National Drug Early Warning System (NDEWS)
Sentinel Community Site (SCS)
Drug Use Patterns and Trends: SCE Narrative

The SCE Narrative is written by the Sentinel Community Epidemiologist (SCE) and provides their interpretation of important findings and trends based on available national data as well as sources specific to their area, such as data from local medical examiners or poison control centers. As a local expert, the SCE is able to provide context to the national and local data presented.

This SCE Narrative contains the following sections:

◊ Highlights
◊ Primary and Emerging Substance Use Problems
◊ Local Research Highlights (if available)
◊ Infectious Diseases Related to Substance Use (if available)
◊ Legislative and Policy Updates

The SCE Narratives for each of the 12 Sentinel Community Sites and detailed information about NDEWS can be found on the NDEWS website at www.ndews.org.
National Drug Early Warning System (NDEWS)
Los Angeles County Sentinel Community Site (SCS)
Drug Use Patterns and Trends, 2017: SCE Narrative

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Highlights

- Continuing increases in three indicators for methamphetamine. Methamphetamine ranked number 1 in 2016 for primary drug at treatment admission and for drug reports from the National Forensic Laboratory Information System (NFLIS) with increases in percentages for 2016 over 2015. There was also an increase in the number of Los Angeles County medical examiner cases testing positive for methamphetamine. Reports from the Los Angeles Criminal Information Clearinghouse (LA Clear) indicated decreasing prices for methamphetamine, with smaller-quantity wholesale amounts available.

- Considerable public concern about prescription opioids. Nevertheless, indicators suggest mixed trends with increases in Los Angeles County medical examiner cases with opioids (not including heroin/morphine) but stable or slightly decreasing trends in 2016 as compared with 2015 for the category of prescription opioids in other indicators. Within this class of substances, the number of Los Angeles County medical examiner toxicology cases testing positive for fentanyl doubled from 2015 to 2016.

- Mixed trends in indicators for heroin. Treatment admissions for primary heroin use remained high (ranked number 2) in 2016 with a slight decrease from 2015; the percentage of NFLIS reports for heroin also decreased, whereas reports increased among Los Angeles County medical examiner toxicology cases.

- Low indicators of emerging synthetics. Reports of emerging synthetics remained very low and decreasing across available indicators.

- Cocaine indicators were mixed. Although most indicators reported continuing decreases, the number of Los Angeles County medical examiner toxicology cases with cocaine/crack increased in 2016.

- Benzodiazepine, marijuana, and heroin indicators were all also mixed.
Primary and Emerging Substance Use Problems

To provide some context relevant to specific data sources, a brief summary of results by data source will be given before providing summaries for each specific drug across data sources.

Admissions for substance abuse treatment in calendar year (CY) 2016 totaled 26,446, continuing a decline in numbers from 30,083 in 2015 and from 45,612 in 2012. This decline is a result of several factors, including decreases in state funding and changes in service delivery. In 2016, four substances accounted for 89.6% of admissions: methamphetamine 29.0%, heroin 28.8%, alcohol 16.9%, and marijuana 14.9%. Cocaine/crack accounted for 4.1% and prescription opioids for 4.0%.

Drug reports from seized items analyzed by the U.S. Drug Enforcement Administration’s (DEA’s) National Forensic Laboratory Information System (NFLIS) totaled 27,672 for Los Angeles County in 2016. Methamphetamine was identified in 41.1% of the drug reports and cannabis in 25.9%. Other drugs with more than 1% of reports included cocaine (12.4%), heroin (7.1%), alprazolam (a benzodiazepine, 2.6%), and MDMA (1.2%).

Toxicology cases compiled by the Medical Examiner’s office for 2016 with results available on 6/15/17 were estimated to total 3,031 (see data source notes at end of report for additional detail on estimation). Percentages reported below for toxicology cases represent fractions of the estimated total for 2016. Alcohol was detected most frequently \( n = 1,311 \) \( (43.2\%) \) cases, followed by methamphetamine \( (n = 859 \) \( (28.3\%)) \), prescription narcotics \( (n = 645 \) \( (21.3\%)) \), THC (tetrahydrocannabinol, an active ingredient in marijuana; \( n = 619 \) \( (20.4\%)) \), heroin/morphine metabolites \( (n = 451 \) \( (14.9\%)) \), and cocaine \( (n = 402 \) \( (13.3\%)) \).

