

# **NDEWS** *National Drug Early Warning System*

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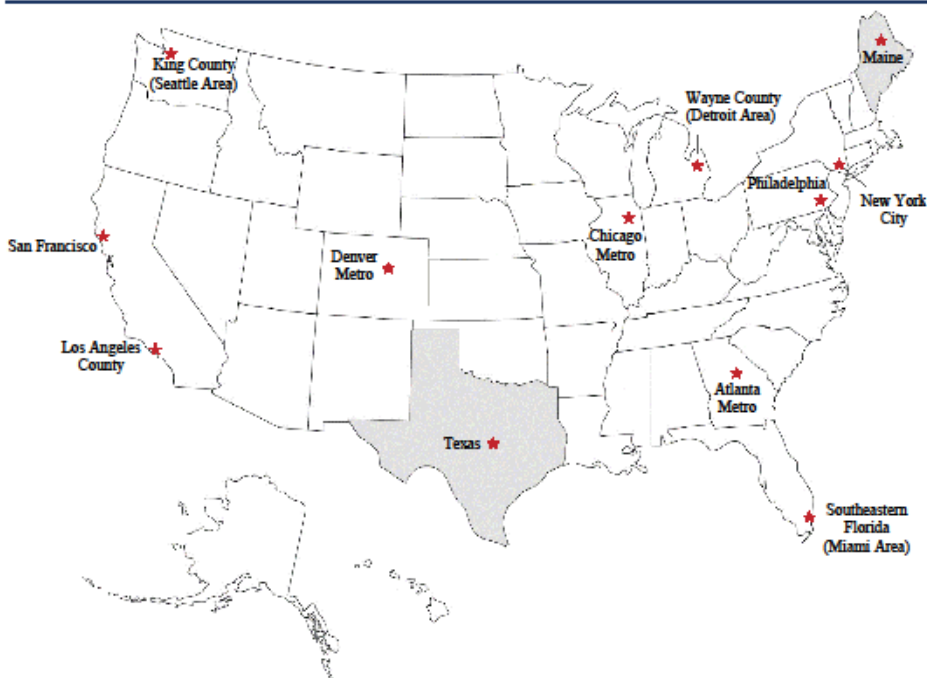
Funded at the Center for Substance Abuse Research by the National Institute on Drug Abuse

## National Drug Early Warning System (NDEWS) Sentinel Community Site Profile 2015: Texas

August 2015

NDEWS Coordinating Center

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# National Drug Early Warning System (NDEWS)

## Sentinel Community Site Profile Overview

The National Drug Early Warning System (NDEWS) was launched in 2014 with the support of the National Institute on Drug Abuse. The Center for Substance Abuse Research (CESAR) at the University of Maryland manages the NDEWS Coordinating Center and has recruited a team of nationally recognized experts to collaborate on building NDEWS. During 2015, 12 Sentinel Community Sites (SCS) were established, each with an expert Sentinel Community Epidemiologist (SCE). This inaugural Sentinel Community Site Profile contains three sections:

- ◇ The *Profile Snapshot* presents selected indicators of substance use, consequences, and availability;
- ◇ The *Drug Use Patterns and Trends* contains the SCE's review of important findings and trends; and
- ◇ The *Appendix Data Tables* contains a set of data tables prepared by Coordinating Center staff and disseminated to each SCE for review in preparing their profiles.

This entire Profile necessarily relies on using a variety of data sources produced by governmental and local agencies and these sources often measure geographic areas that differ from the intended catchment area of a Sentinel Site. For example, some surveys measure statewide patterns while others provide county level estimates. Wherever appropriate, a note is provided specifying the area covered by the findings presented.

The Annual Profiles for the 12 Sentinel Community Sites and detailed information about NDEWS can be found on the NDEWS website at [www.ndews.org](http://www.ndews.org).

# National Drug Early Warning System (NDEWS)

## Texas Sentinel Community Site

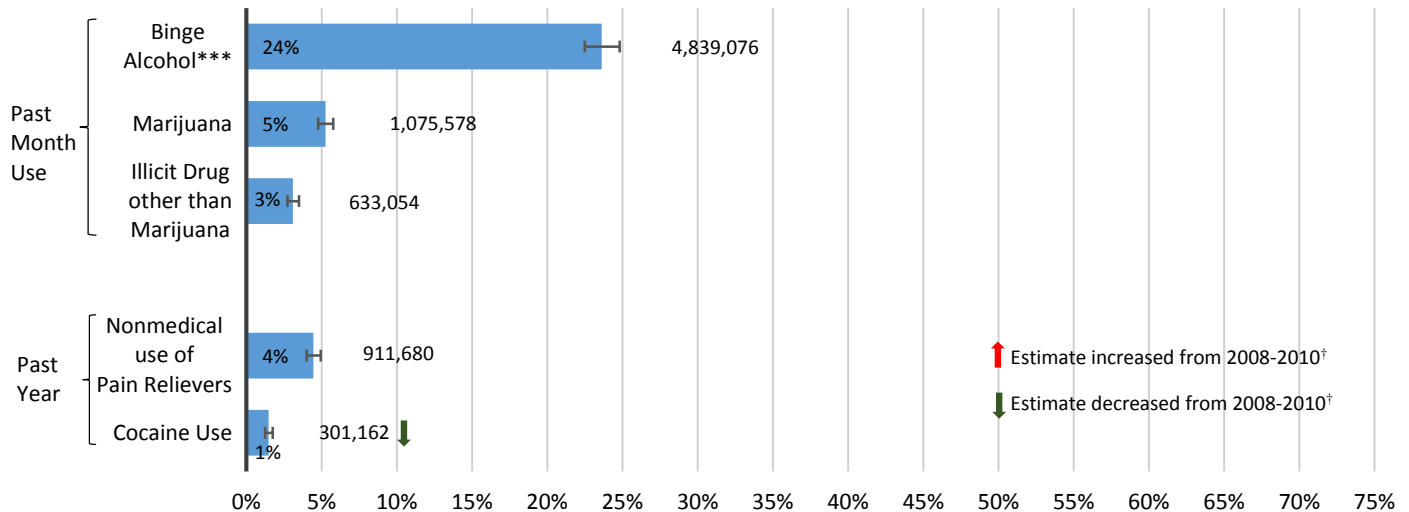
### Profile Snapshot, 2015

#### Substance Use

*National Survey on Drug Use and Health (NSDUH): Survey of U.S. Population\**

#### Persons 12+ Years Reporting Selected Substance Use, Texas, 2010-2012

Estimated Percent, 95% Confidence Interval, and Estimated Number of Persons\*\*



\*U.S. Population: U.S. civilian non-institutionalized population. \*\*Estimated Number: Calculated by multiplying the prevalence rate and the population estimate of persons 12+ years (20,487,199) from Table C1 of the NSDUH Report. \*\*\*Binge Alcohol: Defined as drinking five or more drinks on the same occasion.

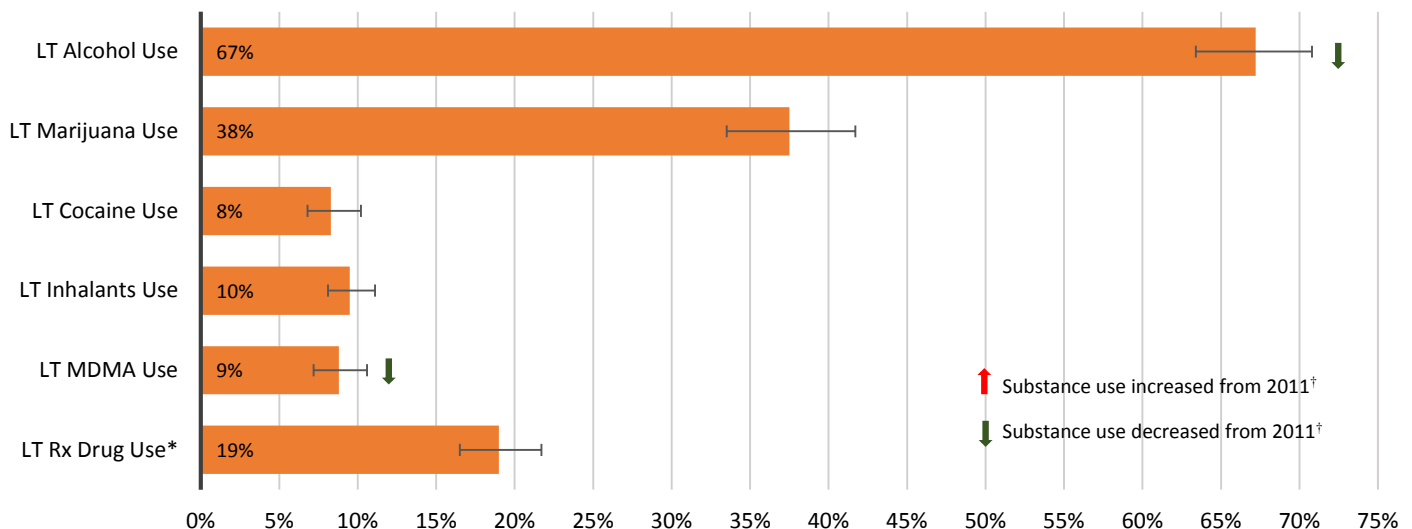
†Statistically significant change:  $p < 0.05$ .

Source: Adapted by the NDEWS Coordinating Center from data provided by SAMHSA, NSDUH. Annual averages based on 2010, 2011, and 2012 NSDUHs.

*Youth Risk Behavior Survey (YRBS): Survey of Student Population*

#### Public High School Students Reporting Lifetime (LT) Use of Selected Substances, Texas, 2013

Estimated Percent and 95% Confidence Interval



\*LT Rx Drug Use: Defined as ever took prescription drugs without a doctor's prescription.

†Statistically significant change:  $p < 0.05$  by t-test.

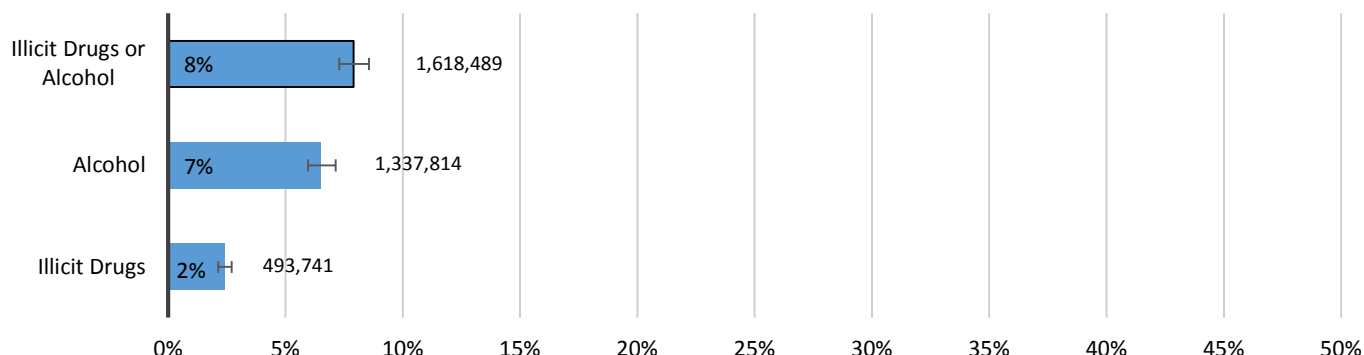
Source: Adapted by the NDEWS Coordinating Center from data provided by CDC, 2001-2013 high school YRBS data.

# Substance Use Disorders and Treatment

## National Survey on Drug Use and Health (NSDUH): Survey of U.S. Population\*

### Dependence or Abuse\*\* in Past Year Among Persons 12+ Years, Texas, 2010-2012

Estimated Percent, 95% Confidence Interval, and Estimated Number of Persons\*\*\*



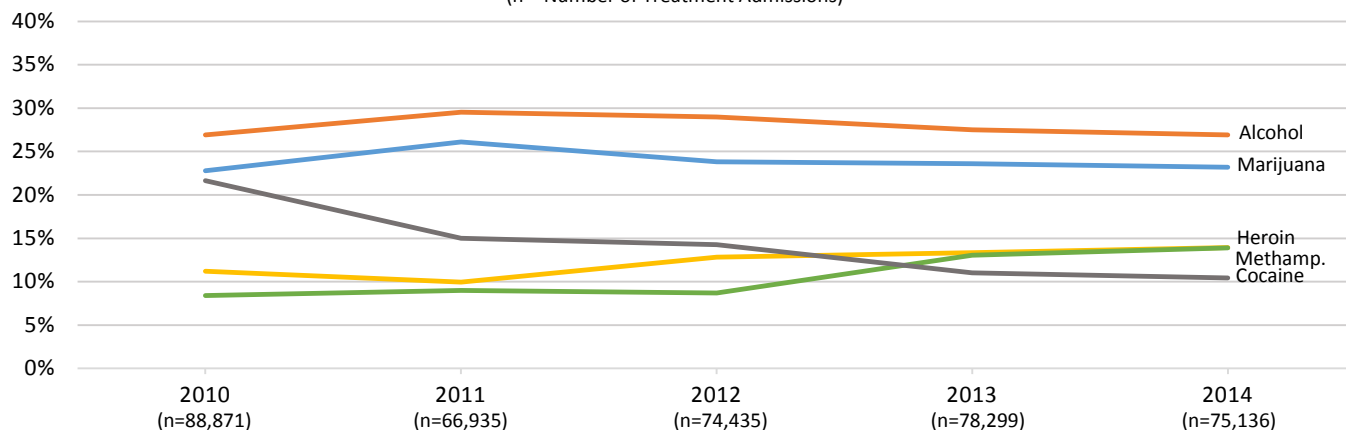
\*U.S. Population: U.S. civilian non-institutionalized population. \*\*Dependence or Abuse: Based on definitions found in the 4<sup>th</sup> edition of the *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV)*. \*\*\*Estimated Number: Calculated by multiplying the prevalence rate and the population estimate of persons 12+ years (20,487,199) from Table C1 of the NSDUH Report.

