

Solano County Opiates

Prepared by Solano Public Health
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Solano County Opiates at a Glance

SOLANO COUNTY OPIATES BY THE NUMBERS

Prescriptions (2016)

343
THOUSAND
Opioid prescriptions in 2016

That's almost **1** opioid prescription for every Solano resident, including children.

Emergency Department Visits (2015)

Opioid overdose (no heroin)	Heroin overdose
2014 (71 visits)	2015 (42 visits)
34%	133%
2015 (47 visits)	2014 (18 visits)

In 2015, the number of ED visits due to opioid-related overdose (excluding heroin) decreased by 34% from 2014; however, heroin overdose ED visits increased by 133% in the same time period.

Hospitalizations (2015)

65
Solano residents were HOSPITALIZED for opioid overdose (including heroin) in 2015, a **38% increase** from the previous year.

Deaths (2016)

Overall opioid **DEATHS ARE DOWN** causing 14 opioid overdose deaths in 2016, compared to 19 in 2015 and 27 in 2014.

6 of 7 opioid overdose deaths were due to **prescription opioid overdose.**

Main source: California Opioid Overdose Surveillance Dashboard, Safe and Active Communities Branch, California Department of Public Health. Prescription data obtained from Controlled Substance Utilization Review and Evaluation System (CURES), California Department of Justice. Emergency Department visit data obtained from Emergency Department Data, California Office of Statewide Health Planning and Development. Hospitalization data obtained from Inpatient Discharge Data, California Office of Statewide Health Planning and Development. Death data obtained from Vital Statistics Multiple Cause of Death Files, California Department of Public Health.

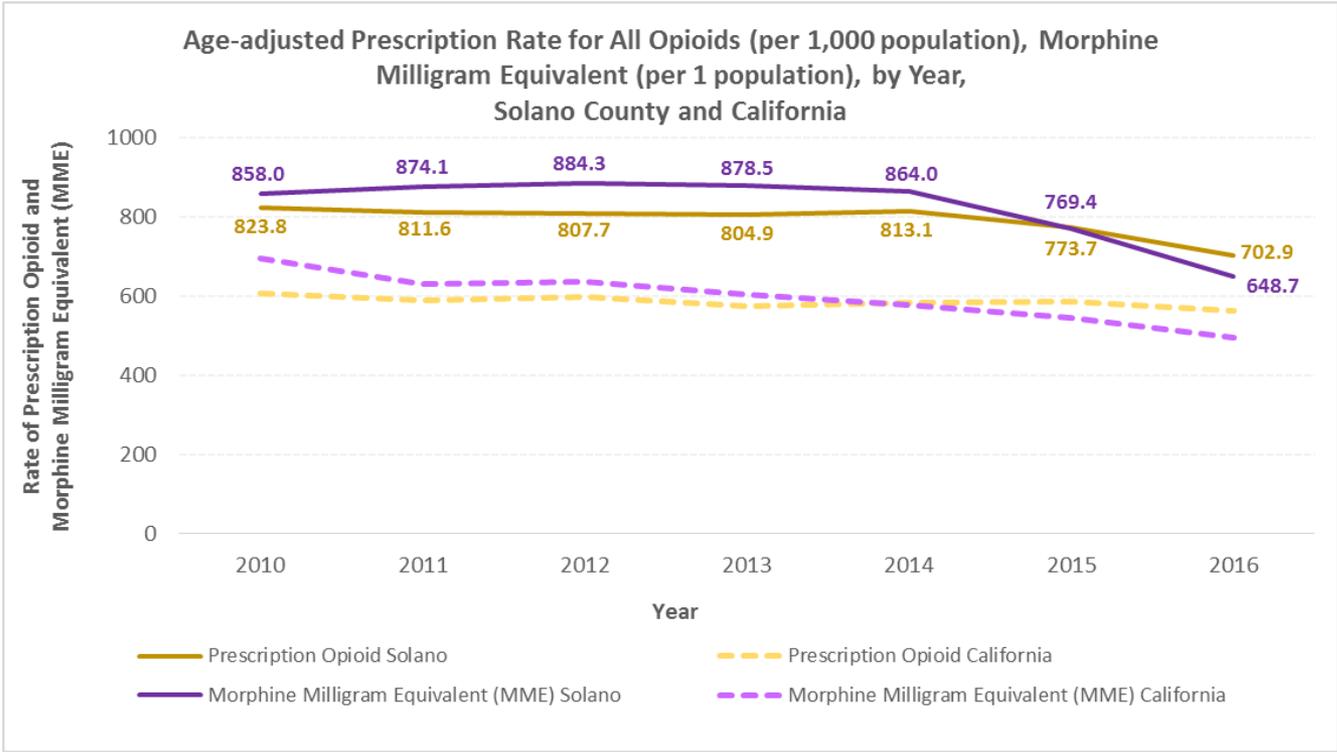
Created 10/4/2017, Solano Public Health, Epidemiology