The number of reports of drugs to the California Poison Control Center for Los Angeles County in 2016 totaled 4,014. Reports were predominantly for nonillicit substances (86.5%); for example, benzodiazepines accounted for 27.8% of substances reported and prescription narcotics for 14.7%. Illicit substances accounted for 13.5% of substance reports. Among illicit substances, methamphetamine accounted for the largest share (33.0% of the illicit substance reports, 4.5% of total reports), followed by marijuana (31.2% of illicit substance reports, 4.2% of total reports), cocaine/crack (10.9% of illicit, 1.5% of total), and heroin (9.2% of illicit, 1.3% of total).

BENZODIAZEPINES

- Benzodiazepine indicators were mixed.

In 2016, treatment admissions associated with primary benzodiazepine use comprised 0.7%, which was a slight increase from 0.5% in 2015 (Table 4a). Although the numbers of benzodiazepines reported in NFLIS were small, there was an increase in reports of alprazolam in 2016 (2.6%) over 2015 (1.4%), resulting in a fifth place rank for this drug among reports of specific substances. Other benzodiazepines accounted for less than 0.4% of NFLIS reports. Among 2016 Los Angeles County medical examiner toxicology cases, benzodiazepines were reported in 20 cases, which was a substantial decrease from 145 in 2015 (Exhibit 4). Benzodiazepines were reported in 27.8% of 2016 Los Angeles County Poison Control calls, which was an increase from 25.3% in 2015, 23.9% in 2014, and 22.1% in 2013 (Exhibit 2).
COCAINE/CRACK

- Cocaine indicators were mixed. Although most indicators reported continuing decreases, the number of Los Angeles County medical examiner toxicology cases with cocaine/crack increased in 2016.

Of Los Angeles County treatment admissions in 2016, 4.1% (n = 1,086) reported crack or powder cocaine as the primary drug of abuse. This represents a continuing decrease for nearly two decades (for example, cocaine/crack admissions constituted 4.4% of total admissions in 2015, 5.8% in 2014, 6.7% in 2013, and 7.5% in 2012) (Table 4a, Exhibit 1). Continuing with an historical gender distribution, a majority (63.1%) of primary cocaine/crack admissions in 2016 were male (Table 4b). Non-Hispanic African Americans/Blacks continued to represent a majority of cocaine admissions (at 62.3% of the total in 2016). Among substances accounting for more than 1% each of 2016 admissions, cocaine/crack displayed the highest percentage of African Americans/Blacks, where this group was substantially overrepresented compared with their general representation across all treatment admissions (14.3%). Cocaine admissions were predominantly 45 years of age and older, with this age group comprising 53.9% of cocaine admissions; note that this 45 and older age group constituted 23.7% of total admissions.

Cocaine retained a rank of third among drugs from NFLIS drug reports in 2016 for Los Angeles County. Continuing decreases in percentages were seen with cocaine accounting for 12.4% of reports in 2016 compared with 14.3% of reports in 2015 and 15.4% in 2014.

Cocaine was detected in 13.3% (n = 402) of Los Angeles County medical examiner toxicology cases in 2016, which was an increase over levels in 2015 (12.7%) and 2014 (12.5%) (Exhibit 4). This was a lower percentage of cases in 2016 than for narcotic analgesics, methamphetamine, THC, and heroin/morphine.

Cocaine was reported in 1.5% of 2016 Los Angeles County Poison Control calls, which was the same percentage as for 2015 and slightly higher than for 2014 (1.2%) following a slow decline over several years (e.g., 2.1% in 2008) (Exhibit 3). Within the subgroup of all illicit drugs together (accounting for 13.5% of all substances reported in relevant poison control calls), cocaine accounted for 10.9% of these illicit drug reports.

