among young teenagers. GHB (gamma hydroxybutyrate) levels remained relatively low, but the drug was again being mentioned in drug-facilitated sexual assault cases, although no toxicology tests have been run on the cases. Ketamine indicators were lower in 2011 than in past years, as were indicators for LSD (lysergic acid diethylalmide) and other hallucinogens. Synthetic cathinone exposure calls to Texas poison centers increased from 22 in 2010 to 340 in 2011, with 76 through May, 2012. PCP (phencyclidine) indicators vary, and exposures to inhalants continued, but with more calls for misuse of air fresheners or dusting sprays than for exposure to automotive products, spray paint, or gases. Patterns of drug abuse varied between the border and non-border treatment admissions. Border clients were more likely to report problems with cocaine and cannabis, while non-border clients reported more use of methamphetamine; use of heroin was similar between the regions. Patterns of drug use as measured by toxicology exhibits varied along the border, with cannabis and cocaine being the primary drugs identified in El Paso, as compared to cannabis and cocaine in Laredo and McAllen.

The case rates for syphilis, chlamydia, and gonorrhea show STD (sexually transmitted disease) rates much higher for young females. The majority of AIDS (acquired immunodeficiency syndrome) cases continued to be people of color. The proportion of cases due to injection drug use continued to decrease, but the proportion of cases of men who have sex with men has increased.

AREA DESCRIPTION

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 2011 CEWG report. To compare the June 2012 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 2010 came from reports on the Texas School Survey of Substance Abuse: Grades 7–12, 2010, and the Texas School Survey of Substance Abuse: Grades 4–6, 2010, which were authored by L.Y. Liu and published by the Department of State Health Services (DSHS). For 2011, the data for high school students in grades 9–12 came from the Youth Risk Behavior Surveillance Survey (YRBS)—United States, 2011, MMWR Surveillance System, downloaded June 8, 2012 at *http://apps.nccd.cdc.gov/youthonline /App/ Default. aspx?SID=HS.*

- **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 2002–2003 and 2008-2009 NSDUH.

- **Poison control center data** came from the Texas Poison Center Network, DSHS, for 1998 through 2011 with updates on cannabis homologs and synthetic cathinones through May 31, 2012. Analysis was provided by Mathias Forrester, epidemiologist with the Texas Poison Center Network, who distributes monthly updates on "Mephedrone and Methylenedioxypyrovalerone (Bath Salts) Reported to the Texas Poison Center Network" and "Marijuana Homologs Reported to the Texas Poison Center Network." Forrester is also the author of "Temporal and Geographic Patterns in Opioid Abuse in Texas, *Journal of Addictive Disease*, 31:83-99, 2012.

- **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, 2011. Analysis of the 2011 data was by Lesli San Jose of the DSHS Decision Support Program and by the author. The DSHS treatment data changed beginning with calendar year 2010 with the addition of specific drug categories and with race and ethnicity variables reported separately. The 2011 data were downloaded on May 7, 2012, and the file may not be complete due to additional records being submitted later.

- **Information on methamphetamine use** came from interviews with recent users entering treatment, an ongoing study by the author (NIDA R21 DA025029).

- **Information on cheese heroin** came from Maxwell et al., "Cheese: An Old Drug in a New Wrapper," *Drug and Alcohol Dependence*, in press, 2012.

- **Information on drug-involved deaths** through 2010 came from the Bureau of Vital Statistics, DSHS; analysis was by the author. The information on cocaine, heroin, methadone, other opiates, synthetic narcotics, benzodiazepines, and psychostimulants for 1999–2010 came from multiple cause data tapes provided by DSHS on March 7, 2012. The data through 2010 are preliminary and the more complete dataset

will be available later in 2012.

- **Information on drugs identified by laboratory tests** was from toxicology laboratories in Texas which reported results from analyses of substances for 1998 through 2011 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 15, 2012. 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.

- **Price, trafficking, distribution, and supply information** was gathered from the July–December 2011 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 Monitoring Project (MPP) and the Texas purity data for heroin came from the DEA Domestic Monitor Program (DMP).

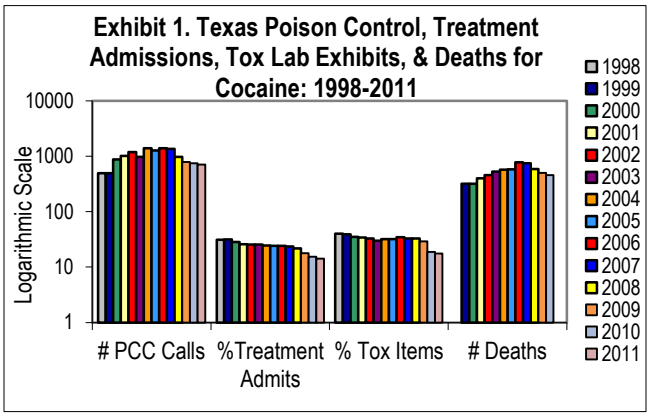
- **Reports by users and street outreach workers** on drug trends for the first quarter of calendar year 2012 were reported to DSHS by workers at local HIV (human immunodeficiency virus) counseling and testing programs across the State.

- **Sexually transmitted disease (STD) and acquired immunodeficiency syndrome (AIDS)** data were provided by DSHS. The STD data are through 2011 and the AIDS data are for the first half of 2011.

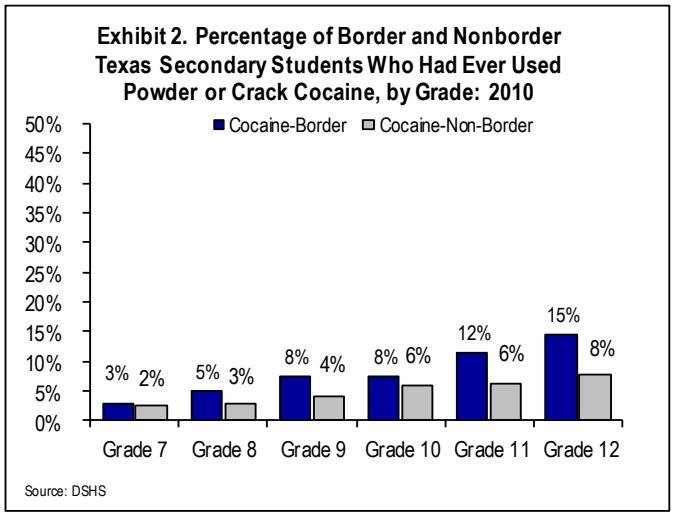
DRUG ABUSE PATTERNS AND TRENDS

Cocaine/Crack

Cocaine indicators have decreased (exhibit 1). There is no explanation for changes other than the possible influence of trafficking wars in Mexico; the demand for cocaine in Europe; production declines in the Andes; and the addition of levamisole, which could dilute the cocaine purity.



The Texas School Survey of Substance Abuse: Grades 7–12, 2010, reported that lifetime use of powder and crack cocaine had dropped from a high of 9 percent in 1998 to 5 percent in 2010, while past-month use dropped from 4 percent in 1998 to 2 percent in 2010. Five 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: 8 percent lifetime use and 4 percent past-month use (exhibit 2).



The 2011 YRBS reported that 9.4 percent percent of Texas high school students had ever used cocaine, compared with 8.5, 12.6, 11.9, and 13.0 percent in 2009, 2007, 2005, and 2001. In 2002-2003, the NSDUH reported that 2.4 percent of the Texas population age 12 and older had used cocaine in the past year, below

the national rate of 2.5 percent; in 2008-2009, 1.9 percent in Texas had used cocaine, below the national rate of 2.0 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 712 in 2011 (exhibit 1). Seventy-five percent of the cocaine cases in 2011 were male and average age was 33.

Cocaine (both crack and powder) represented 14 percent of all admissions to DSHS-funded treatment programs in 2011, down from 35 percent in 1995. Among all cocaine admissions, cocaine inhalers were the youngest and most likely to be Hispanic (exhibit 3). 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 involved in the criminal justice system. 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 11 years between first regular use and entrance to treatment, while injectors averaged 17 years of use before they entered treatment.

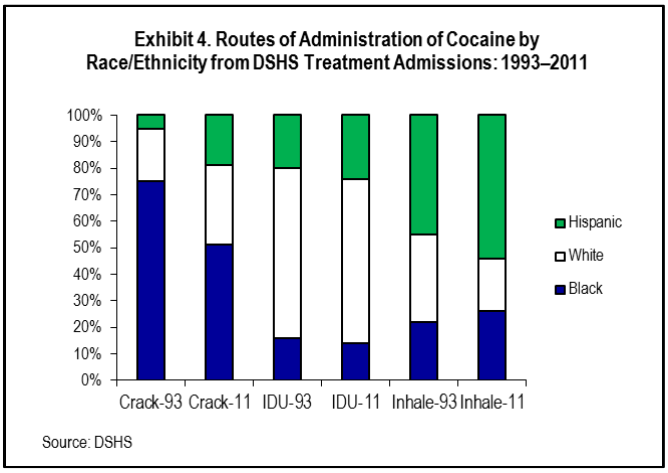
Exhibit 3. Characteristics of Clients Admitted to TDSHS-Funded Treatment with a Primary Problem with Cocaine by Route of Administration: 2011

	Crack Cocaine Smoke	Powder Cocaine Inject	Powder Cocaine Inhale	Cocaine All[a]
# Admissions	6,340	437	3,670	10,643
% of Cocaine Admits	60	4	34	100
Lag-1st Use to Tmt-Yrs.	15	17	11	14
Average Age	41	37	32	38
% Male	48	61	50	49
% Black	51	14	26	41
% White	46	83	68	55
% Hispanic	19	25	54	32
% CJ Involved	54	49	41	50
% Employed Full Tiime	7	7	17	10
% Homeless	18	19	5	13

[a]Total includes clients with "other" routes of administration.

Source: DSHS; analysis by L.San Jose

Exhibit 4 shows the changes in treatment admissions between 1993 and 2011 by route of administration and race/ethnicity. The proportion of Blacks among crack cocaine admissions has increased and the proportions of Whites and Hispanics increased.



The number of deaths statewide in which cocaine was mentioned increased from 321 in 1999 to 778 in 2006, before dropping to 456 in 2011 (exhibit 5).