Source: Adapted by the NDEWS Coordinating Center from data provided by SAMHSA, NSDUH. Annual averages based on 2010, 2011, and 2012 NSDUHs.

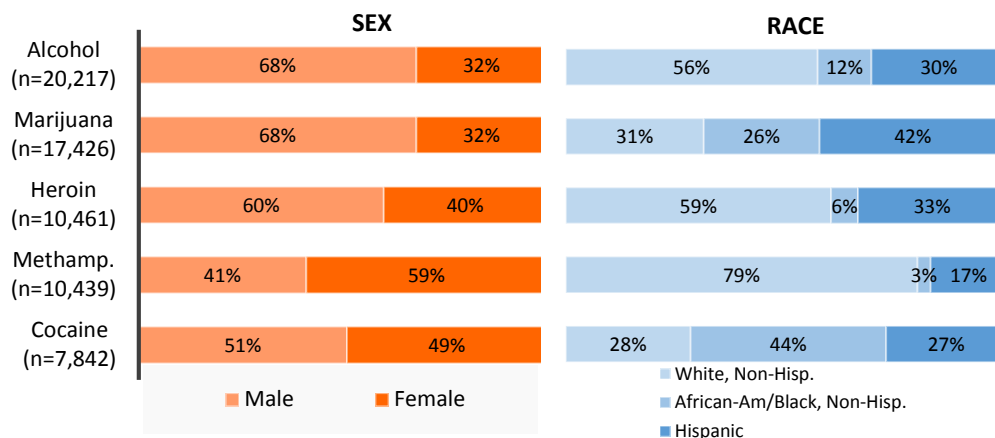
## Treatment Admissions Data from Local Sources

### Trends in Treatment Admissions\*, by Primary Substance of Abuse, Texas, 2010-2014

(n = Number of Treatment Admissions)



### Demographic Characteristics of Treatment Admissions\*, Texas, 2014



\*Treatment Admissions: Includes admissions to Department of State Health Services (DSHS)-funded programs. Percentages may not sum to 100 due to rounding.

Source: Data provided by the Texas NDEWS SCE and the Texas Department of State Health Services (DSHS).

# Law Enforcement Drug Seizures

## National Forensic Laboratory Information System (NFLIS)

### Drug Reports\* for Items Seized by Law Enforcement in Texas in 2014 National Forensic Laboratory Information System (NFLIS)

#### Top 10 Drug Reports and Selected Drug Categories

Drug Identified	Number (#)	Percent of Total Drug Reports (%)
<b>TOTAL Drug Reports</b>	<b>97,017</b>	<b>100%</b>
<b>Top 10 Drug Reports</b>		
Methamphetamine	26,370	27.2%
Cannabis	23,614	24.3%
Cocaine	18,236	18.8%
Heroin	3,569	3.7%
Alprazolam	3,350	3.5%
No Controlled Drug Identified	3,126	3.2%
Hydrocodone	2,599	2.7%
XLR-11 (1-(5-fluoropentyl-1H-3-YL)(2,2,3,3-tetramethylcyclopropyl)methanone)	1,195	1.2%
Phencyclidine	860	0.9%
AB-FUBINACA	798	0.8%
<b>Top 10 Total</b>	<b>83,717</b>	<b>86.3%</b>
<b>Selected Drugs/Drug Categories</b>		
Synthetic Cannabinoids	3,509	3.6%
Synthetic Cathinones	625	0.6%
2C Phenethylamines	268	0.3%
Piperazines	191	0.2%
Tryptamines	77	0.1%
Fentanyl & Fentanyl Analogs	29	<0.1%

#### Top 5 Drugs, by Selected Drug Category (% of Category)\*\*

##### Synthetic Cannabinoids (n=3,509)

XLR-11 (34%)  
AB-FUBINACA (23%)  
AB-PINACA (12%)  
PB-22 (11%)  
AB-CHMINACA (7%)  
Other (13%)

##### Synthetic Cathinones (n=625)

Methylone (33%)  
Ethylone (33%)  
Alpha-PVP (21%)  
Dimethylone (3%)  
Butylone (3%)  
4-MEC (3%)  
Other (4%)

##### 2C Phenethylamines (n=268)

2C-C-NBOME (46%)  
2C-B-NBOME (34%)  
2C-I-NBOME (19%)  
2C-I (1%)  
2C-B (0.4%)

\*Drug Reports: Drug that is identified in law enforcement items, submitted to and analyzed by federal, state, or local forensic labs, and included in the NFLIS database. The NFLIS database allows for the reporting of up to three drugs per item submitted for analysis. The data presented are a total count of first, second, and third listed reports for each selected drug item seized and analyzed.

\*\*Percentages may not sum to 100 due to rounding.

**Source:** Adapted by the NDEWS Coordinating Center from data provided by the U.S. Drug Enforcement Administration (DEA), Office of Diversion Control, Drug and Chemical Evaluation Section, Data Analysis Unit, May 2015.

# National Drug Early Warning System (NDEWS)

## Texas Sentinel Community Site

### Drug Use Patterns and Trends, 2015

Jane C. Maxwell, Ph.D.

#### SCS Highlights

- Methamphetamine indicators are now as high as or higher than they were before the pseudoephedrine ban. Since 2013, methamphetamine has been the drug most commonly reported by forensic laboratories, outranking both cocaine and cannabis. It is ranked by the DEA as the #1 threat in the Dallas area, #2 in the Houston area, and #4 in the El Paso area. The methamphetamine made in Mexico using the phenyl-2-propanone (P2P) method is increasingly pure and more potent, with more reports by outreach workers of use by men who have sex with men and high-risk heterosexuals which will result in increases in STD and HIV. Customs and Border Patrol reports show the seizures along the western part of the Texas border are up by 260% and up by 420% on the lower border. Methamphetamine dissolved in water is a method of importation into the U.S., where laboratories on the Texas side convert it back into ice. The increased availability of the drug has led to a decrease in prices; an eight-ball that cost \$400 in the summer of 2014 was selling for \$225 in February 2015.
- Heroin users are becoming younger and less likely to be people of color. Indicators have been rising and the increase of 352% in heroin seizures on the western part of the border may point to a new supply chain to provide heroin to West Texas and New Mexico. The new Mexican “white” heroin transits through Texas to the East but it is not as potent as the South American white.
- Cocaine indicators are low due to changes in the international market, with fewer coca bushes being grown in the Andes and more product diverted to Europe. However, based on 2013-2014 forensic data showing increased amounts of cocaine being identified along the border, there may be increases in the supply of cocaine in the future.
- The cannabis situation has been influenced by both supply and demand. Supply has seen market changes due to a drought in Mexico, gang warfare, and increased border protection. This limited the availability of Mexican cannabis, which led to increases in home-grown and hydroponic cannabis in Texas and now the availability of high quality cannabis from Colorado. The demand for the drug has been influenced by changes in patterns of use with blunts and now electronic cigarettes, “vaping” of hash oil, and “shatter.”
- The synthetic cannabinoid situation is marked by sporadic clusters of overdoses, which may be due to amateur chemists mixing the drugs or bad batches of precursor chemicals. Given the large number of cases reported along the lower border, importation of chemicals from Mexico may be a factor. The chemical ingredients have changed from JWH varieties to AB-CHMINACA, AB-FUBINACA, AB-PINACA, and PB-22. Spikes in overdoses continue with \$5 sales by street dealers.
- “Other Opiate” indicators are trending downward but pill mills remain a problem. Tramadol is not as abused in Texas as elsewhere, but with the rescheduling of hydrocodone to Schedule II, there is the possibility that tramadol use will increase since it is a Schedule IV drug. Fentanyl abuse and misuse involves the transdermal patches, not the fentanyl powder which is being mixed with the white South American heroin on the East Coast.
- MDMA indicators are down but “Molly” has become a more potent and dangerous drug with one death at Austin City Limits music festival last fall.
- PCP indicators are up, with more use now by females than males. The number of NFLIS toxicology lab items identified between 2006 and 2014 has tripled.
- There was a significant increase in the number of phenethylamines (2-C and NBOME) items reported by Texas forensic toxicology laboratories. The piperazine TFMPP is also trending upward.
- Synthetic cathinone users are shifting from mephedrone, methylone, and pentedrone to ethylone.
- Border-related differences in patterns of use are seen as students on the border report more use of marijuana, cocaine, and heroin while non-border students report more use of methamphetamine. The same patterns of drug use are seen in the treatment admissions data.
- STD-HIV-AIDS--2014 data are not available until July 1, 2015, but there are increasing reports from street outreach workers about risky sexual practices while using methamphetamine and reports of “blood shots” (injecting the blood of another user to maximize the amount of drug injected) could lead to future epidemics.

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## Area Description

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The population of Texas in 2010 was 25,639,373 persons; with 45% White, 12% Black, 38% Hispanic, and 5% “Other.” The population is evenly divided among males and females, with 81% having a high school degree or higher. Unemployment was 5.2%, median income on 2013 inflation-adjusted dollars was \$51,900, and 18% had income in the past year below the poverty level.

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.

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## Drug Use Patterns and Trends

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### ALCOHOL

Alcohol is the primary drug of abuse in Texas. In 2014, 51% of Texas secondary school students in grades 7–12 had ever used alcohol, and 25% 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, 9% of all secondary students said that when they drank, they usually drank five or more beers at one time, and 9% reported binge drinking of liquor.

The 2013 Youth Risk Behavior Survey (YRBS) reported that 67% of Texas high school students in grades 9–12 had ever drunk alcohol; 36% had drunk alcohol in the past month; and 21% had drunk five or more drinks in a row in the last month. In 2013, 20% of females and 22% of males reported binge drinking. The survey also found that the proportion of Texas high school seniors who had driven while drunk decreased from 29% in 1990 to 10% in 2014, but the % who had driven while “high” from drugs exceeded the number driving drunk in 2012 (16%) and 2014 (11%). The 2012–2013 NSDUH estimated that 46.7% of all Texans age 12 and older had drunk alcohol in the past month, compared with 52.1% nationally. In 2012–2013, 6.7% of Texans age 12 and older were estimated to be alcohol dependent or abusers in the past year.

In 2014, 27% of all clients admitted to publicly funded treatment programs in Texas had a primary problem with alcohol (Appendix 4a and 4b). The characteristics of alcohol admissions have changed over the years. In 1988, 82% of the clients were male, compared with 68% in 2014. The average age at admission increased from 33 to 39 years in the same time period.

New methods of using alcohol are being spread through social media, including inhaling or “smoking” alcohol by pouring it over dry ice and by insertion of alcohol-soaked tampons to achieve a quick intoxication while avoiding calories. No reports of these methods have been received by the Texas poison control centers.



## MARIJUANA

Marijuana indicators remained mixed (Exhibit 1), but there have been significant changes in the source and methods of using the drug. Since 2012, supplies from Mexico have decreased due to a drought in Mexico, gang warfare, and increased border security, which resulted in a 19% decrease in kilograms seized in the West Texas border area between 2010 and 2014 and a 29% decrease on the South Texas border, according to Customs and Border Protection in the Department of Homeland Security. With the decrease in Mexican imports, there has been an increase in indoor and hydroponic grows in the state, and the National Institute on Drug Abuse (NIDA) Potency Monitoring Project reported that delta-9-tetrahydrocannabinol (THC) potency in combined U.S. marijuana and sinsemilla samples has increased from 3.06% in 1995 to 11.8% in 2014. DEA in 2015 is noting an increase in high-grade marijuana imported into Texas from Colorado.

The use of blunt cigars (cheap cigars split open with cannabis replacing the tobacco), flavored “papers,” and rolling “cones” has driven the increase in the use of marijuana among secondary school students.

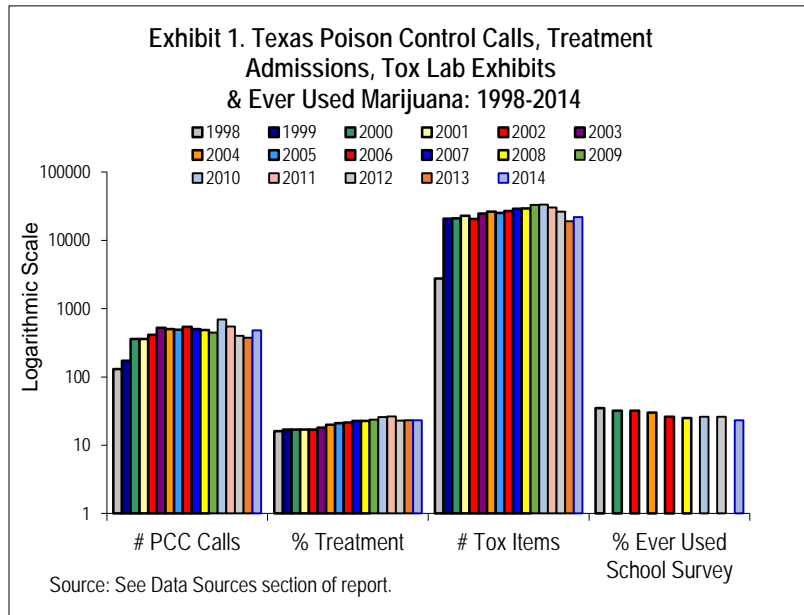
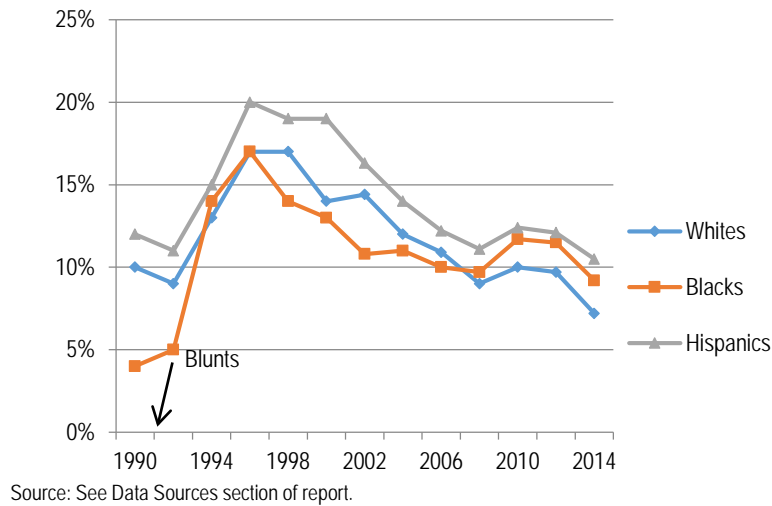


Exhibit 2 shows the impact of blunt cigars after they appeared in Texas in 1993. Since then, rates have increased for all race/ethnic groups. By 2008, however, the levels for Whites and Hispanics were back to their 1992 levels, while the levels for Black students are still above the rates prior to the introduction of blunts. Use of electronic cigarettes (“vapes”) filled with tobacco or hash oil (“wax,” “shatter,” or “budder”) is popular and in 2014, out of 483 cases of human exposure to marijuana

reported by the Texas poison centers, 8 involved exposure to marijuana brownies or cookies, 5 involved exposure to hash oil or “wax,” and 12 reported use of marijuana dipped in formaldehyde. Two-thirds (67%) of these cases were male and the average age was 24.