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Opioid prescription and Morphine Milligram Equivalent Rates – decreased in past two years



Definitions:
All Opioids: Relative number of all opioid prescriptions (any quantity) filled at a pharmacy. Formula: total number of prescriptions, divided by population of the county that year, multiplied by 1,000. Buprenorphine is excluded because its use for pain is trivial statistically, compared to use for addiction.
Morphine Milligram Equivalent: Morphine milligram equivalents (MME) per resident per year (excluding buprenorphine) by patient location. All opioids filled at a pharmacy, translated into morphine milligram equivalents per resident per year. MME allows different types of medicines with different potencies to be compared (for example, 5 mg of oxycodone is equivalent to 7.5 mg of morphine, in terms of its effect on the body). Buprenorphine is excluded from this calculation.

2016 – lowest opioid prescription rate in 7 years, however, still equals to almost 1 prescription for every resident (including children); 14% decrease from 2014

Dramatic decrease of MME in two years (25% decrease)

Source: California Opioid Overdose Surveillance Dashboard, Safe and Active Communities Branch, California Department of Public Health. Prescription data obtained from Controlled Substance Utilization Review and Evaluation System (CURES), California Department of Justice.



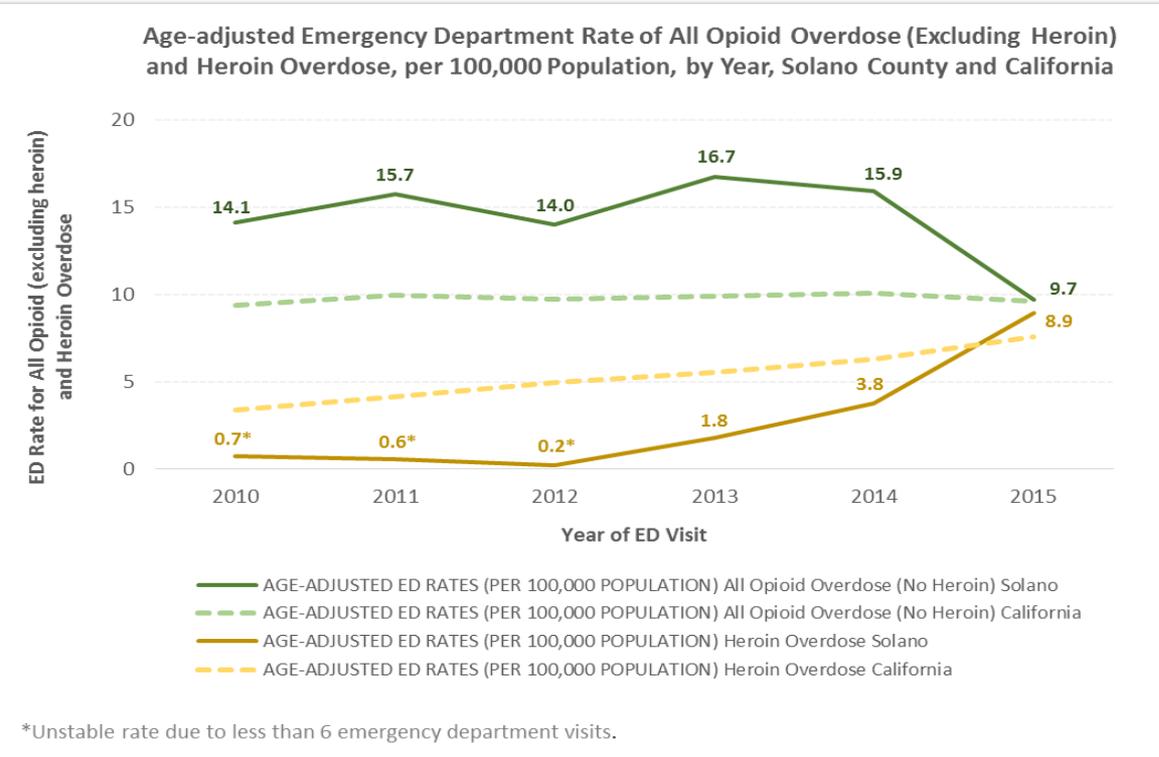
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Opioid ED Overdose Rate – sharp increase in heroin ED visits while sharp decrease in all opioid (excluding heroin) ED visits from 2014-2015

The age-adjusted Emergency Department (ED) visits for all **opioid overdose** (excluding heroin) remained steady from 2010-2014 at an average rate of 15 ED visits per 100,000 population. However, the rate **decreased sharply** from almost 16 visits per 100,000 in 2014 to almost 10 visits per 100,000 in 2015.