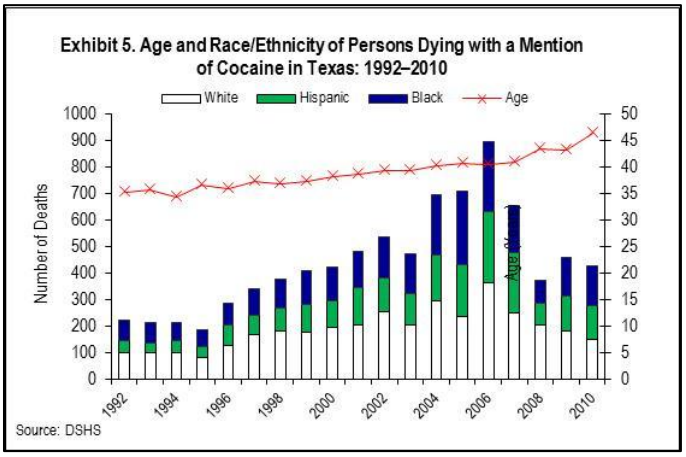


Exhibit 1 shows that the proportion of drug items identified as cocaine by the toxicology laboratories has decreased. In 1998, cocaine accounted for 40 percent of all items examined, as compared with 18 percent in 2011. The DEA laboratory has been finding levamisole (phenyltetrahydroimidazothiazole) (“PIT”) in cocaine exhibits for a number of years, and the decrease in purity may reflect increased use of PIT as filler to increase the volume of the drug. There were 1,339 (1 percent of all items reviewed) that may have been PIT in 2011, according to the toxicology laboratories in Texas.

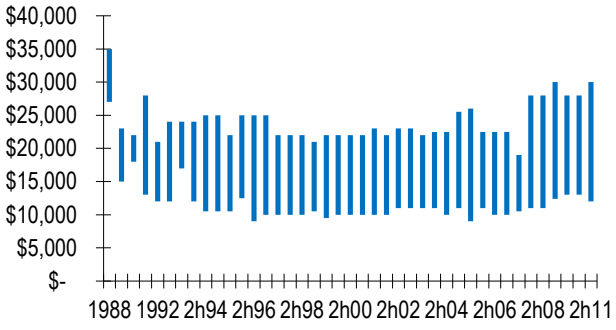
The Dallas DEA FD reported an increase in cocaine loads from Mexico being routed directly to the Dallas area for distribution to the Midwest and eastern United States. Powder cocaine availability was reported as high and stable, with crack cocaine being reported as moderately available. Retail distribution in the area was by Mexican drug trafficking organizations and Black and Hispanic street gangs.

The El Paso DEA FD reported that cocaine was readily available in El Paso and the shortages of 2008 and 2009 had diminished and the supply was now stable.

The Houston DEA FD reported the availability of powder and crack cocaine was high and stable in 2011. Cocaine seizures have decreased, with an increasing flow of cannabis through the division.

The price of cocaine has widened (Exhibit 6). An ounce of powder cocaine in 2011 cost $350–$1,600 in Dallas, $400–$1,000 in El Paso, and $350–$1,000 in Austin. Across the state, a rock of crack cost $10–$100 in 2011.

Exhibit 6. Price of a Kilogram of Cocaine in Texas as Reported by the DEA: 1987–2011 (Prices reported by half year since 1993)

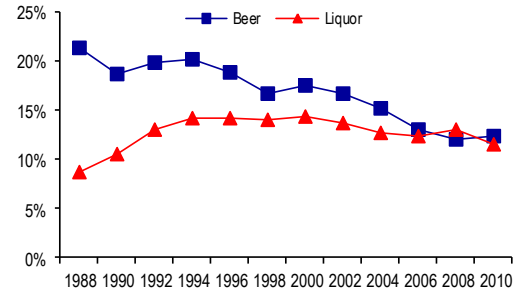


Source: DEA

Alcohol

Alcohol is the primary drug of abuse in Texas. In 2010, 62 percent of Texas secondary school students (grades 7–12) had ever used alcohol, and 29 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 2010, 12 percent of all secondary students said that when they drank, they usually drank five or more (or drinks) beers at one time, and 12 percent reported binge drinking of liquor, which has remained relatively stable since 1992 (exhibit 7). Among students in grades 4–6 in 2010, 22 percent had ever drunk alcohol, and 14 percent had drunk alcohol in the past school year. Eleven percent of fourth graders had used alcohol in the school year, compared with 19 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: 1988–2010



Source: DSHS

The 2011 YRBS reported that 73 percent of Texas high school students in grades 9–12 had ever drunk alcohol; 40 percent had drunk alcohol in the past month; and 24 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 2011, 22 percent of girls and 25 percent of boys reported binge drinking.

The 2002–2003 NSDUH estimated that 47 percent of all Texans age 12 and older had drunk alcohol in the past month (as compared to 50.5 percent nationally); in 2008-2009, 48.5 percent of Texans and 51.8 percent nationally had drunk alcohol in the past month. In 2008-2009, 24.4 percent of Texans had drunk five or more drinks on at least one day (binge drinking) in the past month, as compared to the national average of 23.5 percent. In 2008-2009 among underage Texas drinkers (age 12 to 20), 26.5 percent reported past-month alcohol use, compared with 26.8 percent nationally, and 17.6 percent of Texas underage youths reported past-month binge drinking, compared with 17.7 percent nationally. Almost 7 percent of Texans age 12 and older were found to be alcohol

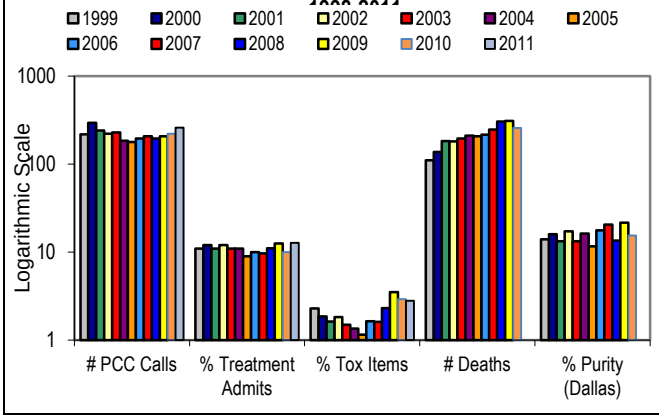
dependent or abusers in the past year, compared with 7.4 percent of the U.S. population.

In 2011, 29 percent of all clients admitted to publicly funded treatment programs had a primary problem with alcohol. The characteristics of alcohol admissions have changed over the years. In 1988, 82 percent of the clients were male, compared with 68 percent in 2011. The average age increased from 33 to 39 years. During this time, alcohol clients were becoming more likely to be polydrug users: the proportion reporting no secondary drug problem dropped from 67 to 51 percent; the most common secondary drugs were cocaine (18 percent) and cannabis (17 percent).

Heroin

Heroin indicators remained varied (exhibit 8), but there were indications of growing heroin problems among teenagers and young adults in 2011. This was first noticed with the "cheese heroin" situation in Dallas in the mid-2000s, but heroin use indicators by youth were increasing statewide. The primary types of heroin in Texas were Mexican black tar and powdered brown.

Exhibit 8. Texas Poison Control Calls, Treatment Admissions, Tox Lab Exhibits, and Deaths for Heroin: 1999-2011



The proportion of Texas secondary students reporting lifetime use of heroin dropped from 2.4 percent in 1998 to 1.4 percent in 2010. The 2011 YRBS found 3.3 percent of Texas high school students reported having ever used heroin, as compared with 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 a high of 296 in 2000, but dropped to 259 in 2011 (exhibit 8).

Heroin was the primary drug of abuse for 13 percent of clients admitted to treatment in 2011 (Appendix 1). The characteristics of these users 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 18 percent in 2011. Smoking black tar heroin is very rare in Texas because the chemical composition tends to flare and burn rather than smolder.

Exhibit 9. Characteristics of Clients Admitted to DSHS-Funded Treatment with a Primary Problem with Heroin by Route of Administration: 2011

	Inject	Inhale	Smoke	All[a]
# Admissions	7,517	1,756	122	9,556
% of Heroin Admits	80	18	1	100
Lag-1st Use to Tmt-Yrs.	12	8	7	11
Average Age	33	29	28	32
% Male	61	52	62	59
% Black	6	15	6	7
% White	86	78	84	84
% Hispanic	49	57	41	51
% CJ Involved	69	63	70	68
% Employed Full Time	5	5	4	5
% Homeless	19	9	11	17

[a]Total includes clients with other routes of administration.

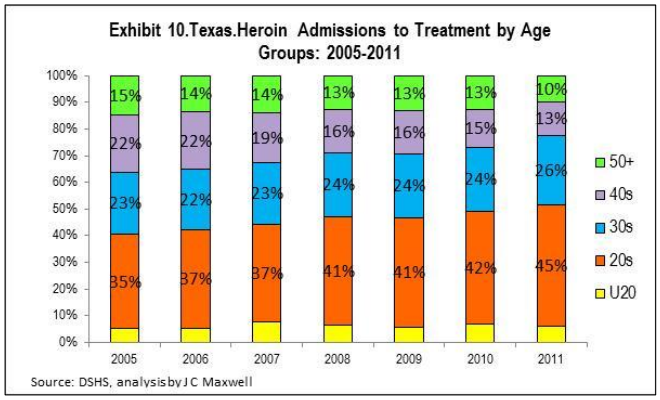
Source: Texas Department of State Health Services; analysis by L. San Jose

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.

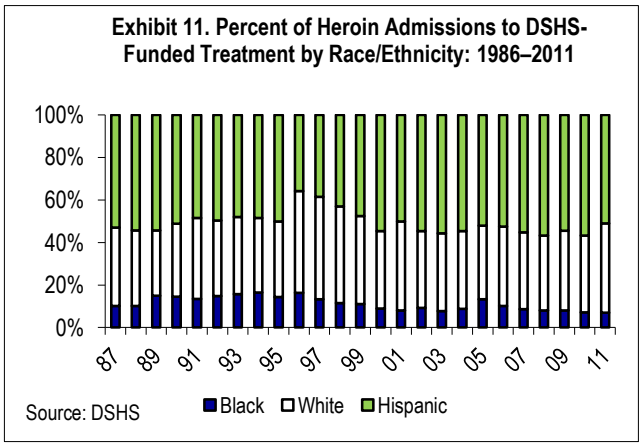
Of the 2011 heroin admissions, 43 percent reported no second substance problem, and 18

percent reported a problem with cocaine (which shows the tendency to "speedball," or use heroin and cocaine sequentially). Ten percent reported a second problem with cannabis, 9 percent with alcohol, and 6 percent with other opiates.

