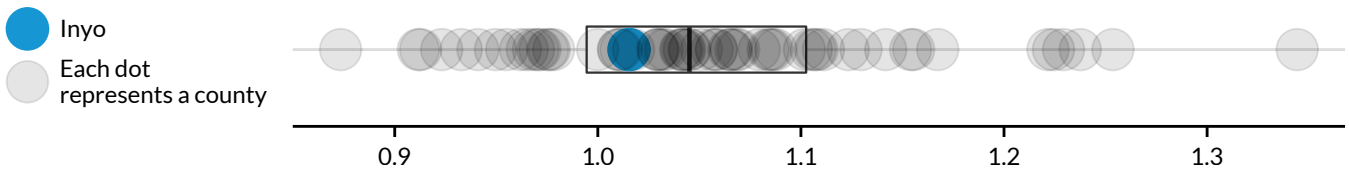
County Estimates of Opioid Use Disorder and Treatment Needs in California

California County Spotlight: Inyo County, March 19, 2018

- In 2016, an estimated **5.6** percent of people ages 12 years and older (**862** people) misused opioids in **Inyo**, and **1.0** percent of people (**156** people) had an opioid use disorder (OUD),[a] defined as opioid abuse or dependence. Approximately one-fifth of those who misuse opioids have an OUD.
- The county had **3** opioid overdose deaths in 2016.
- There are **58** to **98** people with OUD in the county without local access to opioid agonist treatment (i.e. buprenorphine or methadone). Since there are no regulatory barriers to naltrexone and counseling treatments, this snapshot focuses on agonists.

Percent of the Population 12 Years and Older with Opioid Use Disorder (Abuse or Dependence) in California Counties, Highlighting Inyo[b]



County Measure	
All opioid overdose deaths, 2016[c]	**3** deaths; **16.5** per 100,000 people
Buprenorphine prescriptions, 2016[c]	**405** prescriptions; **22.3** per 1,000 people
Methadone patients at OTPs, 2016[d]	**0** methadone patients at OTPs
Buprenorphine-waivered prescribers, February 2018 estimate[e]	**4** prescribers with a 30-patient limit, **0** prescribers with a 100-patient limit, **0** prescribers with a 275-patient limit; up to **5** prescribers from out of county prescribe to patients in the county.
Estimated count and rate of opioid misuse[f]	**862** people misused opioids; **5.6** per 100 people
Estimated count and rate of OUD[f]	**156** people with OUD; **1.0** per 100 people
Estimated number of people with OUD who could be treated, given current buprenorphine and methadone treatment capacity[g]	Between **58** and **98** people could be treated given current capacity, depending on how many patients each buprenorphine prescriber treats.
Estimated treatment gap, assuming all people with OUD seek treatment[g]	Between **58** and **98** people with OUD do not have access to treatment, based on current opioid agonist treatment capacity.
Count and percent of prescribers with a buprenorphine waiver[e]	There are **130** prescribers in the county, and **3.1%** have a buprenorphine waiver.
Strategies to Meet Demand for Treatment	
Increase prescribers:[h] Adding **4** new waivered prescribers with a 30-patient limit would fill the treatment gap, if all prescribers treat half of their maximum waiver capacity. Adding **4** prescribers with a 30-patient limit would double the county's waivered prescribers and fill **36.0%** of the treatment gap, if all prescribers average 9 patients each.	
Increase resources: Work with health plans for prescriber outreach; add MAT in health centers, jails, EDs, hospitals, maternity practices, and existing addiction treatment programs; market MAT telehealth to the public; work with opioid treatment programs to add med units and spokes; work with county Alcohol and Drug departments to coordinate counseling and other services; expand MAT services through the Drug Medi-Cal waiver; engage with local opioid safety coalition.	

Data sources and notes:

[a] Opioid misuse is defined as self-reported use of heroin or misuse of prescription pain relievers. OUD is defined as self-report of heroin use or criteria for opioid abuse or dependence consistent with Diagnostic and Statistical Manual of Mental Disorders (DSM-IV).