Lifetime stimulant (cocaine, methamphetamine, amphetamine as an aggregate category) use was reported in the California Healthy Kids Survey (CHKS) by 3% of 9th graders in the Los Angeles Unified School District in 2014–2015 and by 6% of 11th graders. These figures were slightly lower than reported for cocaine in 2012–2013 (5% and 7%, respectively). Continuing decreases in lifetime cocaine use were also reported in the Youth Risk Behavior Surveillance System (YRBSS) for secondary school students in Los Angeles County: 5.0% in 2015, 6.5% in 2013, 9.2% in 2011, and 9.7% in 2009.

According to LA CLEAR (Los Angeles Criminal Information Clearing House), wholesale and retail prices of cocaine have decreased to their lowest levels since 2013: Wholesale prices were at $20,000 to $25,000 per kilo at the beginning of 2017 and retail prices were $20 to $60/gram.

MARIJUANA

- Marijuana indicators were mixed.
Marijuana as primary drug accounted for 14.9% of Los Angeles County treatment admissions in 2016, which was a decline from levels in 2015 (16.1%) and continuing a downward trend (from 26.9% in 2012) (Table 4a, Exhibit 1). In 2016, approximately two thirds of the primary marijuana admissions were male (65.7%; Table 4b). Marijuana admissions had the largest proportion of clients younger than 18 years (42.8% in 2016, a decrease from 45.6% in 2015 and 48.4% in 2014), compared with this age group share of methamphetamine admissions [2.9%], alcohol admissions [3.2%], cocaine [1.4%], heroin [0.3%], and prescription opioids [0.9%]). A majority of marijuana admissions were Hispanics (at 60.2%), followed by non-Hispanic African American/Blacks (at 25.0%). Of the major illicit substances, the smallest percentage of non-Hispanic Whites (10.3%) was reported for marijuana.

Cannabis was identified in 25.9% of NFLIS drug reports in 2016, with a ranking of second among drugs for Los Angeles County. This was a decrease from 27.3% in 2015, continuing a downward trend since 2010.

THC was detected in 20.4% \((n = 619)\) of Los Angeles County medical examiner toxicology cases in 2016, which was a slight increase from 2015 (20.2%) and 2014 levels (19.8%) (Exhibit 4).

Marijuana was reported in 4.2% of 2016 Los Angeles County Poison Control calls, which was an increase from 3.4% in 2015 and 3.3% in 2014 (Exhibit 3). Marijuana accounted for 33.0% of the reports within the category of illicit drugs.

Lifetime marijuana use was reported in the CHKS for the Los Angeles Unified School District by 9% of 7th graders, by 25% of 9th graders, and 36% of 11th graders in 2014–2015 decreasing from 13%, 35%, and 45%, respectively, in 2012–2013 but closer to 2009–2010 levels (9%, 25%, 42%, respectively). Past 30-day use of marijuana was reported by 5% of 7th graders, 13% of 9th graders, and 17% of 11th graders, decreasing from 7%, 20%, 21%, respectively, in 2012–2013 and decreasing from 15% and 21% for 9th and 11th graders, respectively, in 2009–2010. A decrease in lifetime marijuana use was also reported in the YRBSS for secondary school students with 2015 levels at 34.4%, down from 39.3% in 2013 and 42.4% in 2011; likewise, a decrease was seen in past 30-day marijuana use at 16.6% in 2015, down from 20.3% in 2013.

According to LA CLEAR, marijuana prices have remained stable in 2016 and into 1st quarter of 2017, with many grades of marijuana readily available, both imported from Mexico and cultivated domestically.

**METHAMPHETAMINE**

- Continuing increases in three of four major indicators for *methamphetamine*. Methamphetamine ranked number 1 in 2016 for primary drug at treatment admission and for drug reports from the National Forensic Laboratory Information System (NFLIS) with increases in percentages for 2016 over 2015. There was also an increase in the number of Los Angeles County Medical Examiner cases testing positive for methamphetamine.