The increase in young persons entering treatment for dependence on heroin was a concern. The proportion of heroin clients in their twenties increased from 35 percent in 2005 to 45 percent in 2011, while the proportion of older admissions decreased correspondingly (exhibit 10). The proportion of teenagers entering treatment remained low, but given the lag between first use and dependence, many of the admissions in their twenties began their heroin use as teenagers.



"Cheese heroin," a mixture of Tylenol PM® and black tar heroin (heroin combined with diphenhydramine and acetaminophen) remains a problem in Dallas, and heroin inhaling was increasing across Texas. Diphenhydramine has traditionally been used as a “cut” to turn tar into inhalable powder (see Maxwell et al. article on cheese heroin).



The race/ethnicity of the primary heroin treatment admissions has remained fairly constant over the years (exhibit 11).
In 2010, 258 deaths in Texas involved heroin (exhibit 12). The decline in average age of the decedents from 40 in 2008 to 35 in 2010 is evidence of the increasing use by young adults. Of these deaths, 65 percent involved psychostimulants (with or without other drugs), with 26 percent also involving cocaine (with or without other drugs), and 12 percent also involved benzodiazepines (with or without other drugs).

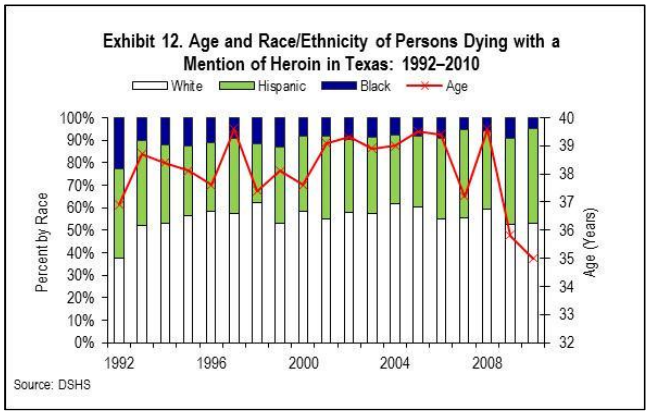
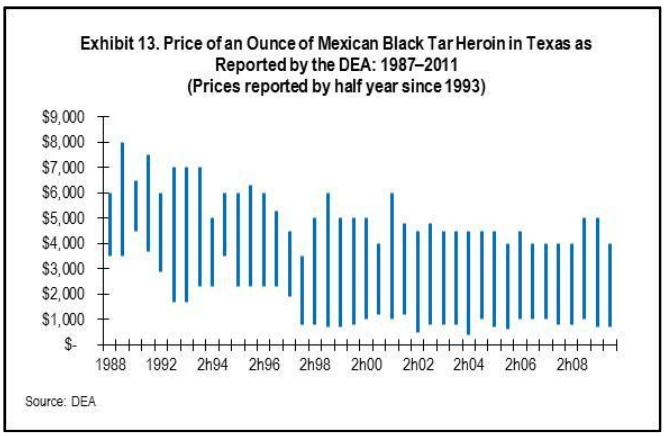


Exhibit 9 shows that the proportion of items identified as heroin by toxicology laboratories has remained low, at 1–3 percent over the years. The El Paso DEA FD reported that seizures of heroin in the district had risen recently, which could signal an increase in smuggling in the region. Users cross to Ciudad Juarez to obtain their supply. The Houston FD reported seizures have increased, as has street-level availability. The Dallas FD reported that black tar and Mexican brown heroin were available, as were small amounts of white heroin which “spell” as wholesale quantities of the white South American heroin transits the area to the northeastern United States.

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 13 shows the decline in price over the years. Depending on the location, black tar heroin was sold on the street in 2011 for $5–$20 per paper, balloon, or capsule; $80–$350 per gram; $700–$4,000 per ounce; and $22,000–$80,000 per kilogram.



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–$20 per cap in 2011. A gram cost between $40 and $120 in El Paso and $80-$350 in Dallas. An ounce cost $800-$1000 in El Paso and $1,200–$2,000 in Houston.

There have continued to be anecdotal reports of Southwest Asian heroin being brought back into Texas from troops returning from Afghanistan, with a price of $400 per gram and $75,000 per kilogram and Dallas DEA reports that a gram of opium cost between $23 and $50 in 2011.

Exhibit 14 shows the purity and price of heroin purchased by the DEA in four Texas cities under the DMP from 1995 to 2010. Heroin was more pure at the border in El Paso and decreased in purity but increased in price as it moved north, since it was "cut" with other products such as diphenhydramine or mannitol as it passed through the chain of dealers.

Exhibit 14. Price and Purity of Heroin Purchased in Dallas, El Paso, Houston, and San Antonio by the DEA: 1995–2010

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
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	13.5	21.6	15.5
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	$0.93	$0.91	$1.31
El Paso Purity (%)					56.7	50.8	41.8	40.3	44.7	50.5	44.7	44.8	39.8	41.1	30.5	
Price/Milligram Pure					$0.49	$0.34	$0.44	$0.27	$0.40	$0.27	$0.40	$0.33	$0.49	$0.61	$0.69	
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	6.2	6.0	3.1
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	$3.05	$3.42	$6.77
San Antonio Purity (%)									8.2	6.4	11.2	17.4	7.1	7.6	8.7	7.7
Price/Milligram Pure									$1.97	$2.24	$0.56	$0.79	$1.88	$1.42	$1.03	$1.09

Source: DEA

Other Opioids

The "other opioids" group excludes heroin but includes drugs such as methadone; codeine; hydrocodone (Vicodin®, Tussionex®); oxycodone (OxyContin®, Percodan®, Percocet-5®, Tylox®); buprenorphine; hydromorphone (Dilaudid®); morphine; meperidine (Demerol®); tramadol (Ultram®), and opium.

The 2011 indicators for poison control cases and toxicology lab items were 10 times greater for hydrocodone as compared to oxycodone, which reflects the more stringent controls on oxycodone, which is Schedule II, as compared to hydrocodone, which is Schedule III (exhibit 15). Buprenorphine indicators were increasing, although at a lower level than other opioid drugs. The pain pill problem continued to increase with the spread of the "Houston Cocktail" consisting of carisoprodol,

alprazolam, and hydrocodone. Two new laws designed to eliminate doctor shopping and prescription fraud became effective September, 2011.

Abuse of codeine cough syrup mixed in sweet soft drinks 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," remains a concern.

Exhibit 15. Indicators of Abuse of Opiates in Texas: 1998–2011

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Poison Control Center Cases of Abuse and Misuse														
Buprenorphine			1	0	0	4	1	6	8	10	14	21	22	32
Fentanyl			9	1	3	11	17	11	15	24	19	27	23	27
Hydrocodone			236	276	348	357	427	431	540	592	558	617	681	676
Methadone			27	23	46	35	53	57	60	71	72	57	54	54
Oxycodone			22	34	68	64	77	50	68	67	81	74	101	75
DSHS Treatment Admissions														
Methadone[a]	55	69	44	52	75	86	63	91	101	113	160	145	132	180
"Other Opiates"[a]	553	815	890	1,386	2084	2794	3433	3482	3903	4529	5221	5844	2679	2047
Codeine[a]													88	109
Hydrocodone[a]													1427	3102
Hydromorphone[a]													143	222
Deaths with Mention of Substance (DSHS)														
Other Opioids		122	168	224	313	370	369	402	577	572	535	555	564	
Synthetic Narcotics		52	52	80	120	80	94	93	113	142	120	171	165	
Methadone		27	62	89	141	161	164	205	222	224	198	183	190	
Drug Exhibits Identified by Toxicology Laboratories (NFLIS)*														
Hydrocodone	61	530	661	1,010	1162	1701	2036	2651	3201	3835	3663	4239	5271	4604
Methadone	4	9	23	52	62	79	150	184	204	251	302	320	285	277
Oxycodone	11	41	77	150	164	232	309	334	335	333	397	456	515	420
Buprenorphine		20	12	6	10	11	6	6	13	25	43	89	131	113

[a] "Other Opiates" refers to all other opioids until 2010; starting in 2011 specific opioids are reported

[b] As of 2010 information on most common opioids reported separately

[b] The toxicology lab data (NFLIS) is not complete for 2009 and 2011

Sources: DSHS and NFLIS.

The 2010 Texas secondary school survey queried about use of other opiates "to get high," and reported that 5 percent had ever used hydrocodone; 12 percent reported ever having consumed codeine cough syrup "to get high;" and 3 percent had ever used oxycodone in that manner. The 2002–2003 NSDUH reported that 4.9 percent of Texans age 12 and older had used pain relievers nonmedically in the past year (as compared with 4.8 percent nationally); in 2008-2009, 4.6 percent of Texans had used these drugs in the past year (as compared to 4.8 percent nationally). The 2011 YRBS reported 22 percent of high school students in Texas have ever taken prescription pills without a doctor's prescription.

The Texas poison control centers reported there were 676 abuse and misuse cases involving human exposure to hydrocodone, and 75 abuse and misuse cases of oxycodone in 2011. Forrester's study of opioid abuse in Texas between 2000 and 2010 found the number of abuse cases for narcotic analgesics increased 160 percent, with hydrocodone cases increasing 189 percent; tramadol, 548 percent; oxycodone, 310 percent; hydromorphone, 600 percent; and buprenorphine, 2,100 percent. The rate for methadone was stable and the rate for morphine declined.

Eight percent of all clients who entered publicly-funded treatment during 2011 had a primary problem with opioids other than heroin, compared with 1 percent in 1995. 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.