**Exhibit 2. Percent of Texas Secondary Students Who Had Used Marijuana in the Past Month by Ethnicity: 1990-2014**



Of the patients entering substance abuse treatment services in 2014, the average age was 23 years, 68% were male, 42% were Hispanic, 31% were White, and 26% were Black. Some 16% worked full time, 74% had legal problems, and they reported using for nine years prior to entering treatment.

Domestic cannabis in 2014 cost between \$25 and \$40 per ounce while Mexican cannabis cost between \$10 and \$60, and hydroponic cost between \$250 and \$2400 per ounce.

## SYNTHETIC CANNABINOIDS

Cannabis homologs (synthetic cannabis or cannabimimetics), 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 other persons required to submit to drug tests. On September 1, 2011, Texas banned many of the synthetic cannabinoids and the U.S. banned more on July 9, 2012. Some of these compounds were 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 gas stations and specialized stores, such as “head shops,” and marketed as herbal incense.

The 2014 Texas School Survey reported 41% of the students in grades 7-12 had never heard of synthetic marijuana, only 25% thought it would be impossible to obtain, and 10% thought it would be very easy to obtain. Some 7% of students had ever used it.

From 2010 through 2014, the Texas Poison Center Network received 2,995 calls involving human exposures to synthetic cannabinoids. Of the calls to the Texas poison centers, the age range was between 1 and 75 years; 45% were younger than 20 years; 77% were male; and 85% had either misused or abused the substance. Of these calls, 8% resulted in “major” or life-threatening conditions; four deaths from synthetic cannabinoids were reported to the Texas poison control centers between 2010 and 2014. Symptoms associated with use of synthetic cannabinoids 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.

At times there have been large spikes in the number of cases per month from 2010 to 2014, which may be due to local “recipes” for mixing the raw ingredients which produce serious side effects, or mislabeled or unknown precursor chemicals imported into the U.S. A recent indictment of a chain of head shops reported there was one chemist who was teaching “helpers” to mix chemicals, which could be a factor in the sudden increases in the number of cases or in more serious cases. In addition, 21% of the items identified in 2014 were in the South Texas region, which may be an indication of the drugs or the raw chemicals coming in from Mexico.

In 2014, 491 persons with a primary problem with synthetic cannabinoids entered Texas treatment programs, as compared to 156 in 2012. The average age was 24 years; 51% were White and 40% were Hispanic. Seventy% were male, and 41% used the substance daily.

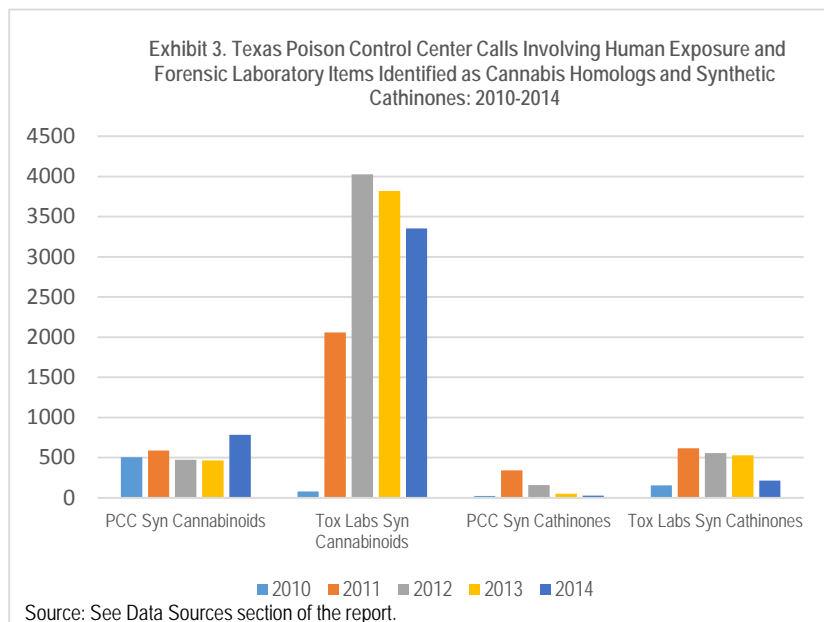
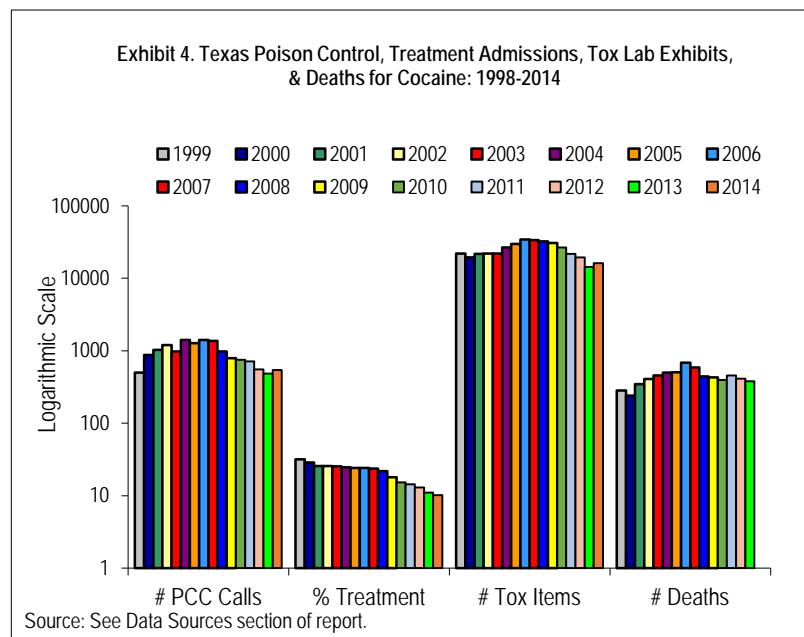


Exhibit 3 shows the number of synthetic cannabinoid items seized and analyzed between 2010 and 2014. The number of varieties of these synthetics increased from 6 in 2010 to 30 in 2014. In addition, the varieties of the drugs changed each year. In 2010, 99% of the exhibits were JWH varieties; less than 1% were JWH in 2014, when the most common varieties were AB-FUBINACA, AB-PINACA, and PB-22.

HIV outreach workers report increasing use of synthetic cannabinoids with severe reactions, including psychotic breakdowns.

## COCAINE

Cocaine indicators have decreased (Exhibit 4). 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. HIV/AIDS outreach workers report some crack users are transitioning to methamphetamine because it is more available and the “high” lasts longer. Cocaine no longer dominates the forensic data; it ranked as the #1 drug identified by the laboratories from 1997 to



2008; it now ranks third, behind methamphetamine and cannabis (Appendix Table 7a).

There has been a 32% decrease in kilograms of cocaine seized on the West Texas Border from 2010 to 2014 and a 33% decrease on the South Texas Border, according to Customs and Border Protection. However, in the forensic laboratories which serve the Lower Border (McAllen and Laredo), cocaine was the most common drug identified in 2014. This trend may be an early indication that the supply of

cocaine may be increasing with more cocaine items identified although the weight in kilograms has decreased.

Texas Poison Center Network abuse and misuse calls involving the use of cocaine peaked at 1,410 in 2008, and then declined to 542 in 2014 (Exhibit 2). In 2014, the average age of a poison control cocaine case was 34 years and 71% were male.

Cocaine (both crack and powder) represented 10% of all admissions to DSHS-funded treatment programs in 2014, down from 35% in 1995. The characteristics of persons admitted to treatment in 2014 are

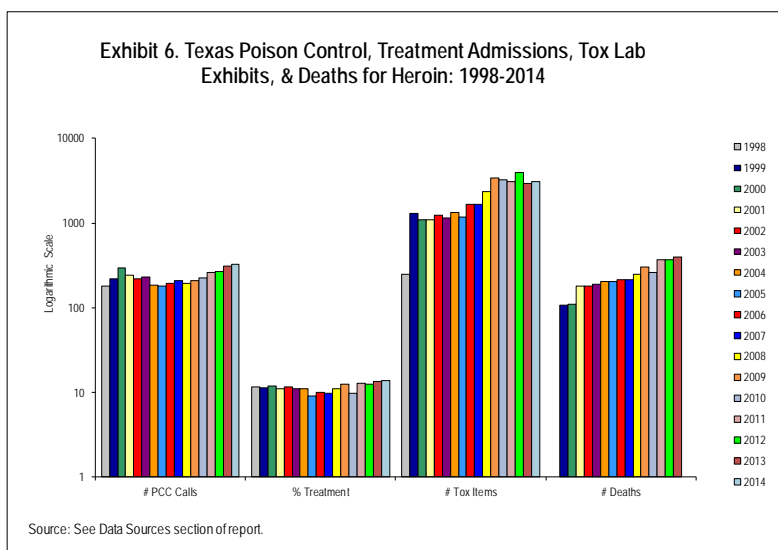
Exhibit 5. Treatment with a Primary Problem with Cocaine by Route of Administration: 2014 (n=7,842)				
	Inject	Inhale	Smoke	Cocaine All <sup>a</sup>
% of Cocaine Admits	61%	4%	33%	100%
Average Age	42	4	33	39
% Male	50	54	53	51
% Black	55	15	28	44
% White	29	63	24	28
% Hispanic	15	19	47	27
Lag-1st Use to Tmt-Yrs.	18	21	12	16
% CJ Involved	44	43	56	48
% Employed Full Time	7	9	20	12
% Homeless	20	5	18	13
<sup>a</sup> Total includes clients with "other" routes of administration				
Source: See Data Sources section of report.				

shown in Exhibit 5. Notice crack cocaine smokers are the oldest and most likely to be Black, while cocaine inhalers are the youngest and most likely to be Hispanic.

A gram of powder cocaine cost between \$20 and \$150 and an ounce cost \$300-\$1,600 in 2014. A rock of crack cocaine cost \$10-\$100 and an ounce cost \$550-\$1,600.

## HEROIN

Heroin use is growing among teenagers and young adults. This was first noticed with the powdered “cheese heroin” mixture of heroin and Tylenol 2® in Dallas in the mid-2000s, but heroin use indicators



by youth and young adults are now increasing statewide. Outreach workers in Laredo now report use of “Mexican Queso” which is heroin, Xanax, and Excedrin PM®. In addition, the proportion of White treatment admissions has increased from 44% in 1986 to 59% in 2014. 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. Mixing fentanyl with

black tar is extremely rare. Heroin indicators document a 352% increase in kilograms of heroin seized on the West Texas Border and a 14% decrease on the South Texas Border, according to Customs and Border Protection. Some of the creamy white heroin produced in Mexico, which has lower potency than the white South American, transits through Texas on its way to the markets in the Northeast.

Calls to the Texas Poison Center Network involving exposures to heroin peaked at 327 in 2014 (Exhibit 6). The average age of those seeking assistance was 31 years and 70% were male. The characteristics of heroin users in treatment varied by route of administration, as Exhibit 7 illustrates. Over time, the proportion of White admissions has increased from 44% in 1986 to 59% in 2014; 77% reported no secondary drug of abuse in 2014. Most heroin addicts entering treatment inject the drug; smoking black tar heroin is very rare in Texas because the chemical composition tends to flare and burn rather than smolder. 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 suggests 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

Exhibit 7. Characteristics of Clients Admitted to DSHS-Funded Treatment with a Primary Problem with Heroin by Route of Administration: 2014 (n=10,461)

	Inject	Inhale	Smoke	All <sup>a</sup>
% of Heroin Admits	81%	16%	2%	100%
Average Age	34	31	30	34
% Male	62	52	58	60
% Black	4	14	5	6
% White	64	40	51	59
% Hispanic	31	45	43	33
% CJ Involved	31	33	32	31
% Employed Full Time	6	7	9	6
% Homeless	20	8	7	18
Lag-1st Use to Tmt-Yrs.	12	9	7	11

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

Source: See Data Sources section of report.

to injecting—increasing their risk of hepatitis C and HIV infection, becoming more impaired, and entering treatment later. The average age of those who died from heroin declined from 40 years in 2008 to 36 years in 2014, which is evidence of the increasing use by young adults. Of the 2014 deaths, 60% involved only heroin and 14% also involved cocaine; 58% were White, 36% Hispanic, and 6% Black.