Increasing **heroin** ED rate starting 2013, with a **sharp increase from 2014 to 2015** (from almost 4 visits per 100,000 to almost 9 visits per 100,000)



Definitions:
All Opioid Overdose (no heroin): Emergency department visits caused by non-fatal acute poisonings due to the effects of all opioids drugs, excluding heroin, regardless of intent (e.g., suicide, unintentional, or undetermined). Emergency department visits related to late effects, adverse effects, and chronic poisonings due to the effects of drugs (e.g., damage to organs from long-term drug use), are excluded from this indicator.
Heroin Overdose: Emergency department visits caused by non-fatal acute poisonings due to the effects of heroin, regardless of intent (e.g., suicide, unintentional, or undetermined). Emergency department visits related to late effects, adverse effects, and chronic poisonings due to the effects of drugs (e.g., damage to organs from long-term drug use), are excluded from this indicator.

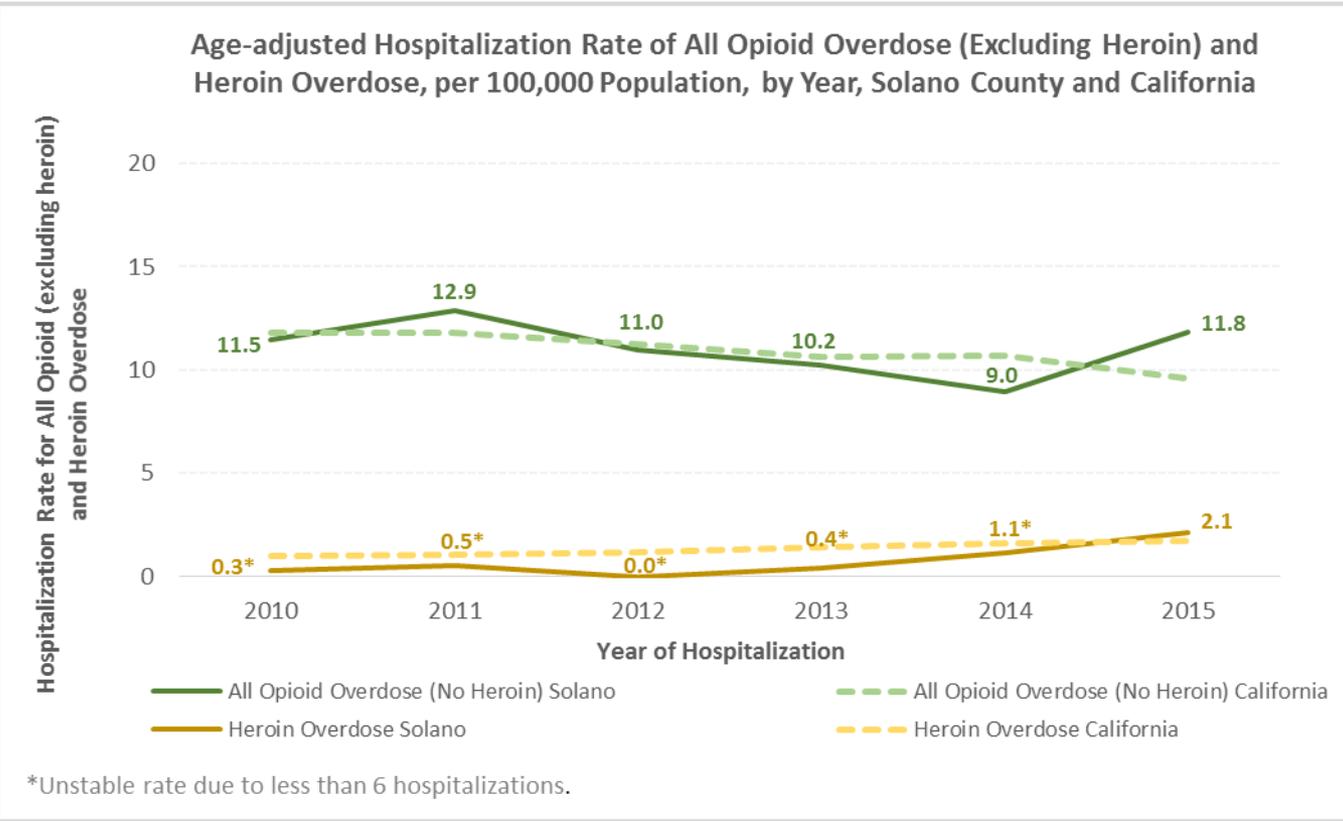
Source: California Opioid Overdose Surveillance Dashboard, Safe and Active Communities Branch, California Department of Public Health. Emergency Department visit data obtained from Emergency Department data, California Office of Statewide Health Planning and Development.