Exhibit 15 shows the number of deaths involving methadone, "other opiates," and "other synthetic narcotics." These are the International Classification of Diseases (ICD) categories that are used to show the causes of death, and other than "methadone," they do not provide data on the specific opiate drug involved. In 2011, 190 deaths involved methadone, with 28 percent of these also involving benzodiazepines. There were also 564 deaths involving other opioids

(exhibit 15), of which 47 percent involved no other drug, and 41 percent also involved benzodiazepines.

The number of exhibits of opioids examined by the toxicology laboratories has increased over time, with some variations between years. Methadone peaked in 2008, while hydrocodone and oxycodone peaked in 2010 (exhibit 15).

In 2011, a hydrocodone pill that cost the pharmacy $0.10 sold for $5-$8 on the street. OxyContin® cost $1 per milligram in Dallas and Houston. A 10-milligram methadone tablet cost $2–$5 in El Paso and $4–$8 in San Antonio. A pint of codeine cough syrup with promethazine cost $300-$900.

Illicit pain management clinics continue to be the primary diversion threat in the Houston area, according to the DEA FD. These clinics are supported by pill crews that recruit "patients," such as homeless persons, to obtain drugs from local doctors, and patients from adjoining states come to Texas to obtain drugs they cannot legally obtain at home, Rogue physicians are writing prescriptions for oxycodone, which is a Schedule II controlled substance on regular prescription pads rather than the required Schedule II forms, and the prescriptions are then filled by out-of-state pharmacies who are not familiar with the Texas forms. A prescription from a Houston physician for 120 dosage units of oxycodone can sell for $240-$500 out of state. In addition, the Dallas DEA FD identified Sibutramine, a Schedule IV controlled substance that is used as an appetite suppressant, in shipments from China.

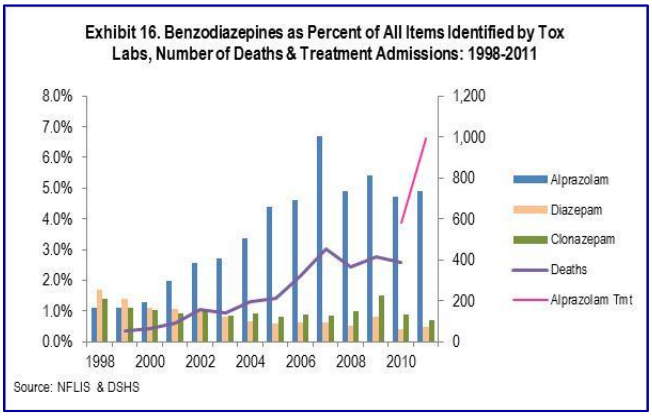
Practitioners in some of these clinics attempt to avoid detection by writing one prescription with two of the "Cocktail" drugs and another noncontrolled medication on one form, and then issuing a second prescription with the third cocktail drug and another non-controlled substance on a second script. Prescription fraud continued, with faxed-in prescriptions and the use of drive-through pharmacies, which avoid camera detection. There have also been increasing instances of mail courier theft in which pharmaceuticals are intercepted in transit.

Benzodiazepines

Benzodiazepines include diazepam (Valium®), alprazolam (Xanax®), flunitrazepam (Rohypnol®), clonazepam (Klonopin® or Rivotril®), flurazepam (Dalmane®), lorazepam (Ativan®), and chlordiazepoxide (Librium® and Librax®). Flunitrazepam (Rohypnol®) is discussed separately in the Club Drugs and Emerging Psychoactive Drugs section of this report.

The 2010 Texas secondary school survey reported lifetime use of downers was 6 percent, and past-month use was 2 percent. Approximately 9 percent of the clients entering DSHS-funded treatment in 2011 reported a primary problem with benzodiazepines. Among these clients with problems with benzodiazepines, 64 percent were female; 81 percent were White; 28 percent were Hispanic; and 16 percent were Black. They were users of multiple drugs. Of the benzodiazepine clients, 29 percent reported a secondary problem with cannabis, 12 percent with alcohol, 16 percent with other opioid drugs, and 10 percent with powder cocaine; 49 percent used their benzodiazepines daily. Exhibit 16 shows that the number of treatment admissions with problems with alprazolam increased from 581 in 2010 to 992 in 2011.

Exhibit 16 shows the increases in deaths due to benzodiazepines, from 55 in 1999 to 389 in 2011, as well as the dominance of alprazolam as the most abused benzodiazepine.

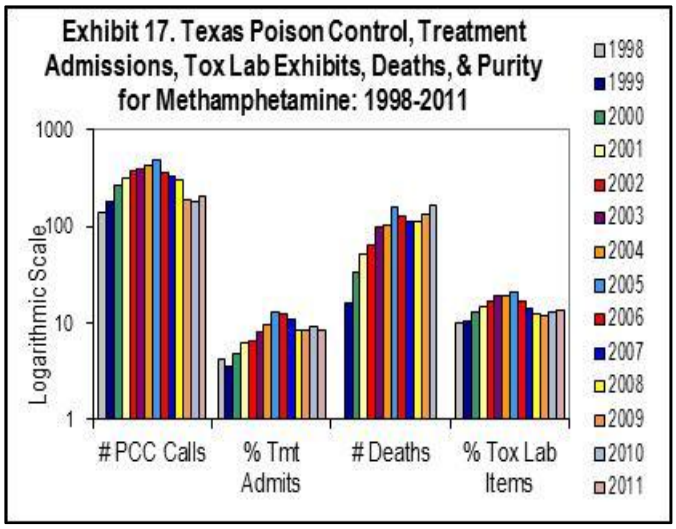


Alprazolam, clonazepam, and diazepam were among the most commonly identified substances, according to the 2011 toxicology laboratory reports, although none of them

represented more than 5 percent of all drug items examined in a year (exhibit 16).

In 2011, an alprazolam tablet that cost the pharmacy $0.80 sold for $4-$7 on the street. It is one of the three ingredients (along with hydrocodone and carisoprodol) that form the "Houston Cocktail" or "Holy Trinity."

Stimulants



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

No shortages of methamphetamine have been reported, and indicators were beginning to move upward after the declines following the precursor regulations in 2005-2006 (exhibit 17). Local "cooking" of ice using over-the-counter pseudoephedrine with the "one pot" or "shake and bake" method continued to be a method for producing small amounts of methamphetamine, but as of first quarter 2012, only 7 percent of the samples from across the U.S. examined in the DEA MPP program were produced from the pseudoephedrine method, with 88 percent produced from the phenyl-2-propanone (P2P) method used in Mexico. During this period, the average purity was 94.8 percent and average potency was 82.9 percent.

The Texas secondary school survey reported that lifetime use of stimulants, or "uppers," was 5 percent, and past-month use was 2 percent in 2010. 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 2011 YRBS reported lifetime use of methamphetamine by Texas high school students was 5 percent, compared with 4 percent in 2009 and 7 percent in both 2007 and 2005.

There were 336 calls to the Texas Poison Center Network involving exposure to methamphetamine in 2006, 315 in 2007, 298 in 2008, 190 in 2009, 180 in 2010, and 197 in 2011 (exhibit 17). Of these 2011 methamphetamine exposures, 69 percent were male and average age was 29. There were also 288 calls for exposure to pharmaceutical amphetamines or phentermine in 2011; 58 percent were male and average age was 21, which shows the problems with misuse of these drugs by children and youths.

Exhibit 18. Characteristics of Clients Admitted to DSHS-Funded Treatment with a Primary Problem of Amphetamines or Methamphetamines by Route of Administration: 2011

	Inject	Inhale	Smoke	Oral	All[a]
# Admissions	2,313	490	3,406	231	6,490
% of Stimulant Admits	36	8	52	4	100
Lag-1st Use to Tmt-Yrs.	14	12	10	11	12
Average Age-Yrs.	33	35	32	34	32
% Male	45	42	38	39	41
% Black	1	2	3	2	2
% White	97	92	93	94	95
% Hispanic	8	17	20	17	15
% CJ Involved	43	43	44	34	44
% Employed Full Time	10	15	14	13	13
% Homeless	13	8	8	7	10

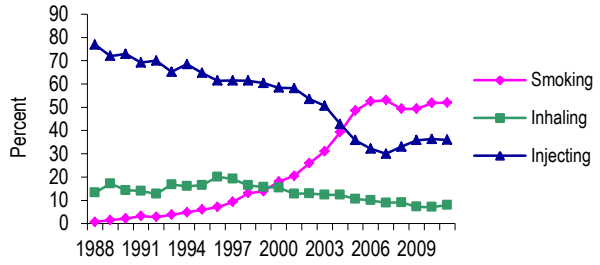
[a]Total includes clients with "other" routes of administration

Source: Texas Department of State Health Services; analysis by L. San Jose

Methamphetamine/amphetamine admissions to treatment programs increased from 3 percent of all admissions in 1995 to 11 percent in 2007. They dropped to 8 percent in 2009 and then

rose slightly to 9 percent of admissions in 2011 The average age of clients admitted for a primary problem with these stimulants increased from 26 in 1985 to 32 in 2011 (exhibit 18). The proportion of White clients rose from 80 percent in 1995 to 95 percent in 2011. Unlike the other drug categories, more than one-half (59 percent) of the clients entering treatment were female. Clients with a primary problem with methamphetamine reported secondary problems with cannabis (27 percent), alcohol (18 percent), or cocaine (7 percent). Thirty-six percent reported no second substance problem.

Exhibit 19. Route of Administration of Methamphetamine by Clients Admitted to DSHS-Funded Programs: 1988–2011



SOURCE: DSHS

Users of methamphetamine tend to differ depending on their route of administration, as exhibit 18 shows. Methamphetamine injectors were more likely to be homeless and not employed fulltime. Smoking ice peaked in 2007, at 53 percent (exhibit 19). Since the precursor bans, the availability of the different forms of methamphetamine changed; the percentage smoking ice decreased slightly and the proportion injecting increased in 2009. However, in 2011, smoking increased, which is an indication that the supply of ice had increased.

Exhibit 17 shows the number of deaths for psychostimulants, which include methamphetamine and amphetamine. There were 128 in 2006, 114 in 2007, 111 in 2008, 134 in 2009, 157 in 2010, and 167 in 2011. Some 11 percent of the deaths also involved cocaine and another 11 percent involved benzodiazepines.