A gram of black tar heroin cost \$60--\$225; a kilogram cost \$20,000 to \$80,000, and Mexican brown, which is black tar turned into powder, cost \$90-100 for a gram and \$160-\$1600 per ounce in 2014.

## PREScription/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 term “synthetic narcotic” refers to drugs such as fentanyl and Dilaudid that are not made from natural materials but from chemicals.

A 2014 report from the Centers for Disease Control and Prevention compared the rates of prescribing and dispensing opioid pain relievers among the states in 2012. The mean rate for all the states for opioid pain relievers was 83 per 100,000 persons, as compared to 74 per 100,000 persons 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 10 nationally and 4 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 nationally and 2 in Texas, and the rate for prescribing benzodiazepines was 38 nationally and 30 in Texas (Paulozzi et al., MMWR, 7/4/14).

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. Codeine can be used to lace synthetic cannabis cigarettes.

Tramadol is not as abused in Texas as elsewhere, but with the rescheduling of hydrocodone to Schedule II, there is the possibility that use of tramadol will increase, since it is a Schedule IV drug and may be more available than hydrocodone. Likewise, fentanyl abuse and misuse involves the transdermal patches, not fentanyl powder which is being mixed with the white South American heroin on the east coast.

Exhibit 8 shows the indicators in the use of various opioids. Of the poison center cases, the average age of a buprenorphine case was 28 years, for hydrocodone, 36 years, for methadone, 38 years, and for oxycodone, 35 years.

Treatment admissions for other opioids have decreased from their high points in 2008-2009, and the number of opioid items seized and identified in forensic laboratories has fallen. Nine percent of all clients who entered publicly funded treatment during 2014 had a primary problem with opioids other than heroin, compared with 1% in 1995. 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 buprenorphine and codeine, were more likely to be female. Persons younger than 30 years of age comprise 37% of the treatment admissions for other opiates.

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.

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. Pill crews continued to recruit “patients” to fraudulently obtain multiple prescriptions from pain clinics.

Exhibit 8. Indicators of Abuse of Opioids in Texas: 1998–2014

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<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	269
Fentanyl			9	1	3	11	17	11	139	155	120	143	109	132	110	98	120
Hydrocodone			236	123	348	465	747	431	657	703	723	748	838	869	814	645	530
Methadone			66	91	46	103	378	477	402	1081	1169	1134	1104	794	575	421	342
Oxycodone			62	99	68	67	112	50	68	67	81	74	101	95	129	74	63
<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	178
"Other Opiates" <sup>a</sup>	553	815	890	1,386	2084	2794	3433	3482	3903	4529	5221	5844	2679	2047	1851	1972	1923
Codeine <sup>a</sup>														109	102	81	99
Hydrocodone <sup>a</sup>														3102	3277	2972	2583
Hydromorphone <sup>a</sup>														222	275	211	188
Oxycodone														342	323	326	323
<b>Deaths with Mention of Substance (DSHS)<sup>b</sup></b>																	
Other Opioids	118	151	214	307	360	359	401	564	515	440	534	540	521	480	452		
Synthetic Narcotics	49	46	77	117	76	94	86	111	118	86	166	156	114	121	112		
Methadone	24	50	89	136	155	150	199	223	195	173	177	180	179	142	128		
<b>Drug Exhibits Identified by Forensic Toxicology Laboratories (NFLIS)</b>																	
Hydrocodone	61	530	661	1,010	1162	1701	2038	2166	3201	3835	3663	4242	5365	4943	3970	2198	2398
Methadone	4	20	23	52	62	79	150	184	204	251	302	288	318	320	236	205	157
Oxycodone	11	41	77	150	164	232	309	339	335	333	397	456	529	458	438	271	284
Buprenorphine	0	9	12	6	10	11	6	6	13	25	43	89	137	133	88	53	79

<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> Preliminary data on drug deaths is not yet available

The number of reports of opioids from items analyzed by forensic laboratories has decreased over time due to rescheduling of hydrocodone to Schedule II, creating abuse-resistant tables to deter crushing and inhaling, public information campaigns about abuse of prescription drugs, education for prescribers, and efforts to decrease pill mills (Exhibit 8).

### CARISOPRODOL (SOMA®)

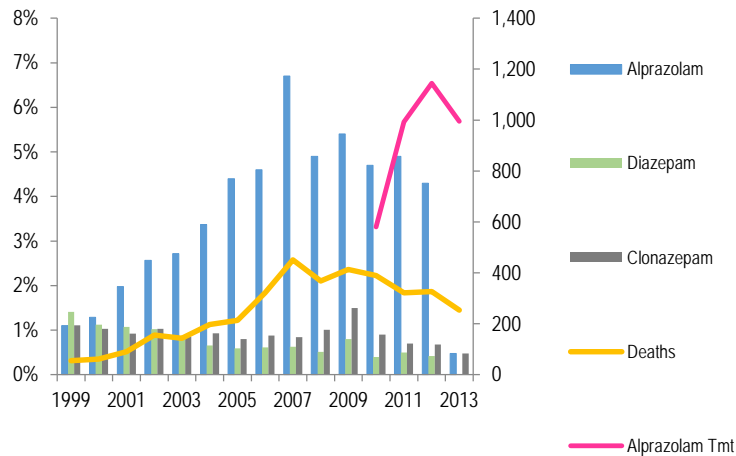
Carisoprodol is not an opiate but it is often abused in combination with hydrocodone and alprazolam as the "Houston Cocktail" or "Holy Trinity." Texas poison control centers confirmed that exposure cases of intentional misuse or abuse of this muscle relaxant increased from 83 in 1998 to 114 cases in 2014; the average age was 38 years.

### BENZODIAZEPINES

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



Exhibit 9. Benzodiazepines as Percentage of All Items Identified by Tox Labs, Number of Deaths & Treatment Admissions: 1998-2013



Source: See Data Sources section of report.

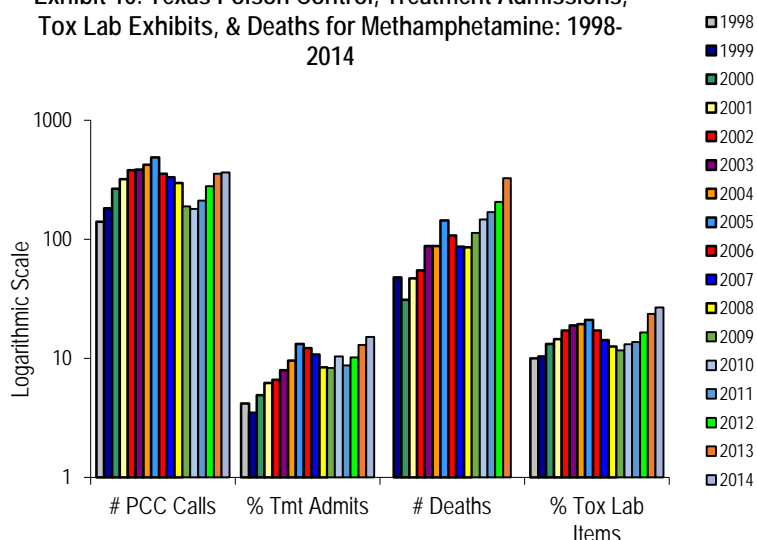
Exhibit 9 shows the most popular benzodiazepine items identified in forensic laboratories in Texas, as well as the number of deaths and number of treatment admissions for alprazolam. Alprazolam is the most abused benzodiazepine in terms of calls to poison control centers.

## 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; piperazines such as BZP (1-benzyl-piperazine) 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; amphetamines; and methamphetamine. Other psychoactive substances, such as phencyclidine (PCP), which often result in similar effects, are also reported in this section. “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, “Yaba,” ecstasy, or synthetic cathinones. Stimulant pills can be taken orally, crushed for inhalation, or dissolved in water for injection.

**Exhibit 10. Texas Poison Control, Treatment Admissions, Tox Lab Exhibits, & Deaths for Methamphetamine: 1998-2014**



Source: See Data Sources section of the report.

## Methamphetamine and Amphetamine

Methamphetamine and amphetamine indicators in 2014 are above the highest levels seen before the precursor regulations enacted in 2005–2006 (Exhibit 10). Local “cooking” of ice using over-the-counter pseudoephedrine, which is available only in limited amounts, with the “one pot” or “shake and bake” method is only used to produce very small amounts of methamphetamine. As of the fourth quarter 2014, only 1% of the samples examined nationally in the DEA’s Methamphetamine Profiling Program

were produced from the pseudoephedrine method. In addition, the kilograms seized on the West Texas border increased 260% between 2010 and 2014, with a 420% increase on the South Texas border, which shows the volume of methamphetamine being imported into the U.S.

Ninety-one percent of the methamphetamine is now produced from the phenyl-2-propanone (P2P) method which is used in Mexico where it is a legal chemical. During this period, the average purity was 96.3%, and the average potency was 88.3%. According to DEA’s Trends in Trafficking Reports, methamphetamine is the #1 drug threat in the Dallas area, with it being #2 in the Houston district, and #4 in El Paso.

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 forensic laboratories reported in 2014 that there were 26,370 reports of methamphetamine among items seized and analyzed in Texas, compared with 736 reports for amphetamine. Methamphetamine represented 21% of all items analyzed by forensic laboratories in 2005; in 2014, it comprised 27% of all items analyzed. In 2013 and 2014, methamphetamine is the drug most often identified in forensic laboratories in the state. Amphetamine was present in less than 1% of the drug reports of items examined in 2014

Of the 2014 Texas poison control cases, 366 involved methamphetamine; the average age was 29 years. There were also 172 cases involving pharmaceutical amphetamines or phentermine; the average age was 23 years, which shows the problems with misuse of these drugs by children and youths.

Methamphetamine/amphetamine admissions to treatment programs increased from 3% of all admissions in 1995 to 11% in 2007, dropped to 8% in 2009, and then rose to 15% of admissions in 2014 (Exhibit 11). Unlike most other drug categories, 59% of the clients entering treatment were female. Clients with a primary problem with methamphetamine reported secondary problems with cannabis and alcohol.

HIV outreach workers in the state reported methamphetamine use was “spiking” among men who have sex with men and by high-risk heterosexuals along the entire Texas border, and it had become the major drug problem in some areas that previously were dominated by heroin. There were also reports of increasing syphilis cases among those using crystal methamphetamine, especially in social circles that engage in risky sex and utilize global positioning systems (GPS) such as Grindr and Jack’d to meet anonymous partners; HIV outreach staff were also using these “apps” to find HIV clients at risk and to offer testing for HIV.

Laboratories on the U.S. side of the border are used to convert liquid methamphetamine into crystal methamphetamine. Liquid methamphetamine, which often looks like an icy sludge, can be concealed in a variety of ways, including hidden in windshield wiper reservoirs and gas tanks, or contained within commercial product packaging such as shampoo bottles, beer bottles, or other liquid containers and then distributed throughout the Midwest and Northeast, including major metropolitan areas such as Atlanta.

The increased availability of methamphetamine has led to decreased prices. In the summer of 2014, an eight-ball cost \$400; in February, 2015, it cost \$225. The cost of a gram of powder methamphetamine was \$80-\$150, and a kilogram cost \$350-\$2,500. An ounce of ice cost \$375 to \$1,600 and a kilogram of ice cost \$4,300-\$20,000.

**Exhibit 11. Treatment with a Primary Problem of Amphetamine or Methamphetamine (n=10,439)**

**by Route of Administration: 2014**

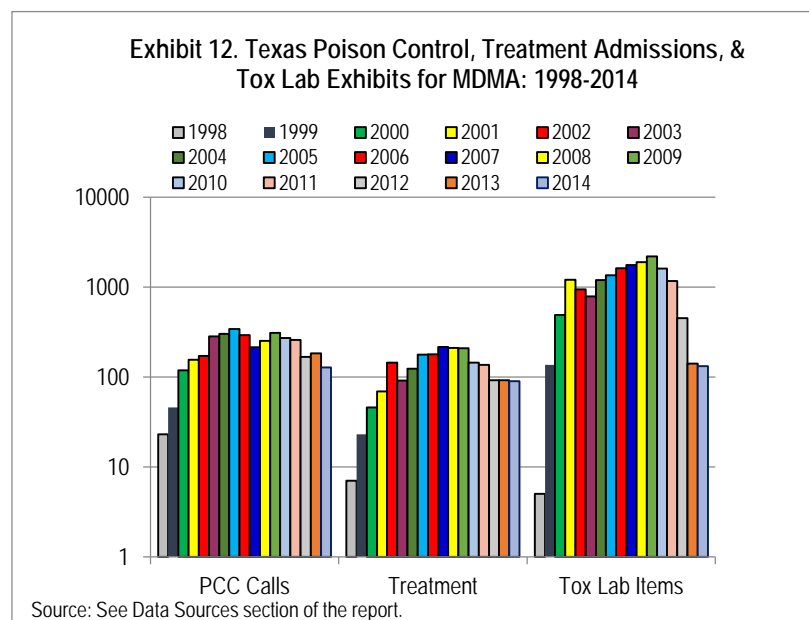
	<b>Inject</b>	<b>Inhale</b>	<b>Smoke</b>	<b>Oral</b>	<b>All<sup>a</sup></b>
% of Stimulant Admits	35%	8%	49%	8%	100%
Average Age-Yrs.	33	33	32	34	32
% Male	47	37	39	37	41
% Black	2	3	4	5	3
% White	88	73	74	81	79
% Hispanic	9	23	21	12	17
% CJ Involved	53	46	49	50	51
% Employed Full Time	6	7	9	-	11
% Homeless	18	9	10	10	13
Lag-1st Use to Tmt-Yrs.	13	12	17	16	13

<sup>a</sup>T total includes clients with "other" routes of administration

Source: See Data Sources section of the report.