Methamphetamine accounted for 29.0% \((n = 7,659)\) of admissions to Los Angeles County substance abuse treatment programs in 2016 (Table 4a), which was an increase from 25.3% in 2015 and continuing a generally increasing trend since 2010 (16.9% in 2012 shown in Table 4a; Exhibit 1). Other amphetamines were reported as the primary substance in 0.08% of the total treatment admissions. Compared with admissions for other major illicit drugs, primary methamphetamine admissions had the largest proportion...
of females (46.3%; Table 4b). Methamphetamine admissions were most likely to be Hispanic (63.7%), followed by non-Hispanic Whites (22.6%). Among methamphetamine admissions, 2.9% were by clients younger than 18 years of age; 22.2% of admissions were for clients ages 18–25; 63.9% were for clients ages 26–44; and clients 45 or older represented 11.0% of methamphetamine admissions. Smoking continued as the most frequently mentioned route of administration by primary methamphetamine admissions (76.2%). Proportions of injectors (9.7%) and inhalers (11.1%) have generally declined from the 1990s (from 15.2% and 29.9%, respectively, in 1999).

Methamphetamine was ranked first among drugs for Los Angeles County based on drug reports from NFLIS; methamphetamine accounted for 41.1% of reports in 2016, which was an increase from 38.7% in 2015, continuing an upward trend since 2009.

Methamphetamine was detected in an estimated 28.3% (n = 859) of Los Angeles County medical examiner toxicology cases in 2016, which was a slight increase over 27.7% in 2015 and 24.3% in 2014 (Exhibit 4).

Methamphetamine was reported in 4.5% of 2016 Los Angeles County Poison Control calls, which was a slight decrease from 2015 (4.8%), attenuating the previous increasing trend from 1.2% in 2008 to 4.8% in 2015 (Exhibit 3).

Lifetime stimulant (cocaine, methamphetamine, amphetamine) use was reported in the CHKS by 3% of 9th graders in the Los Angeles Unified School District in 2014–2015 and by 6% of 11th graders. These figures were slightly lower than reported for methamphetamine in 2012–2013 (5% for 9th graders and 9% for 11th graders). The YRBSS reported 3.4% of secondary school students in 2015 with lifetime methamphetamine use, which was down from 5.1% in 2013 and 6.9% in 2011.

According to LA CLEAR, the price of methamphetamine has continued to decrease: Wholesale prices were at $2,000 to $3,000 per pound in the first quarter of 2017 compared with $2,800 to $3,500 near the end of 2015 and $17,500 to $19,500 in 2008. Retail prices were reported at $50 to $80 per 1/8 ounce in early 2017 compared with $80 to $140 at the end of 2015. Beginning in 2016, methamphetamine was also being sold in smaller (1/4 and ½ pounds) wholesale quantities (priced at $800 to $1,000 and $1,300 to $1,445, respectively, in early 2017) to increase profits.

NEW PYSHOACTIVE SUBSTANCES (OTHER THAN OPIOIDS)

- Low indicators of emerging synthetics. Reports of emerging synthetics remained very low across available indicators with decreases from the previous year.

The prevalence of emerging synthetic drugs remains very low for Los Angeles County across indicator systems that report these substances. These substances are not yet recorded for statewide treatment admission data and are not routinely examined in all medical examiner toxicology cases. Synthetic cathinones (reported as bath salts by callers) were reported in <0.1% (n = 4) of 2016 Los Angeles County Poison Control calls, similar to 2015 (n = 3) and lower than 0.3% (n = 13) in 2014 (Exhibit 3). Synthetic cathinones accounted for 15 reports or <0.1% of NFLIS drug reports in 2016, which was a decrease from 67 reports in 2015 (or 0.2%) and 201 reports (or 0.6% in 2014). Of these 15 reports in 2016, 8 were reported as ethylone and 4 as butylone. Synthetic cannabinoids (most reported as “spice” by callers) were reported in 0.3% (n = 11) of 2016 Los Angeles Poison Control calls, which was a decrease from 0.7% (n = 33) in 2015.
and 0.5% in 2014 (n = 23) (Exhibit 3). Synthetic cannabinoids accounted for <0.1% (n = 18) of NFLIS drug reports, which was a decrease from n = 55 in 2015 and n = 86 in 2014. In 2016, there was 1 report of piperazines among Los Angeles County toxicology cases. There was 1 report of piperazines (TFMPP) in NFLIS, which was a decrease from 10 reports in 2015. In 2016 NFLIS data, there were 7 reports of tryptamines, which was consistent with 2015 reports.

