



DEA BULLETIN



Drug-Caused Deaths Investigated by the Washoe County Regional Medical Examiner

(U) This DEA Bulletin is based on preliminary reporting and may be subject to updating as additional information becomes available.

DEA-MER-BUL-066-20
MARCH 2020

Event

Since 2006, Drug Enforcement Administration (DEA) reporting from the Los Angeles Field Division (LAFD) has explored drug-related mortality in the LAFD area of responsibility (AOR), which includes the State of Nevada. In 2019, LAFD personnel reviewed post-mortem toxicology records from the Washoe County, Nevada Regional Medical Examiner's Office (WCRMEO) from the period between 2015 and 2018. These records show that the rate of drug-caused deaths per 100,000 in Washoe County alone increased by more than 130 percent during these four years. Although opioids as a group were the most commonly detected substances in drug-caused death cases investigated by the WCRMEO from year to year, the prevalence of illicit stimulants (methamphetamine in particular) within such cases rose significantly. By 2017, methamphetamine had become the most frequently detected individual drug in WCRMEO cases when drug toxicity was ruled as the primary cause of death. In nearly half of all WCRMEO drug-caused death cases between 2015 and 2018, toxicology screens revealed the presence of at least one illicit and one licit drug. Deaths involving a combination of illicit and licit drugs also became more common during this span.

Significance

LAFD reporting previously indicated the rate of drug-caused deaths per 100,000 in the population had been on the rise throughout the LAFD AOR. The most dramatic rate increase during the current decade had been observed in Clark County, Nevada, where records indicate there were nearly 28 drug-caused deaths per 100,000 people by 2017. This was more than triple the rate for Los Angeles County that year. The development underscored the importance of assessing drug-related mortality elsewhere in Nevada, with the WCRMEO offering its services to a large portion of the State outside of Clark County. Analyses of WCRMEO toxicology data reflects the growth in drug-caused

deaths in this region generally as well as the increasing prevalence of specific drug threats such as methamphetamine and fentanyl.

Details

LAFD reporting has provided a detailed account of the methodology employed to construct a dataset using raw toxicology records submitted by individual coroner and medical examiner offices within the AOR. In short, all the cases considered in this analysis met two criteria: a pathologist ruled the death was primarily caused either by repeated or acute exposure to drugs, and toxicology screening revealed the presence of one or more specific substances (of interest to the LAFD). Based on these criteria, the WCRMEO identified at least 588 drug-caused deaths in the four-year period between 2015 and 2018. Although Washoe County is the primary area from which the WCRMEO draws its cases, it offers services such as autopsies and toxicological analyses to 13 other counties in Nevada as well as six counties in Northern California. For the four years of data currently available, just less than 64 percent of the drug-caused deaths confirmed by the WCRMEO occurred in Washoe County. Based on data from the U.S. Census Bureau's Population Estimates Program, the LAFD calculated the rate of drug-caused deaths per 100,000 in the population using only the deaths in Washoe County and the county's estimated population. For that subset of WCRMEO cases, the drug-caused death rate rose more than 130 percent from approximately 10.6 percent per 100,000 in 2015 to 24.5 percent in 2018.

Across all WCRMEO drug-caused death cases, the proportion of cases featuring illicit stimulants increased in the time frame considered. Methamphetamine was detected in just less than 25 percent of such cases in 2015, and this figure rose to nearly 38 percent by 2018. Overall, methamphetamine was present in more than one third of all drug-caused deaths investigated by the WCRMEO during the four years and became the most commonly detected individual substance by 2017, when toxicology revealed it to happen nearly 42 percent of the time. In WCRMEO toxicology records, the presence of heroin is confirmed by the detection of the metabolite 6-monoacetylmorphine but is often inferred from the detection of metabolized morphine as well. Either 6-monoacetylmorphine or morphine were present in approximately 31 percent of all drug-caused deaths between 2015 and 2018. Methamphetamine, heroin, and cannabinoids (THC products were in 21 percent of cases) were far more commonly detected than any other illicit substances; all other individual illicit drugs were present at rates lower than 10 percent. Cocaine, for example, was present in only about five percent of cases. As a drug class, opioids were the most frequently detected with at least one opioid (whether licit or illicit) found in nearly 70 percent of all drug-caused deaths during these four years.

The majority of WCRMEO drug-caused deaths involved the detection of multiple controlled substances. Decedents had only a single drug of any variety in their systems at the time of death in less than 17 percent of all cases. By 2018, WCRMEO toxicology records showed that more than half of the drug-caused death cases (nearly 54 percent) featured some combination of illicit and licit drugs. Only 37 percent of these cases exhibited both drug varieties in 2015. Five or more drugs were detected during post-mortem toxicology in nearly one third of the selected cases. A licit drug was detected in nearly eight out of every 10 cases; the most commonly detected licit drugs were oxycodone, alprazolam, and naloxone. During these years, the prevalence of licit opioids (e.g., oxycodone, hydrocodone,

dihydrocodeine) did decline somewhat from appearing in more than 56 percent of drug-caused deaths in 2016 to less than 40 percent in 2018.

In tabulating the frequency of different varieties of drugs in WCRMEO cases, fentanyl was construed as an illicit substance. During the current decade, users have become far more likely to suffer exposure to illicitly-manufactured fentanyl and fentanyl-related substances than licit fentanyl formulations. The prevalence of fentanyl detections increased from just more than four percent of WCRMEO drug-caused death cases in 2015 (three cases) to nearly 11 percent of cases in 2018 (20 cases). A fentanyl type was found in 60 out of 588 cases overall. Records specified that the fentanyl-related substances acetylfentanyl and furanylfentanyl were detected five and two times respectively. Cyclopropylfentanyl was detected in a single case.

DEA PRB 03-04-20-07

(U) This product was prepared by the DEA Intelligence Program – Los Angeles Field Division. Comments and questions may be addressed to the Indicator Programs Section at: DEA.IntelligenceProducts@usdoj.gov.

DFN-701-03—Destroy 2 years after issuance or when the Bulletin is superseded or obsolete.