## MDMA

MDMA (ecstasy), MDA, 5-APB (a MDA analog), and “Molly” are classified as either “other phenethylamines” (MDMA) or “amphetamine phenethylamines.” (MDA, 5-APB). Indicators of use of these substances have varied over time, as Exhibit 12 shows. After 2009, an ecstasy drought began due to the shortage of the raw ingredient, safrole oil, and the amount of MDMA identified in pills sold as “Molly” began dropping. The European Monitoring Centre for Drugs and Drug Addiction reported in



February 2014 that tablets with “dangerously high” levels of MDMA were appearing in Europe, followed by deaths at music festivals in New York City, Canada, and at Austin City Limits in September 2014. “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 report that the drug that is sold as Molly actually contained 4-MEC (4-Methyl-N-Ethylcathinone), cocaine, MDA (3, 4-methylenedioxyamphetamine), mephedrone, or methylone.

Molly is often sold in a powder-filled capsule or in a microcentrifuge tube. Because of the scarcity of MDMA, most Molly capsules contain little MDMA, and research has shown that mephedrone and methylone act on the brain like MDMA (Baumann et al., 2012).

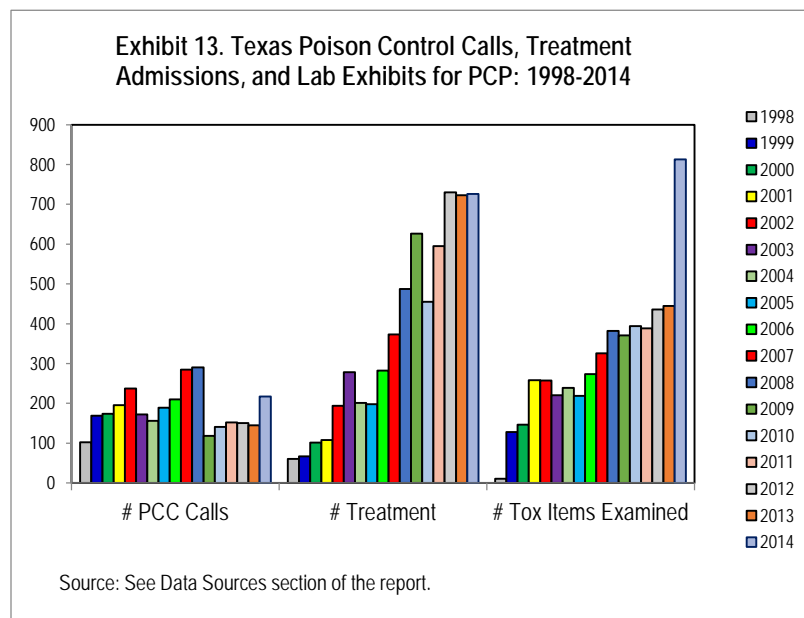
The Texas Poison Center Network reported a high of 310 calls in 2009 involving misuse or abuse of ecstasy, compared with 128 in 2014. Of the 2014 MDMA calls, 30 used the term “Molly.” The average age of the 2014 MDMA cases was 23 years.

In 2014, there were 90 MDMA treatment admissions with an average age of 26 years. Ecstasy is often used in combination with other drugs such as marijuana, alcohol, or cocaine.

Forensic laboratories identified MDMA in 1,626 reports for items seized and analyzed in 2006, as compared with 149 in 2014. MDA was identified in 268 items in 2006 and 122 in 2014. Twenty-four percent of the “other phenethylamine” (e.g. MDMA) items identified were in the Central Texas (Austin) area and 23% in the Lower Rio Grande Valley; 46% of the “amphetamine phenethylamine” (e.g., MDA) items were identified by laboratories in the Lower Rio Grande Valley. The high prevalence of these cases in the Valley may be an indication of importation of these drugs or their raw chemicals from Mexico.

## Phencyclidine (PCP)

Phencyclidine is known as “Wet,” “Wack,” “PCP,” or formaldehyde. Often, marijuana/cannabis joints are dipped in formaldehyde that contains PCP, or PCP is sprinkled on the joint or cigarette. The effects of PCP use are often similar to those of synthetic cathinone use. Because of 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.



As Exhibit 13 shows, abuse of PCP is growing and the characteristics of the users have changed. In 2001, 73% were male, but in 2014, only 38% were male.

The number of poison control center cases involving PCP declined from 290 in 2008 to 217 in 2014; the average age in 2014 was 33 years.

Exhibit 13 also shows an increase in the number of clients entering treatment statewide with a primary problem with PCP, from 487 in 2008 to 726 in 2014. Of the clients in 2014, 84% were Black;

53% were involved in the criminal justice system; and 10% were employed full-time.

The number of PCP items identified by forensic laboratories tripled from 273 in 2006 to 813 in 2014.

## CLUB DRUGS AND PARTY DRUGS

### Phenethylamines (2C-xx)

Phenethylamines 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 (amphetamines, including MDA), entactogens (MDMA), or hallucinogens (the 2C-xx series of compounds). Common street names for 2C-B include “Nexus,” “Bees,” “Venus,” “Bromo Mescaline,” and BDM-PEA. 2C-B 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 E, C, I, P, and T.

The Texas Poison Control Network reported 15 cases of a 2C and/or N-BOME drugs in 2014. 2C phenethylamines can be inhaled or dissolved into a liquid and placed on blotter paper under the tongue. The effects may last 6–10 hours; onset takes 15–20 minutes. Street outreach workers report the 2-C drugs and DMT (dimethyltryptamine) pose problems because they are white or creamy crystalline in appearance, and it is difficult to tell what the drug is.

Forensic laboratories reported that in Texas in 2014, there were 532 reports of 2C-phenethylamines (as compared to 24 in 2012) and 264 2C-NBOMe items (as compared to 75 in 2012). Sixty-one percent of the samples were from the Houston region and 10% from the Austin region.

### **Dextromethorphan (DXM)**

DXM products include 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 2014 Texas school survey reported that 4% of secondary students indicated they had ever used DXM to get high. The 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 480 in 2014. 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 178 in 2014; the average age in 2014 was 19 years.

Forensic laboratories analyzed 15 substances in 2006 that were DXM items, as compared with 82 in 2014.

### **GHB/GBL/1,4-BD**

GHB (gamma-hydroxybutyrate), GBL (gamma-butyrolactone), and 1,4-BD (1-4-Butanediol) cases of misuse or abuse reported to the Texas Poison Center Network totaled 43 in 2006, 99 in 2009, and 10 in 2014. Xyrem<sup>®</sup> is a prescription version of GHB used to treat people who fall asleep frequently during the day, often at unexpected times (narcolepsy). There were 3 cases involving Xyrem<sup>®</sup> out of 61 cases classified as GHB in 2013 and 14 Xyrem<sup>®</sup> out of 40 GHB in 2014.

In 2014, 8 clients were admitted to DSHS-funded treatment programs with a primary problem with GHB; their average age was 36 years. Some 63% were White, and 62% were female.

There were 97 items identified by forensic laboratories as being GHB, GBL, or 1, 4 Butanediol in 2006, compared with 73 in 2014.

### **Ketamine**

Ketamine abuse is low. 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, 6 in 2013, and 4 in 2014. In 2006, 161 substances were identified as ketamine by forensic laboratories and 4 in 2014.

### **LSD and Other Hallucinogens**

The 2014 Texas secondary school survey showed that use of hallucinogens (defined as LSD, PCP, or mushrooms) continued to decrease. Lifetime use peaked at 7.4% in 1996 and dropped to 2.6% in 2014.

The Texas Poison Center Network reported 33 mentions of abuse or misuse of LSD in 2006, compared with 88 in 2014. There were 96 cases of human exposure to mushrooms in 2006 and 87 in 2014. The

average age in 2014 was 18 years for the LSD cases and 26 years for mushroom cases.

Of the 95 hallucinogen treatment admissions in 2014, the average age was 29 years; 72% were male; and 56% were involved in the criminal justice system. Another 30 individuals entered treatment with a primary problem with LSD. The average age was 23 years; 77% were male; and 63% were involved in the criminal justice system. For both groups, marijuana was the second most common drug of abuse.

Forensic laboratories identified 34 substances as LSD in 2006, compared with 14 in 2014.

### **Piperazines**

Piperazines are a broad class of chemicals that include several stimulants, such as BZP (1-benzylpiperazine) and TFMPP (1-(3-trifluoromethylphenyl) piperazine), as well as antivertigo agents (cyclizine, meclizine) and other drugs (e.g., sildenafil/Viagra®). BZP has pharmacological effects that are qualitatively similar to those of amphetamine. It is a Schedule I drug that can be taken in combination with TFMPP, a non-controlled substance, in order to enhance its effects as a substitute for MDMA. It is generally taken orally, but it can be smoked or inhaled. The Texas forensic laboratories identified 7 TFMPP reports for items seized and analyzed in 2007 and 112 in 2014. Forty-eight percent of the items were submitted in the Public Health Region covering Dallas-Fort Worth, with 11% from the Austin region.

### **Synthetic Cathinones**

Emerging psychoactive substances include the substituted or synthetic cathinones (such as ethylone, 4-Methyl-N-Ethylcathinone (4-MEC), alpha-Pyrrolidinopentiophenone (alpha-PVP), and penterone), as well as hallucinogenic cathinones (such as mephedrone, Methylenedioxypyrovalerone (MDPV), and methylone). They are synthetic derivatives from the khat plant and are part of the phenethylamine structural class.

Final orders to temporarily schedule these drugs under the Federal Controlled Substances Act went into effect on July 9, 2012, March 7, 2013, and March 7, 2014, and synthetic cathinones were controlled under Penalty Group 2 in Texas beginning on September 1, 2011, with additional scheduling as recently as April 24, 2015.

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, and sexual arousal. There is no information on the contents or dosing instructions, and the ingredients may vary from package to package.

The Texas Poison Center Network data show the number of human exposures to synthetic cathinones peaked in 2011 (Exhibit 3). Between 2010 and 2014, 15% of the cases were younger than 20 years, with an age range of 12–67 years. Three-quarters were male; 87% intended to abuse or misuse the drug; 43% inhaled it and 31% swallowed it. Common symptoms included tachycardia, hypertension, agitation, confusion, and

hallucinations. For 48% of the cases, a moderate effect was reported (patient returns to pre-exposure state). For 12% 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 2014.

The forensic laboratories in Texas identified 156 reports for drug items seized and analyzed that were synthetic cathinones in 2010 and 625 in 2014 (Exhibit 3). In 2010, there were 5 variations of the cathinones, compared with 15 varieties in 2011, 28 in 2012, 15 in 2013, and 19 in 2014. Mephedrone, methylone, and pentedrone, which were more common in the past, have been replaced with ethylone as the more prevalent variety in 2014. Thirty-two percent of the items were submitted in the Austin region, with 25% from the Houston region.

### **Tryptamines (Psilocybin, Psilocin, and DMT)**

Psilocybin and psilocin are naturally occurring psychedelics in the tryptamine family 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 hallucinogenic and are found in plant sources as well as toad and shamantic brews, such as the ayahuasca brew. Other tryptamines include Dimethyltryptamine (DMT) and alpha-Methyltryptamine (AMT).

In 2006, there were 96 cases of human exposure to hallucinogenic mushrooms reported by Texas poison centers, compared to 87 in 2014. The average age of these cases in 2014 was 26 years, and 74% were male. There were 77 tryptamine (33 were DMT) cases in 2014. There were also four treatment admissions in 2014. The average age was 35 years; 100% were White; and 100% were male.

Forensic laboratories reported 151 psilocin items, 9 psilocybin/psilocin items and 1 psilocybin item in 2014 as well as 33 DMT items. Some 30% of the tryptamine items were submitted from the Central Texas region and 27% from the Houston region.

## **OTHER ABUSED SUBSTANCES: INHALANTS**

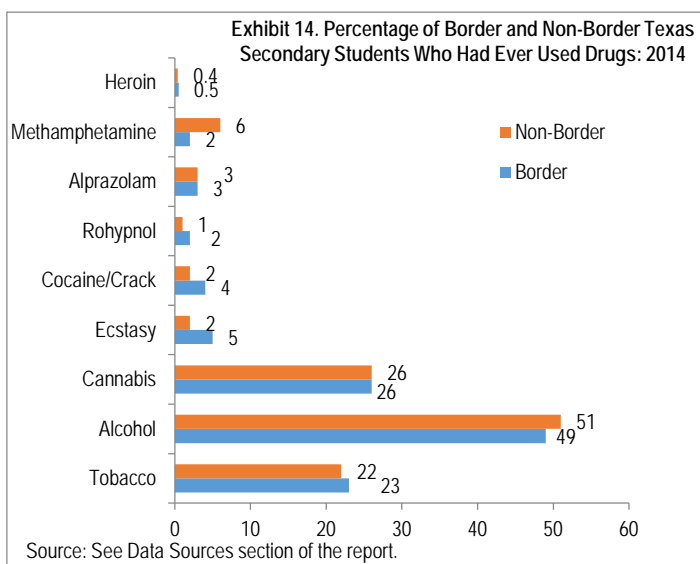
The 2014 Texas secondary school survey reported that 12% of students in grades 7–12 had ever used inhalants, and 4% had used in the past month. Inhalant use has a peculiar age pattern not observed with any other substance. The prevalence of lifetime and past-month inhalant use was higher in the lower grades and lower in the upper grades. This decrease in inhalant use as students get older 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 and ninth 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. Whiteout/correction fluid/magic markers and helium/butane/whippits/Freon were the inhalants most commonly used. The 2013 YRBS reported that 9.5% of Texas high school students had ever used inhalants, compared with 11.4% in 2011, 11.9% in 2009, 12.9% in 2007, 13.2% in 2005, and 13.9% in 2001. Inhalant abusers represented 0.1% of the admissions to treatment programs in 2014.