Methamphetamine represented 21 percent of all items analyzed by toxicology laboratories in 2005 and dropped to 13 percent in 2011 (exhibit 17). Amphetamine represented less than 1 percent of the items examined in either year.

The Dallas DEA FD reported methamphetamine availability was high and stable and seizures of the drug rose 27 percent between 2010 and 2011. The size of the seizures also increased by 42 percent, and there was an upswing in liquid methamphetamine availability. Houston DEA FD reported availability was high.

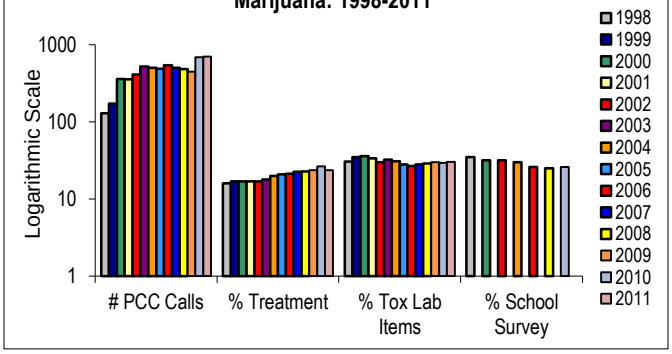
The El Paso DEA FD reported an increase in small laboratories which were said to produce a more potent version using pseudoephedrine as compared to that made using the P2P recipe. Mexican methamphetamine was being transshipped through the area, while local users relied on small clandestine laboratories in rural areas using “smurfers” to obtain the pseudoephedrine. The laboratory seizures have declined because of the increased availability of the Mexican product.

In 2011, a pound of powder methamphetamine sold for $8,500-$12,500 in Dallas, $7,000-$19,000 in El Paso, and $11,000-$16,000 in Houston. A pound of ice sold for $12,000–$20,000 in Dallas. An ounce of ice sold for $1,200–$1,600 in Dallas and a gram of Ice cost between $50 and $120.

Cannabis (Marijuana)

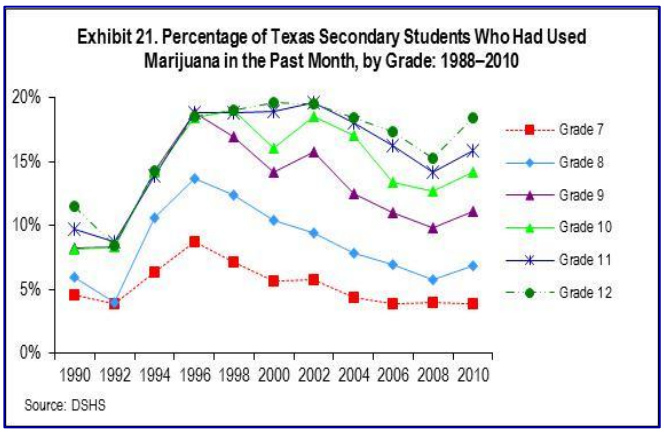
Cannabis indicators remained mixed, with severity of problems among cannabis treatment admissions notable. Cannabis homologs, or cannabamimetic agents which mimic delta-9-tetrahydrocannabinol (THC) but with different chemical structures, continue to be a problem.

Exhibit 20. Texas Poison Control Calls, Treatment Admissions, School Survey & Tox Lab Exhibits for Marijuana: 1998-2011



Cannabis indicators have varied over the years

(exhibit 20). Among Texas students in 2010 in grades 4–6, 1.9 percent had ever used cannabis, with 1.4 percent reporting use in the past school year. Among Texas secondary students (grades 7–12), 26 percent had ever tried cannabis, and 11 percent had used in the past month. Past-month use increased in grades 8 through 12 between 2008 and 2010 (exhibit 21).



The 2010 survey found that 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 2011, the YRBS reported that 41 percent of Texas high school students in grades 9–12 had ever smoked cannabis, as compared with 37 percent in 2009, 38 percent in 2007, 42 percent in 2005, and 41 percent in 2001. The 2002–2003 NSDUH estimated that 8.6 percent of Texans age 12 and older had used cannabis in the past year (compared with 10.8 percent nationally); in 2008-2009, 8.3 percent reported past-year use, as compared to 10.8 nationally.

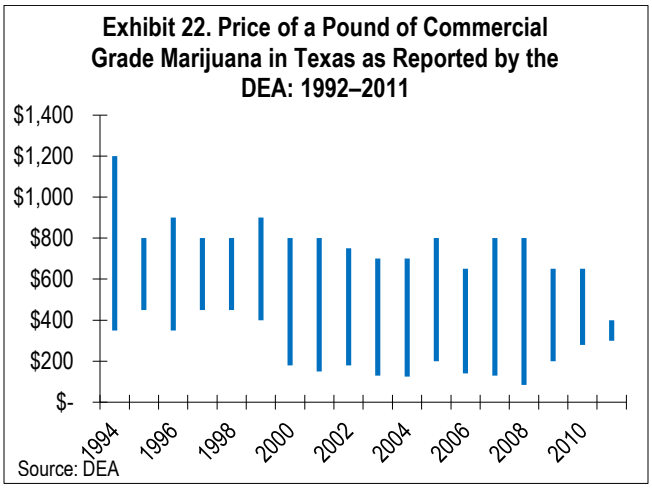
The Texas Poison Center Network reported 133 calls of exposure to cannabis in 1998, compared with 550 calls in 2011 (exhibit 20).

Cannabis was the primary problem for 24 percent of admissions to treatment programs in 2011, compared with 8 percent in 1995. While 27 percent of cannabis admissions in 2011 reported no second substance abuse problem, 38 percent had a problem with alcohol and 10 percent had a problem with powder cocaine. The average age of cannabis clients was 23. Approximately 47 percent were Hispanic; 20 percent were White; and 27 percent were Black. Seventy-eight percent had been referred from the criminal justice system and only 12 percent were employed fulltime.

Cannabis was identified in 31 percent of all the exhibits analyzed by toxicology laboratories in 2000 and in 2011 (exhibit 20).

The El Paso DEA FD reported that cannabis was the controlled substance most frequently seized, often at Border Patrol checkpoints. It was readily available, but most of the cannabis passing through the El Paso area was destined for other cities in the United States. Large quantities were routinely seized in the area, but there was little cannabis cultivation in the area.

In the Dallas/Fort Worth area, large-scale amounts of imported Mexican cannabis, domestically cultivated plants, and indoor grow operations provided large amounts of high-quality cannabis. The Dallas DEA FD office reported an increased number of seizures of domestic outdoor cultivated cannabis, which may be due to a demand for the higher quality produced in domestic grows. Marketing the locally grown cannabis avoids transportation costs, border violence, and risk of detection at the border.



The Houston DEA FD reported Mexican

cannabis was the primary type of cannabis there and there were more cannabis seizures than in the previous year; it was smuggled in through the Rio Grande Valley area. Hydroponic and indoor grow houses were also present in the Houston area.

Exhibit 22 shows the overall decline in the price of a pound of cannabis since 1992, with the tightening of the range of prices in 2011. In Houston, a pound of domestic cost $360-$400, a pound of Mexican cost $100-$1,000. In Dallas, a pound of hydroponic cost $3,000-$7,500, and in El Paso, a pound of BC Bud cost $1,200.

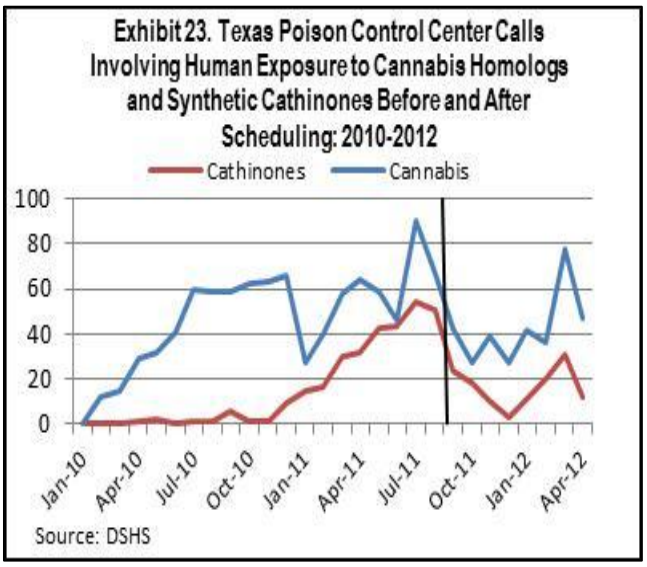
Synthetic Cannabis

A number of synthetic formulations such as JWH-018, JWH-073, CP-47, 497, and HU-210 mimic the primary psychoactive ingredient tetrahydrocannabinol (THC) in cannabis. 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, spice gold, etc. They had been available through gas stations and specialized stores such as head shops and were marketed as herbal incense. Since March 1, 2011, DEA has scheduled 15 of these synthetic cannabinoids as Schedule I, and on September 1, 2011, Texas also made these substances Schedule I. Since then, the drugs are obtained over the internet and from supplies stockpiled prior to the ban. As exhibit 23 shows, use declined immediately after scheduling but has now increased again.

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-May, 2012, the Texas Poison Center Network received 1,339 calls involving human exposures to the substances (504 in 2010, 587 in 2011, and 248 to date in 2012). Of all the calls, the age range was between 10 and 79; 45 percent were younger than 20; 75 percent were male; and 90 percent had either misused or abused the substance.

The Texas toxicology laboratories identified 79 synthetic cannabis items in 2010 and 851 in 2011. El Paso FD DEA reports some local distributors were making their own “Spice” by spraying potpourri with acetone and chemicals obtained in Ciudad Juarez or from China.



Club Drugs and Emerging Psychoactive Substances

This section includes not only those drugs which have been known as “club” or “party” drugs, but also the new synthetic drugs which have appeared in the last few years and which are continuing to appear in different chemical formulations.

Exhibit 24 shows the demographic characteristics of clients entering DSHS-funded treatment programs statewide with a problem with a club drug. Note that some of these drugs are not shown in Appendix 1, which only shows drugs with more than 100 admissions in 2011. The treatment data include a broader category of “Hallucinogens,” which consists of LSD (lysergic acid diethylamide), DMT (dimethyltryptamine), STP (phencyclidine and 2,5-Dimethoxy-4-methylamphetamine), mescaline, psilocybin, and peyote.