[b] Each dot in this chart shows the estimated rate of OUD among those 12 years and older in each county. The featured county's rate is shown as a blue dot; other California county rates are shown as dots. The box in the boxplot has a middle line that shows the median rate across counties. The ends of the box show the rate at the lowest/highest quarter of counties.

[c] California Opioid Overdose Surveillance Dashboard. Buprenorphine prescriptions are by patient location and exclude Butrans.

[d] Substance Abuse and Mental Health Services Administration (SAMHSA) 2016 Opioid Treatment Program (OTP) directory.

[e] Estimates based on DEA Active Controlled Substances Act (CSA) Registrants database and Controlled Substance Utilization Review and Evaluation System (CURES) data as well as several data sources; see methods below and the appendix methodology.

[f] Estimates based on National Survey on Drug Use and Health (NSDUH) and other data sources; see appendix. Estimates of opioid misuse and OUD involve prescription opioids and/or heroin.

[g] Estimates based on DEA CSA Registrants database and a range of estimated patients per prescriber; see appendix. Treatment capacity and treatment gap estimates are rounded up to the nearest integer.

[h] Estimates based on OUD prevalence estimates, DEA CSA Registrants database, and a range of estimated patients per prescriber; see appendix. Prescriber estimates are rounded up to the nearest integer. The treatment gap could also be addressed by encouraging currently waivered prescribers to increase the number of patients treated and/or increasing their waiver limit.

Summary of Methods

This fact sheet presents data from the California Opioid Overdose Surveillance Dashboard and other data sources, as well as county-level estimates based on new analyses by researchers at the Urban Institute (www.urban.org). To estimate the demand for treatment, we calculated county rates of OUD, starting with estimates of past-year nonmedical use of prescription pain relievers for 26 substate regions in California from the NSDUH (Lipari et al. 2017), and adjusting these estimates for additional NSDUH estimates of heroin use disorder and recent trends. We then used regression models to predict county-level rates as a function of explanatory variables that have an empirical relationship with OUD (Alzeer et al. 2017; Paulozzi et al. 2017). We tested a variety of models that produced similar patterns of results. We applied county-level estimates of the population from the Centers for Disease Control and Prevention (CDC) to create county-level counts, which were adjusted to match the NSDUH substate counts. To estimate county OUD rates, the share of OUD among those who misuse opioids (0.2 based on 2016 national NSDUH estimates) was applied to estimated opioid misuse rates. To estimate buprenorphine MAT capacity, we drew on the DEA Active Controlled Substances Act (CSA) Registrants database, which includes all DATA-waived buprenorphine prescribers. We mapped prescriber addresses to county using a ZIP code to county crosswalk from UDS Mapper and the Census Bureau, and for ZIP codes that map to more than one county, we geocoded addresses through the Google Geocoding API. In counties where the number of prescribers from California's CURES data was larger than our estimate based on DEA data, we adjusted the estimated number of waivered prescribers, preserving the distribution of waiver limits from the DEA data. We calculated county buprenorphine treatment capacity using a lower bound of estimated average capacity in California of nine patients per provider (Thomas et al. 2017) and an upper bound equal to half of a prescriber's estimated maximum patient waiver limit. Treatment capacity related to out-of-county buprenorphine prescribers and methadone slots at OTPs in the county were added. To compute the treatment gap, i.e. the number of individuals with OUD who do not have access to MAT in their county, we assumed that all individuals with OUD are likely to seek MAT. We calculated the treatment gap by subtracting the low and high estimated range of the treatment capacity in each county from the estimated number with OUD. We computed the estimated number of additional 30-waivered buprenorphine prescribers needed per county to achieve capacity to fill the estimated treatment gap. We present strategies to meet demand for treatment, showing a range using lower and upper estimates of the treatment gap and the treatment capacity. In cases where the number of new prescribers needed would be more than double the number of current buprenorphine prescribers, we present an alternative, more feasible strategy of doubling the number of prescribers. In these cases, we present the percent of the treatment gap that would be filled.

For more information on the methods used in producing these estimates, see the methodological appendix at: www.urban.org/research/publication/county-level-estimates-opioid-use-disorder-and-treatment-needs-california.

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