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Opioid Overdose Hospitalization Rate – increased from 2014-2015



After a steady 4-year decline of age-adjusted **opioid** (excluding heroin) **hospitalization rate** from 2011-2014, the rate **increased 32%** from 2014 to 2015.

Age-adjusted hospitalization rate for **heroin overdose** increased from 2014 to 2015.

Definitions:
All Opioid Overdose (no heroin): Hospitalizations caused by non-fatal acute poisonings due to the effects of all opioids drugs, excluding heroin, regardless of intent (e.g., suicide, unintentional, or undetermined). Hospitalizations related to late effects, adverse effects, and chronic poisonings due to the effects of drugs (e.g., damage to organs from long-term drug use), are excluded from this indicator.
Heroin Overdose: Hospitalizations caused by non-fatal acute poisonings due to the effects of heroin, regardless of intent (e.g., suicide, unintentional, or undetermined). Hospitalizations related to late effects, adverse effects, and chronic poisonings due to the effects of drugs (e.g., damage to organs from long-term drug use), are excluded from this indicator.

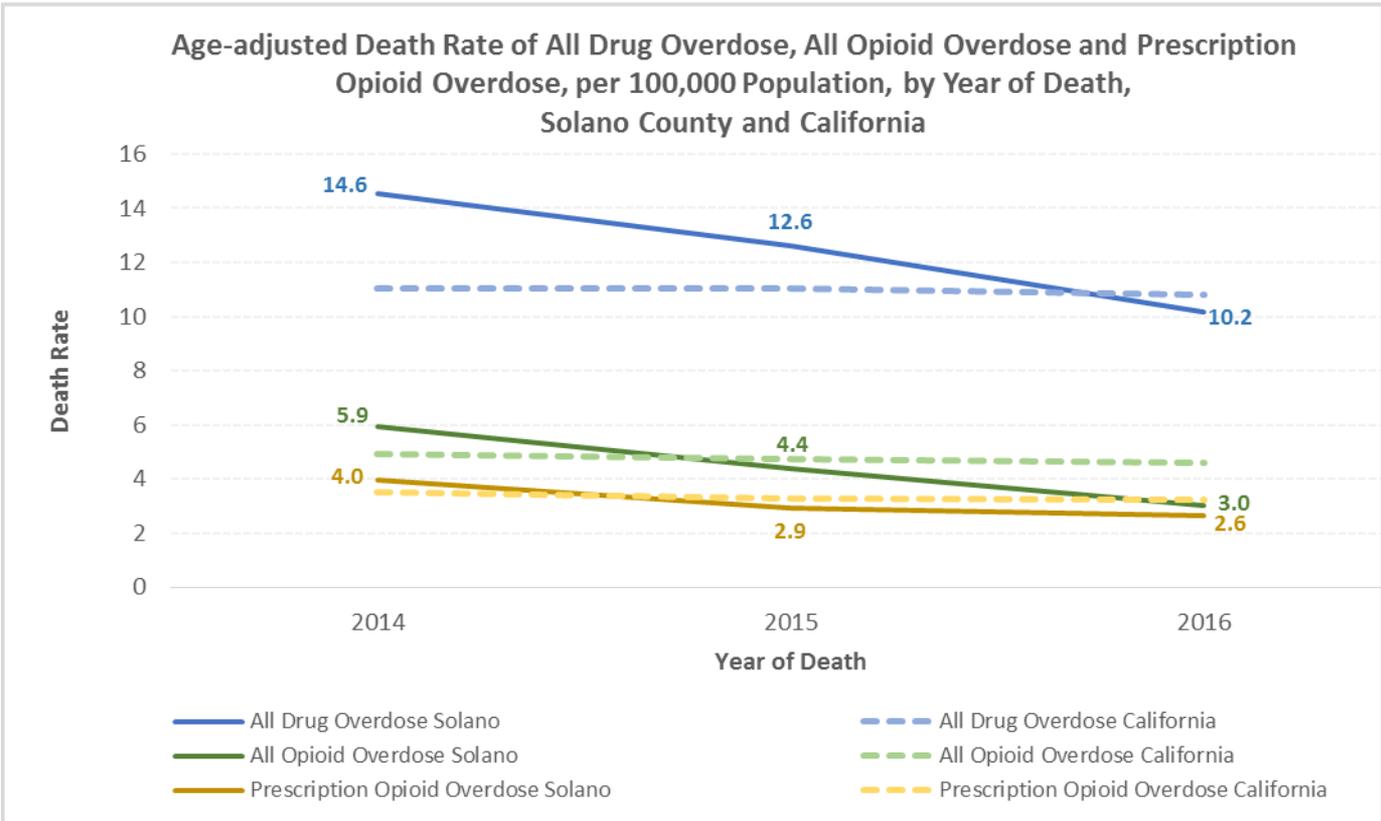
Source: California Opioid Overdose Surveillance Dashboard, Safe and Active Communities Branch, California Department of Public Health. Hospitalization data obtained from Inpatient Discharge Data, California Office of Statewide Health Planning and Development.