Among the clients shown in exhibit 24, the GHB clients were the most likely to be White; PCP (phencyclidine) clients were the most likely to be

users of Hallucinogens and PCP had the longest histories of use prior to treatment admission, while the Rohypnol users came to treatment after two years of use.

Exhibit 24. Characteristics of Clients Admitted to DSHS-Funded Treatment with a Primary Problem with Club Drugs: 2011

Club Drug	GHB	Hallucinogens	LSD	MDMA	PCP	Rohypnol
# Admissions	23	66	14	137	595	24
Average Age (Years)	30	31	25	23	30	16
Lag from 1st Use to Treatment	6	10	8	4	10	2
% Male	26	54	100	53	44	46
% Black	0	30	36	30	91	0
% White	100	62	64	67	9	100
% Hispanic	0	*	0	34	5	100
% Criminal Justice Involved	83	49	0	68	61	74
% Use Daily	70	32	*	15	27	21
% Employed Full Time	0	15	*	8	8	0
% Use Orally	100	44	79	88	5	100
Other Secondary Drug Problem						
% Marijuana	*	10	29	35	29	54
% Alcohol	*	17	0	14	16	1
% Methamphetamine	22	*	0	5	0	*
% Cocaine	0	*	0	11	11	*
% Crack	0	*	0	0	2	0
% Heroin	0	0	0	3	0	1
% Other Opiates	*	1	*	0	2	0
% Benzodiazepines	17	1	*	4	3	0

*Fewer than 3 cases

Source: Texas Department of State Health Services

BZP (1-Benzylpiperazine) and TFMPP (1-(3-trifluoromethylphenyl)piperazine)

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 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 (such as BZP and TFMPP) as well as antivertigo agents (cyclizine, meclizine) and other drugs (e.g., sildenafil/Viagra®).

The Texas toxicology laboratories analyzed 2 BZP exhibits and 0 TFMPP exhibits in 2006, 16 BZP and 7 TFMPP in 2007, 274 BZP and 190 TFMPP exhibits in 2008, 744 BZP and 677 TFMPP exhibits in 2009, 470 BZP and 391 TFMPP exhibits in 2010, and 342 BZP and 168 TFMPP in 2011.

DXM (Dextromethorphan)

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

The 2010 Texas school survey reported that 5 percent of secondary students indicated they

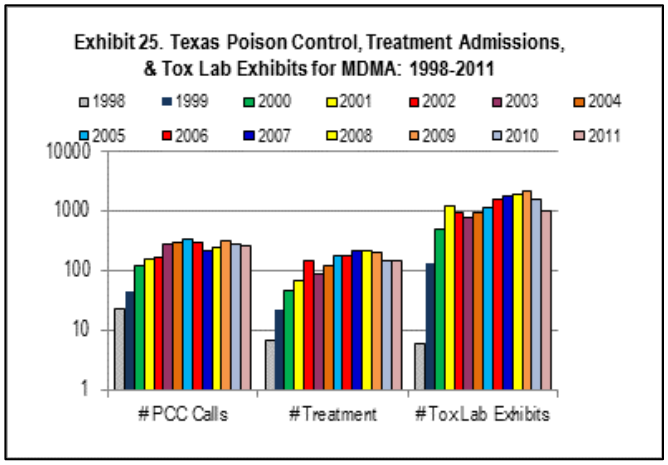
had ever used DXM, and 2 percent had used in the past year.

The Texas Poison Control Center Network reported the number of abuse and misuse cases involving DXM rose from 99 in 1998 to 530 in 2011. The average age of these cases was 21. The number of cases involving abuse or misuse of Coricidin HBP® was 288 in 2006 and dropped to 59 in 2011. The average age in 2011 was 19, which shows that youth can easily access and misuse this substance.

Toxicology laboratories analyzed 15 substances in 2006 that were DXM items, compared with 9 in 2007, 20 in 2008, 47 in 2009, 62 in 2010, and 27 in 2011.

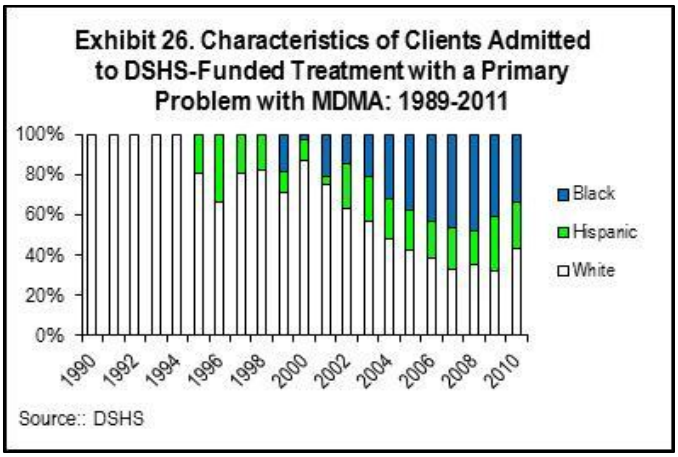
MDMA (Ecstasy, MDA)

The 2010 Texas secondary school survey reported that lifetime ecstasy use dropped from a high of 9 percent in 2002 to 5 percent in 2008, but it increased to 7 percent in 2010, while past-year use was 2 and 3 percent in 2008 and 2010, respectively. The YRBS reported that 12 percent of students had ever used ecstasy in 2011, as compared to 9 percent in 2009, 10 percent in 2007, and 8 percent in 2005.



Indicators of use of MDMA have varied over time, as exhibit 25 shows. The Texas Poison Centers 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, and 258 in 2011 (exhibit 25). In 2011, the average age of these cases was 21 and 53 percent were male.

Ecstasy is often used in combination with other drugs, as shown by secondary problems with cannabis, alcohol, or cocaine (exhibit 24). In 2011, the average age of the MDMA patients was 23 and they had been using the drug over four years before coming to treatment. Exhibit 26 shows that over time, ecstasy has spread outside the White rave scene and into the Hispanic and Black communities.



Toxicology laboratories identified MDMA (3,4-methylenedioxymethamphetamine) in 1,626 exhibits in 2006, 1,758 exhibits in 2007, 1,898 exhibits in 2008, 2,192 exhibits in 2009, 1,534 exhibits in 2010, and 993 in 2011 (exhibit 25). MDA (3,4-methylenedioxyamphetamine) was identified in 268 exhibits in 2006, 225 in 2007, 149 in 2008, 45 in 2009, 98 in 2010, and 69 in 2011.

The Dallas DEA FD reported the primary sources of ecstasy were from Canada through southern California and were trafficked by Asian drug trafficking organizations, with increasing local retail distribution involving younger Black males. According to the Houston DEA FD, ecstasy availability was moderate and stable, with Asian and Caucasian traffickers controlling distribution of this drug, which came from Canada and Europe. The El Paso DEA FD reported an increase in rave parties using ecstasy, and due to the violence in Ciudad Juarez, young adults were staying on the United States side to party. The drug was brought in from Ciudad Juarez in batches of 200–800 pills. In 2011, single dosage units of ecstasy sold for $5–$20 in Houston, $2-$15 in El Paso, $2-$30 in Dallas, and $5-$20 in Houston.

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

The number of cases of misuse or abuse of GHB or its precursors reported to the Texas Poison Center Network was 43 in 2006, 56 in 2007, 49 in 2008, 46 in 2009, 55 in 2010, and 36 in 2011. The average age of the abusers in 2011 was 28.

In 2011, 23 clients were admitted to DSHS-funded treatment who used GHB; their average age was 30; 90 percent were White; 74 percent were female, and 83 percent were involved with the criminal justice system (exhibit 24).

There were 88 items identified by toxicology laboratories as being GHB in 2006, compared with 64 in 2007, 63 in 2008, 99 in 2009, 69 in 2010, and 53 in 2011. There were nine items identified as GBL in 2006, compared with none in 2007, five in 2008, four in 2009, none in 2010, and three in 2011. There were no items identified as 1,4-BD in 2006, 2007, or 2008; two identified in 2009; six in 2010, and two in 2011.

The Dallas DEA FD reported GHB availability was stable, as did Houston FD. In Dallas, a gallon sold for $1200-$1600, and in Houston, a dose cost $20-$65 and a 16 ounce bottle of GHB cost $100.

Ketamine

Three cases of misuse or abuse of ketamine were reported to Texas Poison Control Centers in 2006, compared with one each in 2007, 2008, and 2009, 3 in 2010, and 7 in 2011.

In 2006, 161 substances were identified as ketamine by toxicology laboratories. There were 235 items identified in 2007, 129 in 2008, 123 in 2009, 60 in 2010, and 16 in 2011 A dose sold for $20–$40 in Lubbock and $25–$60 in San Antonio for 0.2 grams.

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 4.6 percent in 2010. Past-month use dropped from a peak of 2.5 percent in 1998 to 1.5 percent in 2010.

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, and 16 in 2011. There were also 96 cases of intentional misuse or abuse of hallucinogenic mushrooms reported in 2006, 125 in 2007, 93 in 2008, 96 in 2009, 85 in 2010, and 59 in 2011. The average ages in 2011 were 20 for the LSD cases and 24 for the mushroom cases.

Of the hallucinogen treatment admissions in 2011, the average age was 31; 55 percent were male, 49 percent were involved in the criminal justice system, and 15 percent were employed fulltime (exhibit 24).

Toxicology laboratories identified 34 substance as LSD in 2006, 41 in 2007, 36 in 2008, 59 in 2009, 71 in 2010, and 19 in 2011.

PCP (Phencyclidine)

The Texas Poison Center Network reported cases of “Fry,” “Amp,” “Water,” "Wet," “Wack,” “PCP,” or formaldehyde. Often, cannabis joints are dipped in formaldehyde that contains PCP, or PCP is sprinkled on the joint or cigarette. The number of poison center cases involving PCP declined from 290 in 2008 to 152 in 2011; average age in 2011 was 28 (exhibit 27).