## Additional Information on Drug Use Trends

### DRUG USE PATTERNS ON THE TEXAS-MEXICO BORDER

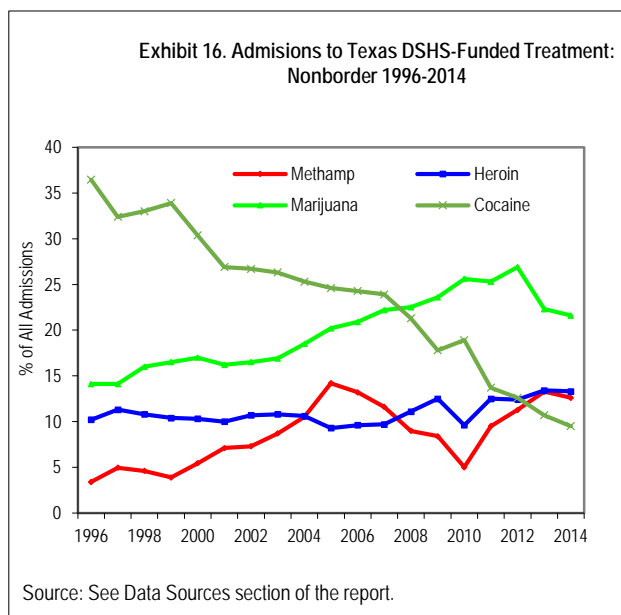
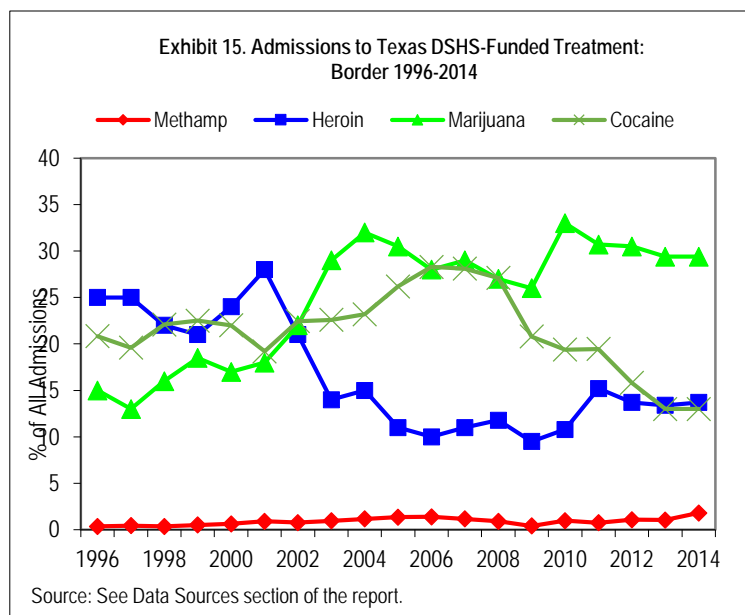
Exhibit 14 shows the lifetime prevalence of use of different drugs by Texas secondary school students. Border students were more likely to report use of Rohypnol®, cocaine or crack, and MDMA/ecstasy than non-border students. When asked which substances were very easy to obtain, border students were more likely than non-border students to report Rohypnol®, cocaine or crack, and MDMA/ecstasy. Both groups reported powder cocaine was easy to obtain, as was crack cocaine.



Different patterns were also seen in border and non-border admissions to DSHS-funded treatment in 2014 (Exhibits 15 and 16). Border clients were more likely to report problems with marijuana, cocaine, and heroin. Non-border clients were more likely to report the use of methamphetamine.

Reports from the three forensic laboratories on the border show different trafficking patterns. All three laboratories reported the amount of cocaine examined had increased substantially, which could point to a potential return of a larger supply of cocaine. In 2012, 48% of the drug reports in Laredo were

marijuana and 21% were cocaine; in 2014, marijuana had dropped to 28% and cocaine had increased to 37%. In 2011, 50% of the items in McAllen were cocaine and 23% were marijuana; in 2014, 62% were cocaine and 16% marijuana. The picture was different in El Paso. In 2012, 50% were marijuana and 29% cocaine. In 2014, 68% were marijuana and 18% cocaine.



## 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% 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 health 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 population, and “blood shots” were occurring, with intravenous users shooting up each other’s blood to maximize the amount of drug injected into their systems.

Only acute hepatitis C is reported in Texas. In 2014, the Texas DSHS reported that there were 18 HCV cases statewide and the HCV incidence rates per 100,000 Texans was highest for those ages 19-29 years, at 0.3.

### Sexually Transmitted Diseases

Street outreach workers were reporting 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 service, such as through the use of smart phone applications, like Grindr and Jack’d.

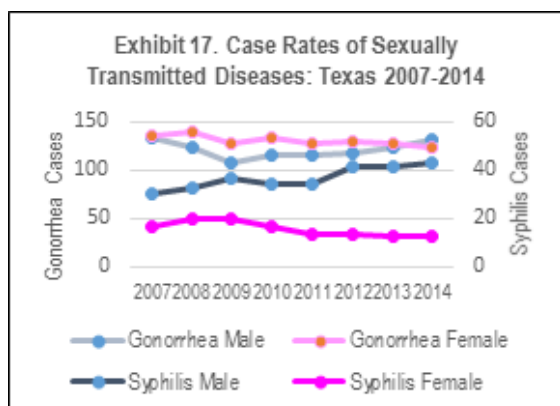
The case rates for chlamydia were higher for females than males, highest for persons between 20 and 24 years, and highest for Blacks. The case rates for gonorrhea were highest for females and for those

between 20 and 24 years. The case rates for syphilis were higher for males, for Blacks, and for those between 20 and 24 years (Exhibit 17).

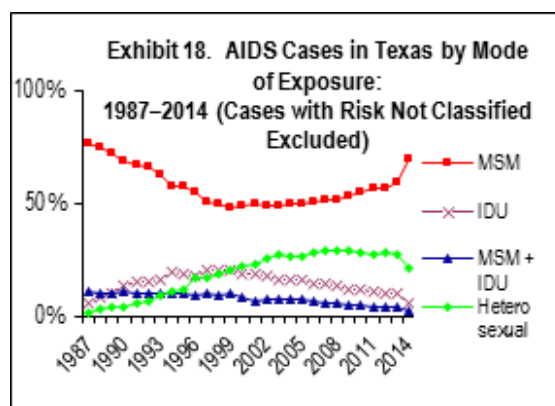
## AIDS Cases

The proportion of AIDS cases among men who have sex with men (MSM) decreased from 71% in 1987 to 44% in 1999 before rising to 70% in 2014 (Exhibit 18). Of the 2013 cases, 27% reported heterosexual mode of exposure, and 10% were IDUs. The proportion of AIDS cases involving IDUs or IDUs/MSM have decreased over time, and the proportion of IDUs entering DSHS-funded treatment programs has also decreased, from 32% in 1988 to 16% in 2014.

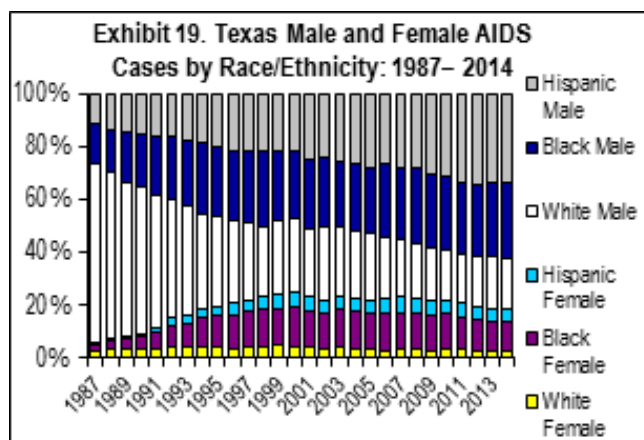
Persons infected with AIDS were increasingly likely to be people of color. Of the AIDS cases in 2014, 48% were Black; 19% were White; and 33% were Hispanic (Exhibit 19).



Source: See Data Sources section of the report.



Source: See Data Sources section of the report.



Source: See Data Sources section of the report.

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## Data Sources

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Data for this report were drawn from the Appendix tables and the following sources:

**Area description data** are from the American Community Survey and 2009-2013 Census.

**Student substance use data** for 2014 came from reports on the Texas School Survey of Substance Abuse: Grades 7–12, 2014, which was provided by Abigail Cameron of 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 at <https://nccd.cdc.gov/YouthOnline/App/Default.aspx>

**Data on drug use** by Texans age 12 and older came from the Substance Abuse and Mental Health Services Administration’s National Survey on Drug Use and Health (NSDUH). The statewide estimates are from the 2012–2013 NSDUH.

**Poison control center data** came from the Texas Poison Center Network, DSHS, for 1998 through 2014, 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, 2014. Analysis of the 2013 data was by Lesli San Jose of the DSHS Decision Support Program and by the author.

**Information on drug mortality** through 2013 came from the Bureau of Vital Statistics, DSHS, courtesy of Lyudmila Baskin and Jessica 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. The preliminary 2014 data will be added when available from DSHS.

**Information on seized drugs identified by laboratory tests** came from forensic laboratories in Texas, which reported results from analyses of substances for 1998 through 2014 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. (NOTE: The NFLIS data utilized in this narrative were run at an earlier time than the NFLIS data prepared by the DEA for NDEWS. Therefore, the numbers and percentages cited in this narrative may not match the numbers and percentages in the NDEWS Appendix Tables or in the Data Snapshot.)

**Information on methamphetamine purity and potency** through the fourth quarter 2014 came from the Methamphetamine Profiling Program of DEA.

**Price, trafficking, distribution, and supply information** was gathered from 2014 reports on Trends in the Traffic Report System from the Dallas, El Paso, and Houston Field Divisions (FDs) of the DEA.

**Reports by users and street outreach workers** on drug trends for the last quarter of 2014 were reported to DSHS by workers at local HIV (human immunodeficiency virus) counseling and testing programs across the State.

**Sexually transmitted disease and AIDS** (acquired immunodeficiency syndrome) data through 2013 were provided by Nicole Hawkins of DSHS; the 2014 data will be available after July 1, 2015. The June 2015 Current Trends report with final numbers on deaths, and hepatitis C virus (HCV), HIV, and AIDS data will be available at <http://www.utexas.edu/research/cswr/gcattc/>

**Data on kilograms seized on the Southwest Border** between 2010 and 2014 came from reports from the Customs and Border Protection agency of the Department of Homeland Security.

**Potency of cannabis** came from the University of Mississippi marijuana Potency Monitoring Project University of Mississippi, National Center for Natural Products Research, Research Institute of Pharmaceutical Sciences. Quarterly Report #124, Potency Monitoring Program (March 21, 2014) for data from 1995 to 2013; Quarterly Report #107 (January 12, 2010) for data from 1985 to 1994.

**Leonard J. Paulozzi** et al. Vital Signs: Variation among states in prescribing of opioid pain relievers and benzodiazepines — United States, 2012, *Morbidity and Mortality Weekly*, July 4, 2014, 63(26); 563-568.

**M. H. Baumann**, et al. The designer methcathinone analogs, mephedrone and methylone, are substrates for monoamine transporters in brain tissue. *Neuron-psychopharmacology* 37(5):1192–1203.

*Contact Information: For additional information about the drugs and drug use patterns discussed in this report, please contact Jane C. Maxwell, Ph.D., Research Professor, School of Social Work, The University of Texas at Austin, Suite 335, 1717 West 6th Street, Austin, TX 78703, Phone: 512–232–0610, Fax: 512–232–0617, E-mail: [jcmaxwell@austin.utexas.edu](mailto:jcmaxwell@austin.utexas.edu).*

This report is available online at [www.ndews.org](http://www.ndews.org) and <https://socialwork.utexas.edu/dl/files/cswr/institutes/ari/pdf/trends/trends615.pdf>

# **National Drug Early Warning System (NDEWS)**

## **Texas Sentinel Community Site**

### **Appendix Data Tables, 2015**

#### **NDEWS Coordinating Center**

- Table 1: Demographic and Socio-Economic Characteristics, 2009-2013, ACS
- Table 2a: Self-Reported Substance Abuse Behaviors Among Persons 12+ Years, 2010-2012, NSDUH
- Table 2b: Self-Reported Substance Abuse Behaviors, By Age Group, 2010-2012, NSDUH
- Table 3: Self-Reported Substance Abuse Behaviors Among Public High School Students, 2013, YRBS
- Table 4a: Trends in Admissions to Substance Abuse Treatment Programs, 2010-2014, from local data sources
- Table 4b: Demographic and Drug Use Characteristics of Primary Treatment Admissions for Selected Substances of Abuse, 2014, from local data sources
- Table 5: Drug Poisoning Deaths, by Demographic Characteristics, 2009-2012, NVSS-M, NCHS
- Table 6: HIV/AIDS and Viral Hepatitis Cases, Various Years, CDC
- Table 7a: Drug Reports for Items Seized by Law Enforcement, 2014, NFLIS
- Table 7b: Drug Reports for Selected Categories of New Psychoactive Substances, 2014, NFLIS

**Table 1: Demographic and Socio-Economic Characteristics**  
**State of Texas**  
 2009-2013 ACS Five-Year Estimates

	Estimate	Margin of Error
<b>Total Population (#)</b>	<b>25,639,373</b>	<b>**</b>
<b>Age (%)</b>		
18 years and over	73.0%	+/-0.1
21 years and over	68.5%	+/-0.1
65 years and over	10.7%	+/-0.1
Median Age	33.8	
<b>Race (%)</b>		
White, Not Hisp.	44.8%	+/-0.1
Black/African American, Not Hisp.	11.5%	+/-0.1
Hispanic/Latino	37.9%	+/-0.1
American Indian/Alaska Native	0.3%	+/-0.1
Asian	3.9%	+/-0.1
Native Hawaiian/Pacific Islander	0.1%	+/-0.1
Some Other Race	0.1%	+/-0.1
Two or More Races	1.4%	+/-0.1
<b>Sex (%)</b>		
Male	49.6%	+/-0.1
Female	50.4%	+/-0.1
<b>Educational Attainment (Among Population Aged 25+ Years) (%)</b>		
High School Graduate or Higher	81.2%	+/-0.1
Bachelor's Degree or Higher	26.7%	+/-0.1
<b>Unemployment (Among Civilian Labor Force Pop Aged 16+ Years) (%)</b>		
Percent Unemployed	5.2%	+/-0.1
<b>Income</b>		
Median Household Income (in 2013 inflation-adjusted dollars)	\$51,900	+/-132
<b>Poverty (%)</b>		
People Whose Income in Past Year is Below Poverty Level	17.6%	+/-0.1

**NOTES:**

**Margin of Error:** can be interpreted roughly as providing a 90% probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value.