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Opioid Overdose Death Rate – declining rates



Overall, there is a **decreasing** trend in death rate for **all drug**, **all opioid** and **prescription opioid** overdoses in the last three years.

Almost all opioid overdose deaths in Solano County in 2016 were from **prescription opioid** overdoses.

There was almost a **50% decrease** in all opioid death rate from 2014 to 2016

Definitions:
Death-All Drugs: This indicator includes all overdose deaths, regardless of intent (e.g., unintentional, suicide, assault, or undetermined). This indicator does not include: (1) deaths related to chronic use of drugs (e.g., damage to organs from long-term drug use), 2) deaths due to alcohol and tobacco, and 3) deaths that occur under the influence of drugs, but do not involve acute poisoning (e.g., a car crash that occurred because the driver was drowsy from taking a prescription drug).
Death-All Opioid: Acute poisoning deaths involving opioids such as prescription opioid pain relievers (i.e. hydrocodone, oxycodone, and morphine) and heroin and opium. Death related to chronic use of drugs excluded from this indicator.
Death-Prescription Opioid: Acute poisoning deaths involving prescribed opioid pain relievers such as hydrocodone, oxycodone, morphine, and fentanyl. Death related to chronic use of drugs excluded from this indicator.

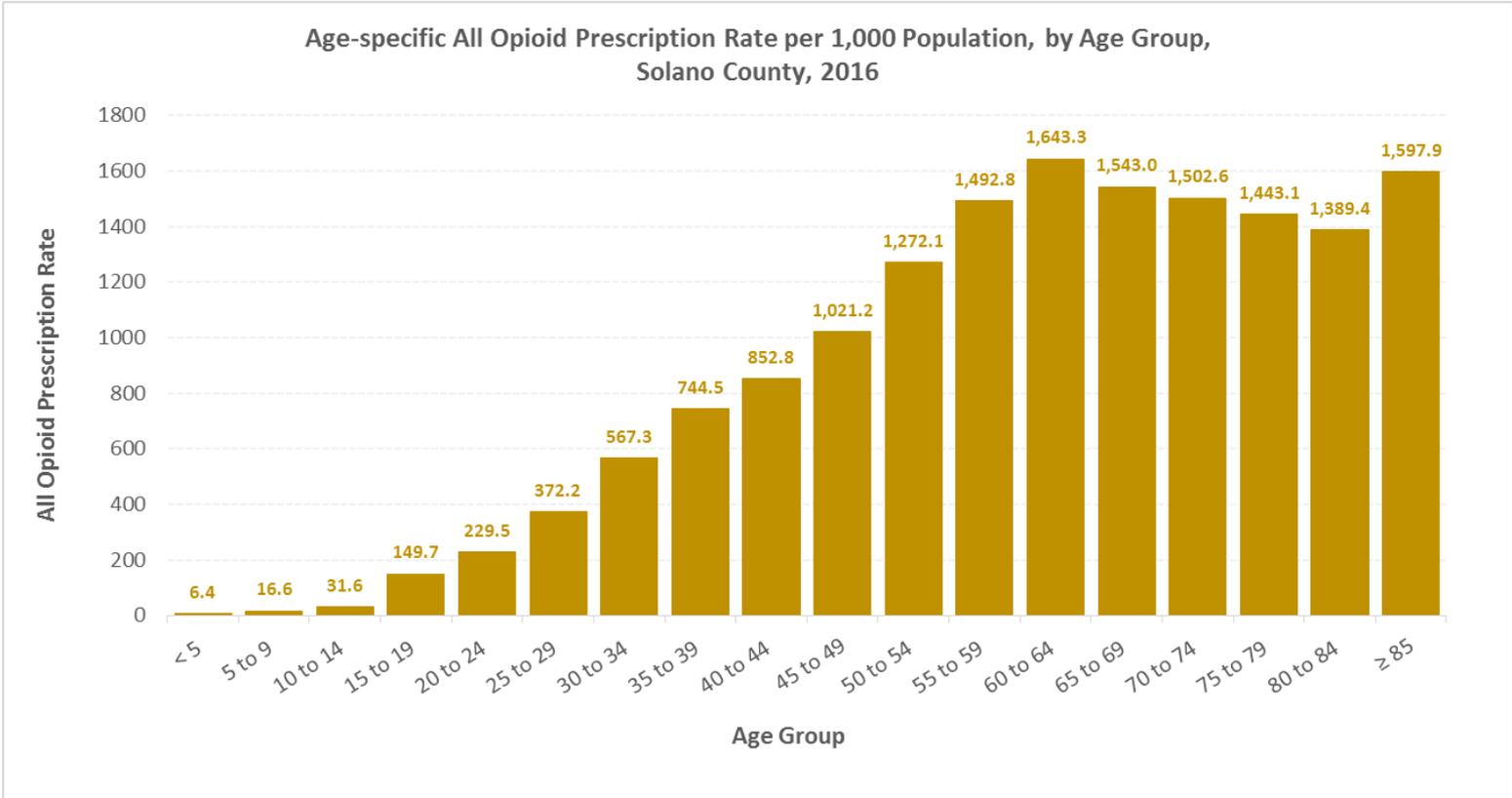
Source: California Opioid Overdose Surveillance Dashboard, Safe and Active Communities Branch, California Department of Public Health. Death data obtained from Vital Statistics Multiple Cause of Death Files, California Department of Public Health.



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Opioid prescription Rate by Age-Group



Definition:
All Opioids: Relative number of all opioid prescriptions (any quantity) filled at a pharmacy. Formula: total number of prescriptions, divided by population of the county that year, multiplied by 1,000. Buprenorphine is excluded because its use for pain is trivial statistically, compared to use for addiction.

Highest opioid prescription rate among adults 55 years old and older.

Source: California Opioid Overdose Surveillance Dashboard, Safe and Active Communities Branch, California Department of Public Health. Prescription data obtained from Controlled Substance Utilization Review and Evaluation System (CURES), California Department of Justice.