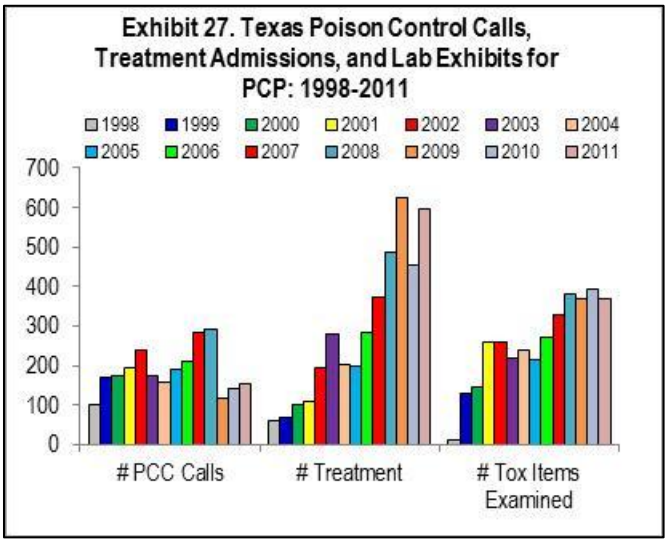


Exhibit 27 shows an increase in the number of clients entering treatment statewide with a primary problem with PCP from 487 in 2008 to 595 in 2011. A decrease was observed in 2010 but rose to 595 in 2011. Of the clients in 2011,

91 percent were Black; 44 percent were male; 39 percent were involved in the criminal justice system, and 8 percent were employed fulltime (exhibit 24).

Toxicology laboratories identified 273 in 2006, 326 in 2007, 382 in 2008, 370 in 2009, and 370 in 2009, 394 in 2010, and 368 in 2011 (exhibit 27).

PCP cost $20 per dipped cigarette and $700–$1,200 per gallon in San Antonio.

Rohypnol®

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. Rohypnol® continued to be a problem along the Texas–Mexico border.

The 2010 secondary school survey found that students from the border area were about three times more likely to report lifetime 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.

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

The number of youths and adults admitted into treatment with a primary with Rohypnol® has varied: In 2011, clients abusing Rohypnol® were the youngest of the club drug clients (age 16), and they were all Hispanic, reflecting the availability and use of this drug along the border. Seventy-one percent were involved with the criminal justice system (exhibit 24).

Toxicology laboratory exhibits for flunitrazepam numbered 10 in 2006, two in 2007, none in 2008, three in 2009, one in 2010, and none in 2011. Rohypnol® sold for $2–$4 per pill in San Antonio in 2008.

Synthetic Cathinones

Emerging Psychoactive Substances (EPS) include the substituted or synthetic cathinones and include mephedrone (4-methyl-methcathinone) and MDPV (methylenedioxypyrovalerone). Mephedrone (4-methylmethcathinone or 4-MMC) is a designer substance of the phenethylamine class and a cathinone derivative from the khat plant. Its pharmacology and structure are similar to MDMA and amphetamine. MDPV (3,4-methylenedioxypyrovalerone) is another cathinone derivative with effects similar to cocaine and amphetamine. These drugs are usually supplied as a white, crystalline powder, although they also are available in tablet form and sold over the Internet and through "head shops," convenience stores, gas stations, and truck stops, and are often labeled as "bath salts," "plant food," or "insect repellant." Their street names include "Bubbles," "Snow," "Bath Salts," "M-cat," and "Meow Meow." They are usually ingested or inhaled, and they are reported to produce euphoria, increased energy, empathy, talkativeness, intensification of sensory experiences, and sexual arousal.

A final order to temporarily schedule these drugs under the federal Controlled Substances Act went into effect on October 21, 2011, and it became Penalty Group 2 in Texas on September 1, 2011. Exhibit 23 shows the number of cases per month before and after the ban.

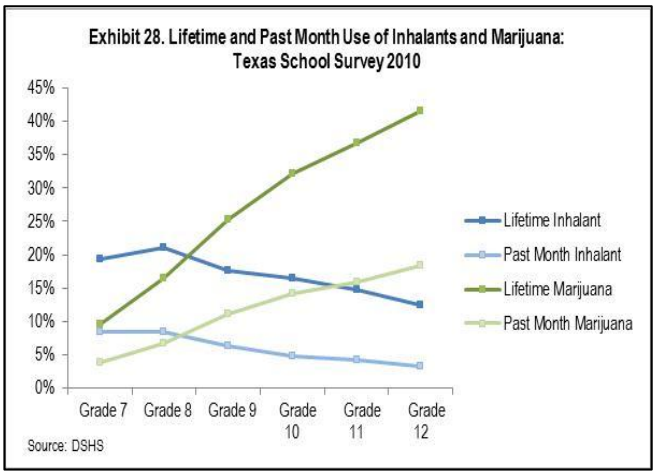
The Texas Poison Control Center Network reported 438 human exposures to "bath salt" substances from January, 2010 through May 31, 2012 (22 in 2010, 340 in 2011, and 76 in 2012 to date). Ages ranged from 12 to 67, with 13 percent younger than 20. Seventy-four percent were male; 89 percent intended to abuse or misuse the drug; and common symptoms include tachycardia, hypertension, agitation, confusion, and hallucinations.

The toxicology laboratories in Texas in 2010 identified 158 items that were synthetic cathinones; in 2011, 540 cathinone items were identified.

Other Abused Substances

Inhalants

The 2010 Texas elementary school survey found that 11 percent of students in grades 4–6 had ever used inhalants, and 8 percent had used in the school year. The 2010 secondary school survey found that 17 percent of students in grades 7–12 had ever used inhalants, and 6 percent had used in the past month.



Inhalant use exhibits a peculiar age pattern not observed with any other substance (exhibit 28). 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 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 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 2011 YRBS reported that 11.4 percent of Texas high school students had ever used inhalants, compared with 11.9 in 2009, 12.9 percent in 2007, 13.2 percent in 2005, and 13.9 percent in 2001.

Of the calls to the Texas Poison Center Network in 2011 that involved human exposure to the inhalation of chemicals, there were 54 calls for misuse of air fresheners or dusting sprays containing tetrafluoroethane or difluoroethane or freon (66 percent were male and average age was 26);15 calls for exposure to automotive products, such as carburetor cleaner, transmission fluid, and gasoline (95 percent were male, average age 29); 18 calls for abuse or misuse of spray paint or toluene (83 percent male and average age 31); 10 calls for helium, butane, or nitrous oxide gas (80 percent male and average age 21).

Inhalant abusers represented 0.1 percent of the admissions to treatment programs in 2011. The clients tended to be male (66 percent), with an average age of 23. Twenty-nine percent were involved with the criminal justice system. Of the inhalant abusers, 18 percent reported no secondary drug problem; 42 percent had a second problem with cannabis; and 21 percent had a second problem with alcohol.

Steroids

The Texas school survey reported that 1.4 percent of all secondary students surveyed in 2010 had ever used steroids, and 0.5 percent had used steroids during the month before the survey. The 2011 YRBS found lifetime use among Texas high school students was 4.8 percent; in 2009, use was 2.9 percent, and 3.9 percent in 2007.

The toxicology data for Texas reported that testosterone was the steroid most likely to be identified in forensic testing, although it constituted only 0.1 percent of all the items tested in 2011.

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 the muscle relaxant carisoprodol (Soma®) increased from 83 in 1998 to 271 cases in 2011; average age was 36.

Toxicology laboratory exhibits identified as carisoprodol have fluctuated in the past 5 years. The numbers of such drug items were 1,047 in 2006, 1,256 in 2007, 902 in 2008, 1,097 in 2009, 1,464 in 2010, and 1,079 in 2011.

Soma®, which cost $0.75 to the pharmacy, sells for $5 on the street. 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

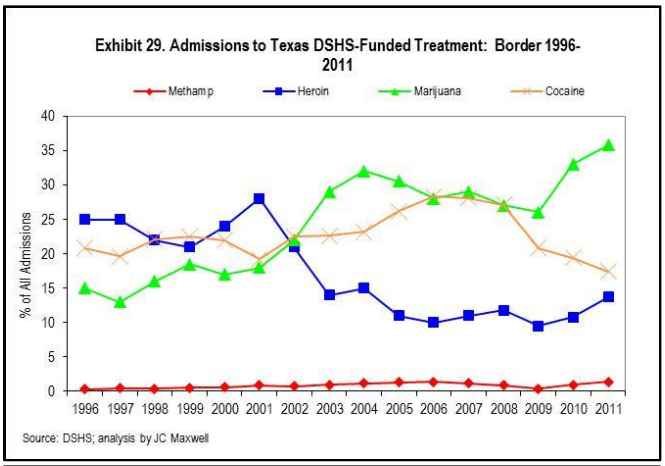
The 2010 Texas Secondary School Survey reported that students living in counties along the Texas border were more likely to report lifetime use of a number of drugs than residents of nonborder counties, including tobacco (33 percent border versus 30 percent nonborder), powder cocaine (8 percent border versus 4 percent nonborder), ecstasy (11 percent border and 6 percent nonborder), and Rohypnol® (6 percent border versus 2 percent nonborder).

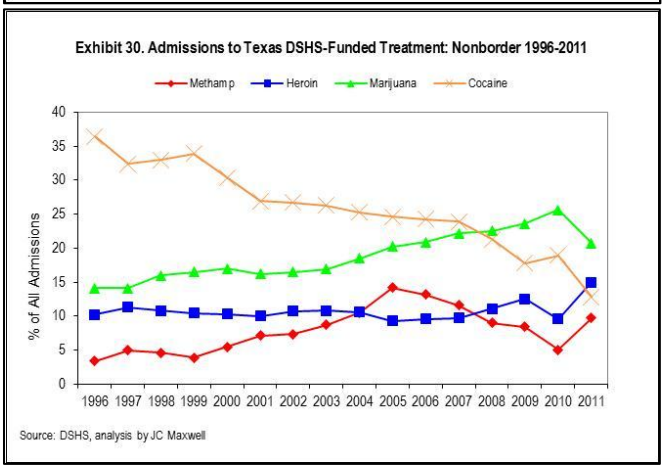
Nonborder students were more likely to report use of cannabis (27 versus 25 percent border). The results for other substances were similar: alcohol (63 percent nonborder versus 62 percent border), alprazolam (5 percent nonborder versus 4 percent border), methamphetamine (3 percent nonborder versus 3 percent border), crack cocaine (2 percent nonborder versus 2 percent border), and heroin (1 percent nonborder and 2 percent border).