**\*\***The estimate is controlled; a statistical test for sampling variability is not appropriate.

**SOURCES:** Adapted by the NDEWS Coordinating Center from data provided by the U.S. Census Bureau, 2009-2013 5-Year American Community Survey (ACS).

**Table 2a: Self-Reported Substance Use Behaviors  
Among Persons 12+ Years in Texas, 2010-2012**  
Estimated Percent, 95% Confidence Interval, and Estimated Number  
Annual Averages Based on 2010, 2011, 2012 NSDUHs

Substance Use Behaviors	Texas	
	Estimated % (95% CI)	Estimated #*
<b>Used in Past Month</b>		
Alcohol	48.51 (47.11 - 49.91)	9,938,340
Binge Alcohol**	23.62 (22.48 - 24.80)	4,839,076
Marijuana	5.25 (4.76 - 5.77)	1,075,578
Use of Illicit Drug Other Than Marijuana	3.09 (2.72 - 3.50)	633,054
<b>Used in Past Year</b>		
Cocaine	1.47 (1.24 - 1.75)	301,162
Nonmedical Use of Pain Relievers	4.45 (4.01 - 4.93)	911,680
<b>Dependence or Abuse in Past Year***</b>		
<b>Illicit Drugs or Alcohol</b>	<b>7.90 (7.29 - 8.56)</b>	<b>1,618,489</b>
Alcohol	6.53 (5.97 - 7.14)	1,337,814
Illicit Drugs	2.41 (2.13 - 2.71)	493,741

**NOTES:**

**95% Confidence Interval (CI):** provides a measure of the accuracy of the estimate. It defines the range within which the true value can be expected to fall 95 percent of the time.

**\*Estimated #:** the estimated number of persons aged 12 or older who used the specified drug or are dependent/abuse a substance was calculated by multiplying the prevalence rate and the population estimate from Table C1 of the NSDUH report. The population estimate is the simple average of the 2010, 2011, and 2012 population counts for persons aged 12 or older

**\*\*Binge Alcohol:** defined as drinking 5 or more drinks on the same occasion on at least 1 day in the past 30 days.

**\*\*\*Dependence or Abuse in Past Year:** based on definitions found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV)*.

**SOURCE:** Adapted by the NDEWS Coordinating Center from data provided by the Substance Abuse and Mental Health Services Administration (SAMHSA), Substate Estimates of Substance Use and Mental Disorders from the 2010-2012 National Surveys on Drug Use and Health: Results and Detailed Tables. Rockville, MD. 2014. Available at:  
<http://www.samhsa.gov/data/NSDUH/substate2k12/toc.aspx>.



**Table 2b: Self-Reported Substance Use Behaviors  
Among Persons in Texas, by Age Group, 2010-2012**  
Estimated Percent and 95% Confidence Interval (CI)  
Annual Averages Based on 2010, 2011, 2012 NSDUHs

Substance Use Behaviors	Texas					
	12-17		18-25		26+	
	Estimated Percent (95% CI)		Estimated Percent (95% CI)		Estimated Percent (95% CI)	
Used in Past Month						
Binge Alcohol*	6.7	(5.9 - 7.5)	38.0	(36.4 - 39.7)	23.4	(21.9 - 24.9)
Marijuana	6.2	(5.5 - 7.0)	14.2	(13.0 - 15.5)	3.4	(2.9 - 4.1)
Use of Illicit Drug Other Than Marijuana	4.4	(3.8 - 5.1)	6.4	(5.7 - 7.2)	2.3	(1.9 - 2.8)
Used in Past Year						
Marijuana	12.3	(11.3 - 13.4)	24.5	(23.1 - 26.1)	6.1	(5.4 - 7.0)
Cocaine	1.2	(0.9 - 1.5)	4.3	(3.7 - 5.1)	1.0	(0.7 - 1.3)
Nonmedical Use of Pain Relievers	5.7	(5.0 - 6.5)	9.6	(8.6 - 10.6)	3.3	(2.8 - 3.9)
Dependence or Abuse in Past Year**						
Illicit Drugs or Alcohol	6.7	(5.9 - 7.5)	17.6	(16.4 - 18.9)	6.3	(5.5 - 7.1)
Alcohol	3.7	(3.1 - 4.3)	14.6	(13.5 - 15.8)	5.4	(4.8 - 6.2)
Illicit Drugs	4.3	(3.7 - 4.9)	6.1	(5.3 - 6.9)	1.4	(1.2 - 1.8)

**NOTE:**

**95% Confidence Interval (CI):** provides a measure of the accuracy of the estimate. It defines the range within which the true value can be expected to fall 95 percent of the time.

**\*Binge Alcohol:** defined as drinking 5 or more drinks on the same occasion on at least 1 day in the past 30 days.

**\*\*Dependence or Abuse in Past Year:** based on definitions found in the 4th edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV).

**SOURCE:** Adapted by the NDEWS Coordinating Center from data provided by the Substance Abuse and Mental Health Services Administration (SAMHSA), Substate Estimates of Substance Use and Mental Disorders from the 2010-2012 National Surveys on Drug Use and Health: Results and Detailed Tables. Rockville, MD. 2014. Available at:  
<http://www.samhsa.gov/data/NSDUH/substate2k12/toc.aspx>.

**Table 3: Self-Reported Substance Use-Related Behaviors Among Texas ^ Public High School Students, 2013**  
Estimated Percent and 95% Confidence Interval (CI)  
2011 and 2013 YRBS\*

Substance Use Behaviors	2013 vs 2011			2013 by Sex			2013 by Race		
	2013	2011	p-value	Male	Female	p-value	White	Black	Hispanic
	Percent			Percent			Percent		
	Estimate (95% CI)	Estimate (95% CI)		Estimate (95% CI)	Estimate (95% CI)		Estimate (95% CI)	Estimate (95% CI)	Estimate (95% CI)
Used in Past Month									
Alcohol	36.1 (32.5 - 39.9)	39.7 (37.4 - 42.2)	0.09	35.9 (30.8 -41.4)	36.2 (33.1 -39.6)	0.90	43.3 (38.7 -48.0)	24.8 (20.4 -29.9)	34.3 (30.1 -38.8)
Binge Alcohol**	21.0 (17.5 - 25.0)	23.5 (21.1 - 26.0)	0.25	22.2 (17.5 -27.7)	19.9 (16.9 -23.2)	0.25	27.5 (23.1 -32.4)	10.3 (7.1 - 14.7)	19.6 (16.3 -23.4)
Marijuana	20.5 (17.9 - 23.2)	20.8 (18.2 - 23.6)	0.87	22.0 (19.0 -25.3)	18.9 (16.2 -21.9)	0.03	18.5 (14.6 -23.0)	22.5 (17.6 -28.3)	21.5 (17.6 -25.9)
Ever Used in Lifetime									
Alcohol	67.2 (63.4 - 70.8)	72.7 (69.9 - 75.4)	0.02	64.8 (58.9 -70.2)	69.7 (66.0 -73.2)	0.11	72.9 (68.9 -76.5)	60.3 (51.1 -68.9)	65.6 (61.2 -69.7)
Marijuana	37.5 (33.5 - 41.7)	40.5 (36.8 - 44.3)	0.27	40.0 (35.5 -44.6)	35.1 (30.7 -39.8)	0.02	34.3 (29.0 -40.1)	40.3 (34.0 -46.9)	39.8 (33.8 -46.1)
Cocaine	8.3 (6.8 - 10.2)	9.4 (8.1 - 11.0)	0.29	11.2 (8.8 - 14.2)	5.3 (4.2 - 6.7)	0.00	5.8 (4.2 - 8.0)	5.7 (2.9 - 10.7)	10.2 (8.3 - 12.5)
Hallucinogenic Drugs	—	—	~	—	—	~	—	—	—
Inhalants	9.5 (8.1 - 11.1)	11.4 (10.1 - 12.9)	0.05	9.5 (7.4 - 12.0)	9.5 (7.7 - 11.6)	1.00	8.4 (6.6 - 10.6)	9.1 (5.9 - 13.7)	10.0 (8.3 - 12.1)
Ecstasy also called "MDMA"	8.8 (7.2 - 10.6)	11.9 (10.0 - 14.1)	0.02	10.1 (8.3 - 12.2)	7.5 (5.7 - 9.7)	0.02	7.8 (6.0 - 10.2)	7.9 (4.0 - 15.0)	9.4 (7.0 - 12.6)
Heroin	3.8 (2.5 - 5.7)	3.3 (2.6 - 4.1)	0.57	5.5 (3.5 - 8.6)	1.9 (1.0 - 3.4)	0.00	2.1 (1.3 - 3.5)	5.0 (2.1 - 11.5)	3.7 (2.4 - 5.7)
Methamphetamine	4.8 (3.5 - 6.6)	5.0 (4.3 - 5.9)	0.80	6.4 (4.5 - 9.0)	3.2 (2.1 - 5.0)	0.01	3.8 (2.8 - 5.2)	7.5 (3.5 - 15.4)	4.1 (2.6 - 6.5)
Rx Drugs without a Doctors Prescription	19.0 (16.5 - 21.7)	22.1 (19.7 - 24.7)	0.08	20.8 (17.9 -24.1)	17.0 (14.1 -20.4)	0.03	20.6 (17.0 -24.8)	17.5 (12.9 -23.4)	17.8 (14.3 -22.0)
Injected Any Illegal Drug	2.9 (1.9 - 4.3)	3.1 (2.5 - 3.9)	0.71	3.9 (2.5 - 6.0)	1.8 (1.0 - 3.5)	0.03	2.3 (1.3 - 3.9)	2.4 (1.1 - 5.1)	3.0 (1.9 - 4.7)

**NOTES:**

'—' = Data not available; ~ = P-value not available; **N/A** = < 100 respondents for the subgroup.

^**Texas:** weighted data were available for Texas in 2011 and 2013; weighted results mean that the overall response rate was at least 60%. The overall response rate is calculated by multiplying the school response rate times the student response rate. Weighted results are representative of all students in grades 9–12 attending public schools in each jurisdiction.

\***Sample Frame for the 2011 and 2013 YRBS:** sampling frame consisted of public schools with students in at least one of grades 9-12. The sample size for 2011 was 4,209 with an overall response rate of 72%; the 2013 sample size was 3,181 with a 61% overall response rate.

\*\***Binge Alcohol:** defined as had five or more drinks of alcohol in a row within a couple of hours on at least 1 day during the 30 days before the survey.

**Source:** Adapted by the NDEWS Coordinating Center from data provided by the Centers for Disease Control and Prevention (CDC), 1991-2013 High School Youth Risk Behavior Survey Data. Available at <http://nccd.cdc.gov/youthonline/>. Accessed on [3/12/2015].

**Table 4a: Trends in Admissions\* to Substance Abuse Treatment Programs, Texas Residents, 2010-2014**

Number of Admissions and Percent of Admissions with Selected Substances

Cited as Primary Substance of Abuse at Admission, by Year and Substance

	Calendar Year									
	2010		2011		2012		2013		2014	
	(#)	(%)	(#)	(%)	(#)	(%)	(#)	(%)	(#)	(%)
<b>Total Admissions (#)</b>	<b>88,871</b>	n/a	<b>66,935</b>	n/a	<b>74,435</b>	n/a	<b>78,299</b>	n/a	<b>75,136</b>	n/a
<b>Primary Substance of Abuse (%)</b>										
Alcohol	23,928	26.9%	19,770	29.5%	21,556	29.0%	21,546	27.5%	20,217	26.9%
Cocaine/Crack	19,247	21.7%	10,053	15.0%	10,622	14.3%	8,641	11.0%	7,842	10.4%
Heroin	9,945	11.2%	6,652	9.9%	9,542	12.8%	10,459	13.4%	10,461	13.9%
Prescription Opioids	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail
Methamphetamine**	7,458	8.4%	6,015	9.0%	6,479	8.7%	10,217	13.0%	10,439	13.9%
Marijuana	20,257	22.8%	17,472	26.1%	17,723	23.8%	18,478	23.6%	17,426	23.2%
Benzodiazepines	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail
MDMA	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail
Synthetic Stimulants	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail
Synthetic Cannabinoids	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail
Other Drugs/Unknown	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail

**NOTES:**

\***Admissions:** includes admissions to Department of State Health Services (DSHS)-funded programs. Each admission does not necessarily represent a unique individual, since some individuals are admitted to treatment more than once in a given period.

\*\***Methamphetamine:** includes amphetamines and methamphetamine.