**OPIOIDS**

- Heroin indicators were mixed.

- Considerable public concern about prescription opioids. Nevertheless, indicators suggest mixed trends with increases in Los Angeles County medical examiner cases with opioids (not including heroin/morphine) but stable or slightly decreasing trends in 2016 as compared with 2015 for the category of prescription opioids in other indicators. Within this class of substances, the number of Los Angeles County medical examiner toxicology cases testing positive for fentanyl doubled from 2015 to 2016.

**Heroin**

In 2016, 7,626 Los Angeles County treatment admissions reported heroin as the primary drug. These heroin admissions represented 28.8% of Los Angeles County admissions (Table 4a, Exhibit 1), which was a decrease from 31.2% in 2015 after a substantial increase from 2013 (22.4%) to 2015. In 2016, heroin admissions were predominantly for males (71.6%) and were most likely to be for non-Hispanic Whites (50.2%) or Hispanics (38.0%). Heroin admissions were predominantly for clients in the 26–44-year age range (49.0%) or who were 45 years of older (33.9%). Although an increasing proportion of the heroin admissions was observed for the 18–25 age group from 2008 (9.0%) to 20.2% in 2013, the percentage of heroin admissions for that age group has declined to 16.8% in 2016.

Heroin/morphine or metabolites were detected in 14.9% of Los Angeles County medical examiner toxicology cases in 2016, which was an increase from 2015 (13.8%) but still lower than in 2014 (16.5%) (Exhibit 4).

Heroin ranked fourth among drugs for Los Angeles County based on NFLIS drug reports. Heroin was identified in 7.1% of NFLIS drug reports, which was a small decrease over 2015 (7.4%).

Heroin was reported in 1.3% of 2016 Los Angeles County Poison Control calls (or 9.2% of reports for illicit drugs), which was a decrease from 2015 (1.8% of all relevant drug reports; 12.9% of reports for illicit drugs) (Exhibit 3).

The YRBSS reported lifetime heroin use among 2.0% of secondary school students in 2016, which was a decrease from 3.0% in 2013 and 4.4% in 2011.

**Other Opioids**

Admissions for primary drug in the categories “Other opioids/synthetics” or “Oxycodone/OxyContin” continued to constitute a small percentage (n = 1,056 or 4.0%) of Los Angeles County treatment admissions in 2016. The gradual increase since 2010 appears to have stabilized in 2015 and 2016 with
levels similar to 2014 (4.1%; Table 4a, Exhibit 1). Admissions for these opioid categories remain predominantly male (53.3%), majority non-Hispanic White (54.1%), and older than 25 years (54.0%) were 26–44, which was an increase from 52.3% in this age category in 2015 and 47.9% in 2014; and 36.3% were 45 or older, which was a decrease from 37.8% in 2014 and 42.1% in 2014) (Table 4b). The percentage of opioid admissions for younger users remained relatively stable in 2016 (9.7% were 25 or younger in 2016).

Hydrocodone ranked 9th and oxycodone ranked 10th among drugs for Los Angeles County based on NFLIS drug reports for 2016, accounting for 0.6% and 0.4%, respectively, of total reports. These two prescription opioids were the most prevalent among drugs in the general category of narcotic analgesics; together these two drugs accounted for 1.0% of NFLIS reports, which was consistent with their combined percentage in 2015. The general category of narcotic analgesics accounted for 2.1% of NFLIS drug reports for Los Angeles County in 2016, which was a very slight increase from 2.0% in 2015. Other narcotic analgesics accounting for more than 0.1% of NFLIS reports included tramadol (0.3%), fentanyl (0.2%), and codeine (0.2%); 2016 reports for tramadol and fentanyl increased over 2015 (0.2% and 0.1%, respectively).