When asked which substances were very easy to obtain, border students were more likely to report Rohypnol® (10 percent) than nonborder students (6 percent), while nonborder students were more likely to report use of tobacco (36 percent) compared with 32 percent of border students, alcohol (43 percent nonborder versus 38 percent border), and cannabis (26 percent nonborder versus 24 percent border). Both groups reported powder cocaine equally easy to obtain (11 percent), as was crack cocaine (8 percent).

Different patterns were also seen in border and nonborder admissions to DSHS-funded treatment in 2011 (exhibits 29 and 30). Border clients were more likely to report problems with alcohol (33 versus 30 percent nonborder), cocaine (17 versus 13 percent) and cannabis (30 versus 21 percent), and heroin (11 versus 10 percent). Nonborder clients were more likely to report problems with methamphetamine (10 versus 0.4 percent), and the levels for heroin was similar, at 14 percent border and 15 percent nonborder. In addition to differences in primary problems, nonborder clients were less likely to be male (59 versus 65 percent), more likely to be homeless (11 versus 3 percent), and more likely to be injectors (13 versus 10 percent).

The toxicology laboratory in El Paso in 2011 reported that approximately 44 percent of the items examined were cannabis, followed by cocaine (24 percent) and heroin (1.3 percent). In Laredo, 49 percent of the items analyzed were cannabis; 26 percent were cocaine; and 7 percent were heroin. In McAllen, 49 percent of the items analyzed were cocaine, with 19 percent identified as cannabis and 3 percent as methamphetamine.



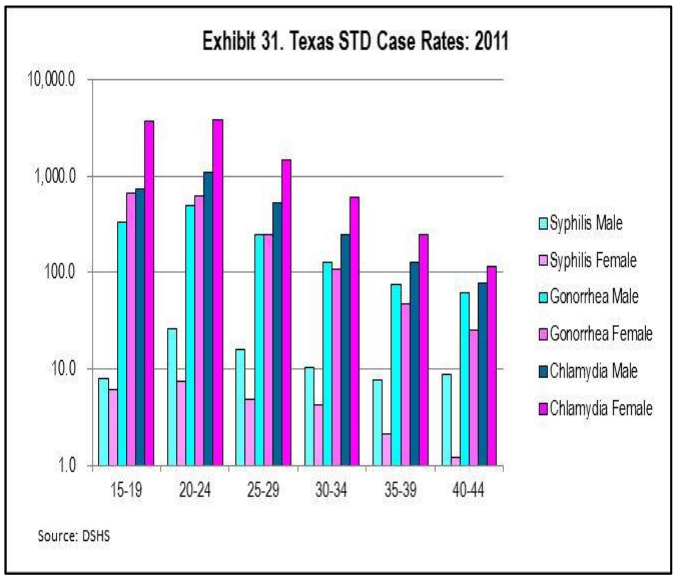


Infectious Diseases Related to Drug Abuse

The Texas DSHS estimated in 2010 that 1.8 percent of Texans were infected with hepatitis C virus (HCV). The number of acute HCV cases has fluctuated from 57 in 2006, to 71 in 2007, to 59 in 2008, to 36 in 2009, and 35 in 2010.

The case rate for syphilis increased from 2.9 per 100,000 in 2003 to 4.9 per 100,000 in 2010.

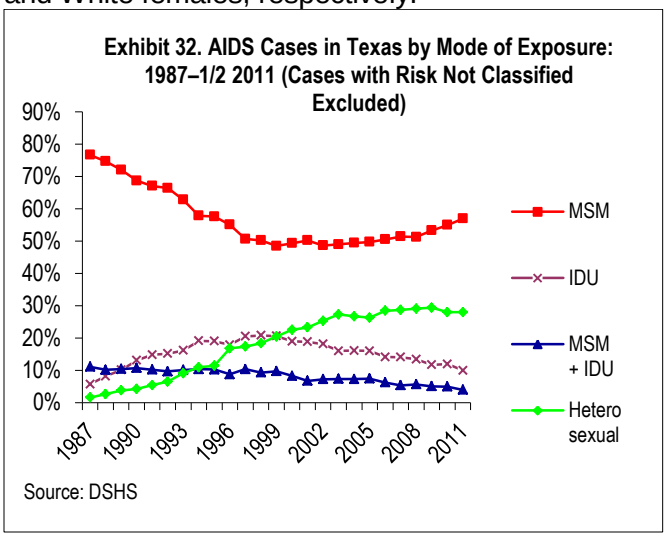
Exhibit 31 shows the 2011 case rates by age group. The case rates for gonorrhea and chlamydia were higher for females between the ages of 15 and 24; the case rates for syphilis were higher for males than females for all age groups.



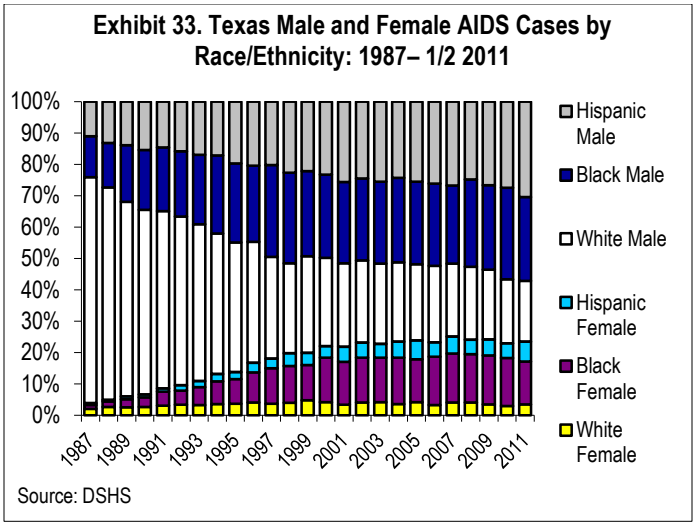
AIDS Cases

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 57 percent in the first half of 2011 (exhibit 32). Of the 2011 cases, 28 percent reported heterosexual mode of exposure, and 11 percent were injection drug users (IDUs). The proportions of cases involving IDUs or IDUs/MSM have decreased over time.

Persons infected with AIDS were increasingly likely to be people of color. Of the AIDS cases in the first half of 2011, 40 percent were Black; 23 percent were White; and 37 percent were Hispanic (an increase from 31 percent in 2009) (exhibit 33). The rate of Blacks living with HIV/AIDS was over 4 times the rate for Whites. The rate of new HIV diagnoses in Black females was 10 to 14 times higher than rates in Hispanic and White females, respectively.



The proportion of IDUs entering DSHS-funded treatment programs decreased from 32 percent in 1988 to 14 percent in 2011.



Appendix 1. Characteristics of Clients at Admission to DSHS-Funded Treatment Programs: 2011*

	Total Admissions	% of All Admissions	Average Age	Av. Lag (Yrs) 1st Use to Admission	% Black	% White	% Hispanic
All Drugs	74435	100.0	32.6	14.3	18.9	75.9	34.78
Alcohol	21556	29.0	38.8	23.2	12.8	82.0	32.1
Alprazolam	992	1.3	27.4	7.3	16.9	54.6	28.5
Amphetamines	2066	2.8	33.2	12.4	2.9	92.5	13.8
Cannabis	17723	23.8	22.5	8.5	27.5	67.0	46.9
Cocaine	4990	6.7	33.7	12.2	28.5	65.6	46.8
Crack Cocaine	5632	7.6	40.9	15.7	52.2	45.6	18.2
Codeine	109	0.2	29.6	8.8	40.4	57.8	13.8
Ecstasy	137	0.2	22.8	4.3	29.9	67.2	34.3
Heroin	9542	12.8	32.4	11.2	7.4	84.3	50.8
Hydrocodone	3102	4.2	33.7	9.2	8.3	88.6	17.8
Hydromorphone	222	0.3	33.4	7.6	0	97.7	0
Methamphetamine	4413	5.9	32.1	11.4	1.8	95.6	15.8
Non-Rx Methadone	180	0.2	33.8	6.9	2.2	93.9	14.4
Other Benzodiazepines	113	0.2	30.5	9.8	13.3	85.8	27.4
Other Opiates	2047	2.8	33.6	10.3	5.4	78.9	20.3
Oxycodone	342	0.5	31.0	7.4	1.5	96.5	9.6
PCP	595	0.8	29.7	9.7	91.3	5.9	5.0

	% Male	% Using Needles	% Use Daily	% Employed Full time	% No Legal Problem	% Homeless	Av.Yrs Education
All Drugs	59.4	13.9	40.7	12.0	49.4	10.6	12.0
Alcohol	67.9	0.0	45.6	18.2	47.4	23.2	13.0
Alprazolam	34.3	0.0	41.7	5.9	41.8	7.3	12.5
Amphetamines	48.3	34.7	28.0	13.9	33.0	12.4	12.7
Cannabis	71.1	0.0	24.8	12.4	22.4	8.5	11.5
Cocaine	52.2	8.2	19.1	14.8	39.5	12.2	12.3
Crack Cocaine	46.7	0.5	41.6	6.4	51.8	15.7	12.6
Codeine	64.2	0.0	33.9	13.8	26.6	8.8	13.0
Ecstasy	53.3	0.0	15.3	8.0	32.1	4.3	12.0
Heroin	59.4	78.7	78.7	5.2	65.7	11.3	12.3
Hydrocodone	34.8	0.4	71.3	9.5	62.7	9.2	13.0
Hydromorphone	46.8	88.8	77.0	7.7	67.1	7.6	13.4
Methamphetamine	37.5	36.1	29.5	12.0	43.0	11.4	12.6
Non-Rx Methadone	48.3	6.1	73.3	8.9	63.9	6.9	13.5
Other Benzodiazepines	41.6	0.0	53.1	9.7	51.3	9.8	13.1
Other Opiates	47.1	16.9	68.2	11.1	62.8	10.3	13.2
Oxycodone	56.7	16.7	64.6	9.9	68.1	7.4	13.5
PCP	43.9	0.0	27.4	8.4	39.3	9.7	12.3

*Only drugs with more than 100 admissions included in this table.