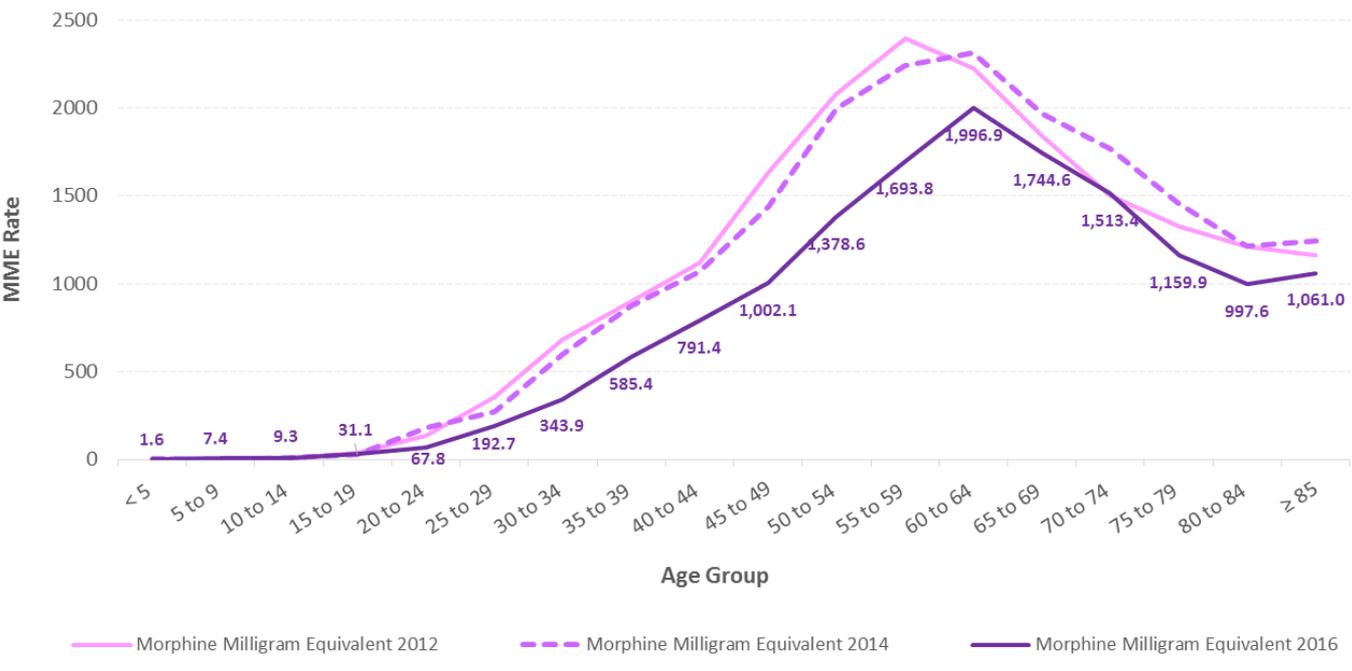


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Morphine Milligram Equivalent Rate by Age-Group – *substantial decrease in the past 2 years*

Morphine Milligram Equivalent Rate per resident, by Age Group, Solano County, 2012, 2014, 2016



Average MME has **decreased substantially** since the implementation of new opioid prescription guidelines in 2014 (note the gap between the curves for 2014 and 2016, especially for ages 45-70 years)

Definition:
Morphine Milligram Equivalent: Morphine milligram equivalents (MME) per resident per year (excluding buprenorphine) by patient location. All opioids filled at a