One or more narcotic analgesics (not including heroin/morphine) were detected in 21.3% of 2016 Los Angeles County medical examiner toxicology cases, which was an increase from 19.4% in 2015 but lower than 2014 levels (24.4%) (Exhibit 4). Narcotics were identified at a level lower than that of methamphetamine and higher than for other specific categories including THC (tetrahydrocannabinol, an active ingredient in marijuana) and other illicit drugs such as cocaine and heroin/morphine.

Narcotic analgesics were reported in 14.7% of 2016 Los Angeles County Poison Control calls, which was a slight decrease from 15.2% in 2015 (Exhibit 2); of these narcotic analgesic reports, 60.2% were for hydrocodone products in 2016, 21.1% were for oxycodone products, and 1.4% were for fentanyl.

Lifetime use of prescription drugs without a prescription (including pain killers, tranquilizers, or sedatives reported as aggregate category) were reported in the CHKS by 9% of 9th graders and 14% of 11th graders, decreasing from 11% and 15%, respectively, for prescription pain killers in 2012–2013. In the YRBSS, lifetime misuse of prescription drugs (including opioids, Adderall/Ritalin, or tranquilizers) was reported by 9.5% of secondary school students in 2016, which was a decrease from 10.6% in 2013 and 12.1% in 2011.

We looked specifically at fentanyl because of current concern with fentanyl-related deaths in several locations across the United States. Fentanyl was identified in 0.2% of NFLIS drug reports for Los Angeles County in 2016 (n = 66), which was more than double the number (n = 31) and percentage of 2015 reports. Fentanyl was reported in 8 calls to the California Poison Control System for Los Angeles County in 2016, which was a decrease from 20 reports in 2015 and 23 reports in 2014. Fentanyl was reported in 115 toxicology cases by the Los Angeles medical examiner for 2016, more than double the 2015 number (n = 47). The highest percentage (45%) of fentanyl cases by age group were for those ages 26–44, whereas in 2015, the highest percentage (49%) was for those ages 45 or older.

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**Infectious Diseases Related to Substance Use**
According to CDC reports, there were 2001 HIV diagnoses in the Los Angeles County portion of the Los Angeles/Anaheim metropolitan statistical area in 2015 (rate of 23.4/100,000 population), which was a decline from 2251 in 2014 (rate of 26.6). Males accounted for a large majority of diagnoses (89.5% in 2015); the rate per 100,000 population for males was 42.9, which was a decline from a rate of 48.7 in 2014. Among males, men who have sex with men (MSM) contact remained the predominant vector of transmission (93.0%). Injection drug use (IDU) was reported as transmission vector in 2.7% cases and MSM/IDU in 3.0%, increasing from 2.0% and 2.6%, respectively, in 2014. Among females (10.5% of diagnoses, rate of 4.8/100,000 population), heterosexual contact was the primary vector of transmission (84.8% of female diagnoses). Although IDU remained the secondary vector of transmission at 15.2% for women, this was a slight increase over 14.5% in 2014. Among males, the rate of diagnosis was highest for the Black/African American race/ethnic group at 121.8 per 100,000 (compared with 43.6 for Hispanic/Latino, 33.0 for White, and 15.1 for Asian). Among males, the highest rate by age grouping was for 25–34 year olds at 80.2 per 100,000 population (compared with 43.6 for 13–24 years, 56.2 for 35–44 years, 37.5 for 44–54 years, and 10.2 for those 55 and older). Similar patterns were seen for women with the highest rate by race/ethnic grouping of 22.4 per 100,000 for Black/African Americans (compared with 4.5 for Hispanic/Latino, 1.9 for Whites, and .9 for Asians) and with the highest rate by age grouping of 8.3 for 25–34 year olds (compared with 4.2 for 13–24 years, 5.8 for 35–44 years, and 6.1 for 55 or older).