**SOURCE:** Data provided by the Texas NDEWS SCE and the Texas Department of State Health Services (DSHS).

**Table 4b: Demographic and Drug Use Characteristics of Primary Treatment Admissions\***  
**for Select Substances of Abuse, Texas Residents, 2014**  
 Number of Admissions, by Primary Substance of Abuse and  
 Percent of Admissions with Selected Demographic and Drug Use Characteristics

	Primary Substance of Abuse								
	Alcohol	Cocaine/ Crack	Heroin	Prescription Opioids	Meth- amphetamine	Marijuana	Benzo- diazepines	Synthetic Stimulants	Synthetic Cannabinoids
<b>Number of Admissions (#)</b>	20,217	7,842	10,461	unavail	10,439	17,426	unavail	unavail	unavail
<b>Sex (%)</b>									
Male	68%	51%	60%	unavail	41%	68%	unavail	unavail	unavail
Female***	32%	49%	40%	unavail	59%	32%	unavail	unavail	unavail
<b>Race/Ethnicity (%)</b>									
White, Non-Hisp.	56%	28%	59%	unavail	79%	31%	unavail	unavail	unavail
African-Am/Black, Non-Hisp	12%	44%	6%	unavail	3%	26%	unavail	unavail	unavail
Hispanic/Latino	30%	27%	33%	unavail	17%	42%	unavail	unavail	unavail
Asian	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail
Other	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail
<b>Age Group (%) / Average Age</b>	39	39	34		32	23			
Under 18	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail
18-25	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail
26-44	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail
45+	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail
<b>Route of Administration (%)</b>									
Smoked	0%	33%	2%	unavail	49%	100%	unavail	unavail	unavail
Inhaled	0%	4%	16%	unavail	8%	0%	unavail	unavail	unavail
Injected	0%	61%	81%	unavail	35%	0%	unavail	unavail	unavail
Oral/Other/Unknown	100%	2%	1%	unavail	8%	0%	unavail	unavail	unavail
<b>Secondary Substance (%)</b>									
None	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail
Alcohol	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail
Cocaine/Crack	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail
Heroin	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail
Prescription Opioids	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail
Methamphetamine**	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail
Marijuana	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail

**NOTES:**

\***Admissions:** includes admissions to Department of State Health Services (DSHS)-funded programs. Each admission does not necessarily represent a unique individual, since some individuals are admitted to treatment more than once in a given period.

\*\***Methamphetamine:** includes amphetamines and methamphetamine.

\*\*\***Female:** calculated using formula "1 minus Male %".

**unavail:** data not available; **percentages** may not sum to 100 due to either rounding and/or because not all possible categories are presented in the table.

**SOURCE:** Data provided by the Texas NDEWS SCE and the Texas Department of State Health Services (DSHS).

**Table 5: Drug Poisoning Deaths\*, by Demographic Characteristics,  
Texas, 2009-2012**

Rate per 100,000 of deaths with underlying causes of drug related poisonings and  
95% Confidence Interval (CI), 2009-2011 and 2010-2012

	2009-2011 Rate (95% CI)	2010-2012 Rate (95% CI)
<b>Total</b> (Age-Adjusted**)	9.8 (9.6 - 10.1)	9.7 (9.5 - 9.9)
<b>Sex</b> (Age-Adjusted**)		
Male	11.9 (11.5 - 12.2)	11.7 (11.4 - 12.0)
Female	7.8 (7.5 - 8.1)	7.7 (7.4 - 8.0)
<b>Race/Ethnicity</b> (Age-Adjusted**)		
White, Non-Hisp.	14.4 (14.0 - 14.8)	14.3 (13.9 - 14.7)
African-American/Black, Non-Hisp.	8.0 (7.4 - 8.6)	8.2 (7.6 - 8.8)
Hispanic	5.1 (4.8 - 5.4)	5.1 (4.9 - 5.4)
Asian	1.4 (1.0 - 1.8)	1.5 (1.1 - 2.0)
American Indian/Alaska Native	2.6 (1.6 - 4.0)	2.4 (1.5 - 3.7)
<b>Age Group</b>		
<18	0.5 (0.4 - 0.6)	0.4 (0.3 - 0.5)
18-44	13.1 (12.7 - 13.6)	12.9 (12.5 - 13.3)
45-64	17.3 (16.7 - 17.9)	17.4 (16.8 - 18.0)
65+	4.4 (4.0 - 4.9)	4.1 (3.6 - 4.5)

**NOTES:**

**\*Deaths due to drug poisoning**, ICD-10 codes X40-44, X60-64, X85, Y10-14. Please see the *Overview & Limitations* section (pgs. 8-9) for the ICD-10 definitions.

**\*\*Age Adjusted Rate:** the rate is adjusted based on the age distribution of a standard population allowing for comparison of rates across different sites.  
Unless noted otherwise, any age-adjusted data are adjusted using the year 2000 standard population.

**unavail:** data not available for geographic area; **DSU:** data statistically unreliable.

**SOURCE:** Adapted by the NDEWS Coordinating Center from National Vital Statistics System-Mortality (NVSS-M) data provided by the Centers for Disease Control and Prevention, National Center for Health Statistics. Accessed from Health Indicators Warehouse.

**Table 6: HIV/AIDS and Viral Hepatitis Cases, Texas**  
Number of Cases and Rate per 100,000 Population, Various Years

Type of Disease	Texas	
	#	Rate per 100,000
<b>HIV</b>		
Diagnosis of HIV Infection, 2012 <sup>a</sup>	4,675	22.3
Persons Living with Diagnosed HIV Infection (Prevalence), Year-End 2011 <sup>a</sup>	68,128	331.0
<b>Hepatitis B, 2012<sup>b</sup></b>		
Acute Cases (reported new cases)	170	0.7
Chronic Cases (estimated #)	unavail	unavail
<b>Hepatitis C, 2012<sup>b</sup></b>		
Acute Cases (reported new cases)	44	0.2
Chronic Cases (estimated #)	unavail	unavail

**NOTES:**

**unavail:** data not available.

**Sources:** Adapted by the NDEWS Coordinating Center from data provided by:

<sup>a</sup>Centers for Disease Control and Prevention (CDC). NCHHSTP Atlas. Accessed on [3/20/15]. Available at: <http://www.cdc.gov/nchhstp/atlas/>.

<sup>b</sup>Centers for Disease Control and Prevention (CDC), National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention, Division of Viral Hepatitis, *Surveillance for Viral Hepatitis — United States, 2012*.

**Table 7a: Drug Reports for Items Seized by Law Enforcement in Texas in 2014**  
**National Forensic Laboratory Information System (NFLIS)**  
 Top 10 Drug Reports\* and Select Drugs/Drug Categories of Interest,  
 Number of Drug-Specific Reports and Percent of Total Analyzed Drug Reports

Drug Identified	Number (#)	Percent of Total Drug Reports (%)
<b>TOTAL Drug Reports*</b>	<b>97,017</b>	<b>100%</b>
<b>Top 10 Drug Reports</b>		
Methamphetamine	26,370	27.2%
Cannabis	23,614	24.3%
Cocaine	18,236	18.8%
Heroin	3,569	3.7%
Alprazolam	3,350	3.5%
No Controlled Drug Identified	3,126	3.2%
Hydrocodone	2,599	2.7%
XLR-11 (1-(5-fluoropentyl-1H-3-YL)(2,2,3,3-tetramethylcyclopropyl)methanone)	1,195	1.2%
Phencyclidine	860	0.9%
AB-fubinaca	798	0.8%
<b>Top 10 Total</b>	<b>83,717</b>	<b>86.3%</b>
<b>Selected Drugs/Drug Categories**</b>		
Fentanyl & Fentanyl Analogs	29	<0.1%
Synthetic Cannabinoids	3509	3.6%
Synthetic Cathinones	625	0.6%
2C Phenethylamines	268	0.3%
Piperazines	191	0.2%
Tryptamines	77	0.1%

**NOTES:**

**\*Drug Report:** drug that is identified in law enforcement items, submitted to and analyzed by federal, state, or local forensic labs, and included in the NFLIS database.

**\*\*Selected Drugs/Drug Categories:** Fentanyl & Fentanyl Analogs and Synthetic Cannabinoids, Synthetic Cathinones, 2C Phenethylamines, Piperazines, and Tryptamines are drug categories of current interest to the NDEWS Project because of the recent increase in their numbers, types, and availability. Please see the Overview & Limitations section (pgs. 12-17) for a complete list of drugs included in each category that were reported to NFLIS during the January to December 2014 timeframe.

The NFLIS database allows for the reporting of up to three drugs per item submitted for analysis. The data presented are a total count of first, second, and third listed reports for each selected drug item seized and analyzed. The Houston Forensic Science Local Government Corporation (formerly Houston Police Department Crime Lab) began reporting in April 2014; due to difficulties in exporting data from their LIMS, 4th quarter 2014 data have not yet been processed into NFLIS.

**Source:** Adapted by the NDEWS Coordinating Center from data provided by the U.S. Drug Enforcement Administration (DEA), Office of Diversion Control, Drug and Chemical Evaluation Section, Data Analysis Unit. Data were retrieved from the NFLIS Data Query System (DQS) on May 5, 2015.

**Table 7b: Drug Reports\* for Selected Categories of New Psychoactive Substances (NPS) among Items Seized by Law Enforcement in Texas^ in 2014, National Forensic Laboratory Information System (NFLIS),**  
Number of NPS Drug-Specific Reports and Percent of NPS Category

NPS Category Drug Identified	Number (#)	Percent of NPS Category (%)
<b>Top 5 Synthetic Cannabinoid Drug Reports**</b>		
XLR-11 (1-(5-FLUOROPENTYL-1H-3-YL)(2,2,3,3-TETRAMETHYLCYCLOPROPYL)METHANONE)	1,195	34.1%
AB-FUBINACA	798	22.7%
AB-PINACA	418	11.9%
PB-22 (1-PENTYL-1H-INDOLE-3-CARBOXYLIC ACID 8-QUINOLINYL ESTER)	377	10.7%
AB-CHMINACA (N-[(1S)-1-(AMINOCARBONYL)-2-METHYLPROPYL]-1-(CYCLOHEXYLMETHYL)-1H-INDAZOLE-3-CARBOXAMIDE)	257	7.3%
Other Synthetic Cannabinoids	464	13.2%
<b>Total Synthetic Cannabinoid Reports</b>	<b>3,509</b>	<b>100.0%</b>
<b>Top 5 Synthetic Cathinone Drug Reports**</b>		
N-METHYL-3,4-METHYLENEDIOXYCATHINONE (METHYLONE)	209	33.4%
3,4-METHYLENEDIOXYETHYLCATHINONE (ETHYLONE)	203	32.5%
ALPHA-PYRROLIDINOPENTIOPHENONE (ALPHA-PVP)	130	20.8%
DIMETHYLONE (3,4-METHYLENEDIOXYDIMETHYLCATHINONE; bk-MDDMA)	21	3.4%
BUTYLONE (ß-KETO-N-METHYLBENZO-DIOXYLPROPYLAMINE)	18	2.9%
4-METHYL-N-ETHYLCATHINONE (4-MEC)	18	2.9%
Other Synthetic Cathinones	26	4.2%
<b>Total Synthetic Cathinone Reports</b>	<b>625</b>	<b>100.0%</b>
<b>Top 5 2C Phenethylamine Drug Reports**</b>		
2-(4-CHLORO-2,5-DIMETHOXYPHENYL)-N-(2-METHOXYBENZYL)ETHANAMINE (2C-C-NBOME)	122	45.5%
2-(4-BROMO-2,5-DIMETHOXYPHENYL)-N-(2-METHOXYBENZYL)ETHANAMINE (2C-B-NBOMe)	90	33.6%
2-(4-iodo-2,5-DIMETHOXYPHENYL)-N-(2-METHOXYBENZYL)ETHANAMINE (2C-I-NBOME)	52	19.4%
2,5-DIMETHOXY-4-iodophenethylamine (2C-I)	3	1.1%
4-BROMO-2,5-DIMETHOXYPHENETHYLAMINE (2C-B)	1	0.4%
<b>Total 2C Phenethylamine Reports</b>	<b>268</b>	<b>100.0%</b>
<b>Top 5 Piperazine Drug Reports**</b>		
1-(3-TRIFLUOROMETHYL)PHENYL-PIPERAZINE (TFMPP)	112	58.6%
N-BENZYLPIPERAZINE (BZP)	74	38.7%
1,4-DIBENZYLPIPERAZINE (DBZP)	3	1.6%
4-METHOXYPHENYLPIPERAZINE(MeOPP)	2	1.0%
<b>Total Piperazine Reports</b>	<b>191</b>	<b>100.0%</b>
<b>Top 5 Tryptamine Drug Reports**</b>		
DIMETHYLTRYPTAMINE (DMT)	33	42.9%
ALPHA-METHYLTRYPTAMINE	25	32.5%
N,N-DIALLYL-5-METHOXYTRYPTAMINE (5-MEO-DALT)	10	13.0%
4-HYDROXY-N-METHYL-N-ISOPROPYLTRYPTAMINE (4-OH-MIPT)	6	7.8%
5-METHOXY-N-METHYL-N-ISOPROPYLTRYPTAMINE (5-MEO-MIPT)	3	3.9%
<b>Total Tryptamine Reports</b>	<b>77</b>	<b>100.0%</b>

**NOTES:**

**\*Drug Report:** drug identified in law enforcement items submitted to and analyzed by federal, state, or local forensic labs participating in NFLIS.

**\*\*Top 5 NPS Category Drug Reports:** fewer than 5 drug types for a specific NPS category may have been seized in the catchment area during the reporting period. Please see the Overview & Limitations section (pgs. 12-17) for a complete list of drugs included in each NPS category that were reported to NFLIS during the January to December 2014 timeframe.

NFLIS database allows for the reporting of up to three drugs per item submitted for analysis. The data presented are a total count of first, second, and third listed reports for each selected drug item seized and analyzed. The Houston Forensic Science Local Government Corporation (formerly Houston Police Department Crime Lab) began reporting in April 2014; due to difficulties in exporting data from their LIMS, 4th quarter 2014 data have not yet been processed into NFLIS.

**Source:** Adapted by the NDEWS Coordinating Center from data provided by the U.S. Drug Enforcement Administration (DEA), Office of Diversion Control, Drug and Chemical Evaluation Section, Data Analysis Unit. Data were retrieved from the NFLIS Data Query System (DQS) on May 5, 2015.