pharmacy, translated into morphine milligram equivalents per resident per year. MME allows different types of medicines with different potencies to be compared (for example, 5 mg of oxycodone is equivalent to 7.5 mg of morphine, in terms of its effect on the body). Buprenorphine is excluded from this calculation.

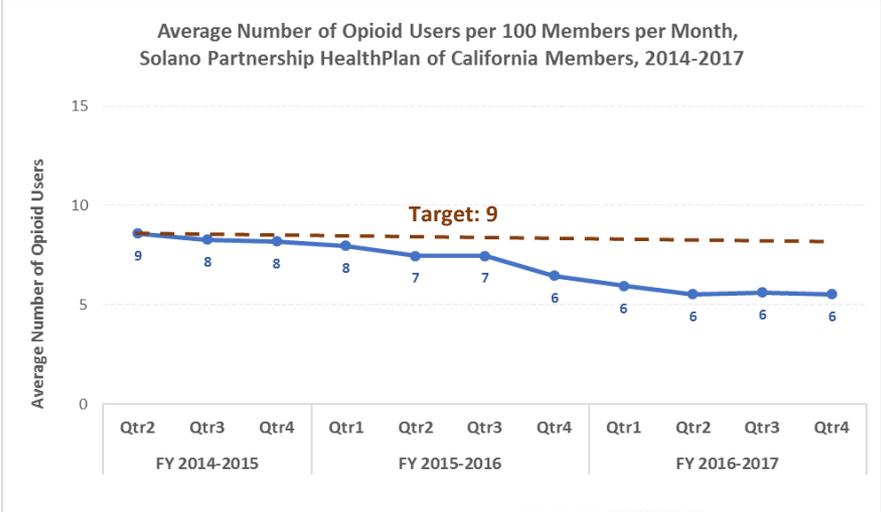
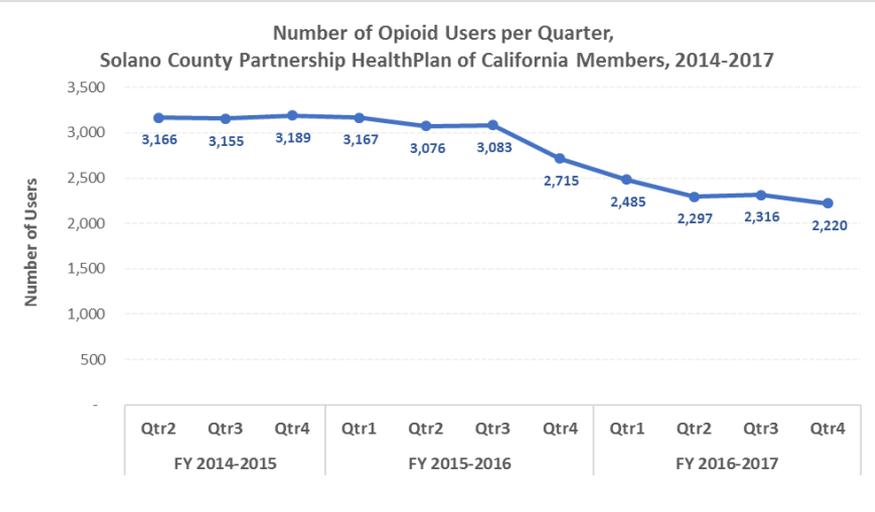
Source: California Opioid Overdose Surveillance Dashboard, Safe and Active Communities Branch, California Department of Public Health. Prescription data obtained from Controlled Substance Utilization Review and Evaluation System (CURES), California Department of Justice.