According to the Los Angeles County Department of Public Health Acute Communicable Disease Control, new cases of hepatitis A in Los Angeles County numbered 33 in 2015, with an annual incidence rate of 0.34 per 100,000 population; this was a decrease from rates of 0.44 in 2014 and 0.64 in 2013. Note that the incidence rate for California for 2015 was 0.46 and for the United States 0.43. Two new cases of (acute) hepatitis C (rate of 0.02) were reported in 2015 in Los Angeles County, which was a decline from 5 cases in 2014. The rate of hepatitis C for California was 0.15 and for the United States was 0.76.

The California Department of Health reported high rates of sexually transmitted diseases for the state and for Los Angeles County in 2015. Los Angeles experienced incidence rates of 560.6 per 100,000 population for chlamydia in 2015, 172.8 for gonorrhea, and 18.3 for early latent syphilis, continuing the several-year increasing trends in numbers of cases across genders, race/ethnic, and age groups.

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**Legislative and Policy Updates**

In 2016, California voters passed an amendment legalizing recreational use of marijuana. The new legislation legalizes possession and use of up to one ounce of marijuana (or 8 grams of concentrates) and personal use cultivation of up to six plants per residence by adults 21 and older. In addition, it establishes a licensed regulation system for commercial production and sale of adult use cannabis and levies a production tax of $9.25/ounce of flowers plus an additional 15% excise tax on retail sales of marijuana both adult-use and medical, effective January 1, 2018. Counties and cities continue local decisions about whether, where, and under what conditions to allow dispensaries for medical; and hearings are underway on regulations for retailers, distributors, labs, and cultivation.
Data Sources

Data for this report were drawn from the following sources:

**Data for admissions to substance abuse treatment** are reported from the California Outcomes Monitoring System (CalOMS) for Los Angeles County for 2016 and earlier years for comparison (compiled by the California Department of Health Care Services, Mental Health Services Division, Office of Applied Research and Analysis; 2016 data from 2/14/17). Data include all admissions to programs in Los Angeles County receiving any public funding and all admissions to programs providing narcotic replacement therapy (whether or not the program receives public funding). The total number of admissions for Los Angeles County has experienced a continuing decline from 48,762 in 2010 to 26,446 in 2016. Decreases in annual admissions have occurred statewide and are a result of factors such as reductions in certain state funding and changes in the overall service delivery system.

**Drug prices and trafficking** data were derived from U.S. Department of Justice sources. Prices were reported by the Los Angeles County Regional Criminal Information Clearinghouse (LA CLEAR) for first quarter 2017 and for fourth quarter 2015 for comparison. The prices included in these reports reflect the best estimates of the analysts in the Research and Analysis Unit at LA CLEAR and reported in National Drug Intelligence Center (NDIC) publications. Price estimates are based primarily on field reports, interviews with law enforcement agencies throughout the Los Angeles High Intensity Drug Trafficking Area (HIDTA), and postseizure analysis.

**Drugs detected in Los Angeles County Medical Examiner toxicology cases** were extracted from data provided by the Los Angeles County Medical Examiner’s office for calendar year 2016 (data provided 2/22/2017) with reference to earlier years from the same source. Because confirmed results were not available in the data set for methamphetamine, amphetamine, MDMA, and MDA for 2016, we have estimated frequencies for these drugs from supplemental (communication 7/20/17) aggregate reports of number of tests sent for confirmation of which about 75% were expected to be positive and 96% were expected (from historical results) to include methamphetamine. The total number of cases (for use in computing percentages of cases with each specific type of drug) was also an estimate based on number of cases in the primary data set plus the estimated number of cases represented by the aggregate number of confirmatory tests adjusting for overlap because of multiple drugs within cases (based on historical data). [Further details of estimation available from the author.] Thus, we urge caution in interpreting 2016 results. Frequencies and percentages reflect cases for which toxicology tests were conducted with a drug detected (i.e., not just drug-related deaths). Each case may have more than one drug detected; therefore, percentages should not be summed across drug categories. Note that heroin and morphine and their metabolites were not distinguished into separate categories. Emerging synthetic drugs typically were not included in routine toxicology testing. For reporting purposes, we have combined narcotic analgesics and narcotic-like analgesics (other than heroin/morphine) into one category; these include codeine, hydrocodone, hydromorphone, oxycodone, oxymorphone, methadone, fentanyl, other narcotics, and tramadol.
Poison Control calls were summarized for Los Angeles County from data from the California Poison Control Center for calendar year 2016 (data extracted as of 2/20/2017). References to prior years are from the same source. Drug mentions are included for cases (calls) that reported illicit drugs or cases for which the reason for the call was labeled as “intentional/suspected suicide, misuse, abuse, unknown,” “contamination/tampering,” or “malicious.”

Youth substance use was reported from the California Healthy Kids Survey (CHKS; reports available online for 2014–2015 and earlier periods) for Los Angeles Unified School District, the largest school district in Los Angeles County and representing about 42% of the public school students in Los Angeles County. A county-wide aggregate report was not available for the most recent period (2014–2015). An additional source of secondary school youth substance use was the CDC Youth Risk Behavior Surveillance System, accessed using the online system 7/27/17.

Human immunodeficiency virus (HIV) diagnosis data were obtained from the Centers for Disease Control HIV Surveillance Report Vol. 22 No. 1, Diagnosed HIV Infection among Adult and Adolescents in Metropolitan Statistical Areas in the United States and Puerto Rico, 2015 (and for 2014 for comparison). Hepatitis data for 2015 were from the Los Angeles County Department of Health Services, Acute Communicable Disease Control Program, Annual Morbidity Report 2015. Data on sexually transmitted diseases were from the CA Department of Health Local Health Jurisdiction STD Data Summaries, California, 2015

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Exhibit 1. Percentage of Admissions to Substance Use Treatment for Selected Major Substances (Primary Drug for Admission), Los Angeles County, 2008–2016¹

¹Data include all admissions to programs in Los Angeles County receiving any public funding and all admissions to programs providing narcotic replacement therapy (whether or not the program receives public funding). Number of admissions in 2016 $N = 30,083$, in 2008 $N = 55,530$.

Source: California Department of Health Care Services, Mental Health Services Division, Office of Applied Research and Analysis.
Exhibit 2. Percentage of Reports to California Poison Control Center for Selected Drug Categories, Los Angeles County, 2010–2016

Notes: a) reports for cases with “intentional/suspected suicide, misuse, abuse, unknown,” “contamination/tampering,” or “malicious” reason for exposure; b) illicit drugs include heroin, marijuana, cocaine/crack, methamphetamine, PCP, LSD, MDMA, GHB, piperazines, tryptamines, Rohypnol, cannabamimetics, and cathinones (see exhibit 3 for selected illicit drugs); and c) opioid category includes opioids other than heroin.

Source: California Poison Control System 2016 data, N = 4,014 total drug reports.
Exhibit 3. Percentage of Reports to California Poison Control Center for Selected “Illicit” Drugs, Los Angeles County, 2010–2016

1Reports for illicit drugs or for cases (for other drugs) with “intentional/suspected suicide, misuse, abuse, unknown,” “contamination/tampering,” or “malicious” reasons.

Source: California Poison Control System (2/20/17) 2016 data, N = 4,014 total drug reports.
Exhibit 4. Percentage of Medical Examiner Toxicology Cases with Drugs Detected, Los Angeles County, 2010–2016

*narc. analgesics and narc-like analgesics (other than heroin/morphine) include codeine, hydrocodone, hydromorphone, oxycodone, oxymorphone, methadone, fentanyl, other narcotics, and tramadol.


Source: Data for analysis from Los Angeles County Medical Examiner 4/4/17 and supplemental methamphetamine data 7/20/17.