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Partnership HealthPlan of California (Solano data) – declining number of opioid users



After an average of about 3,100 opioid users per quarter from the 2nd quarter of 2014-2015 among Partnership HealthPlan of California (PHC) members, the number of opioid users started to decline in the 4th quarter of 2015-2016, leading to a **28% decrease** in the **number of opioid users** from the 3rd quarter of 2015-2016 to the 4th quarter of 2016-2017.

The average rate of opioid users per 100 PHC members per month (MPM) has **declined steadily from 2014-2017** and has been **below the target** of 9 users per 100 MPM since the 3rd quarter of 2014-2015.

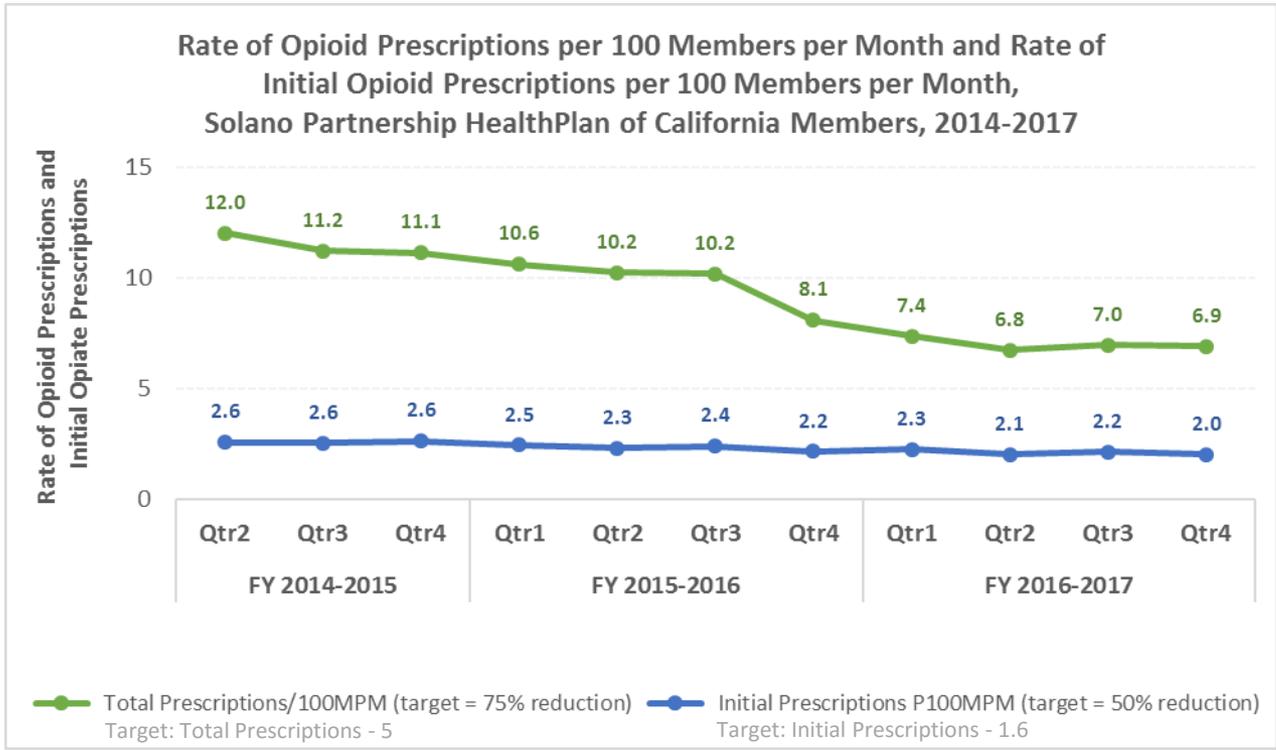
Source: Data provided by Partnership HealthPlan of California.



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Partnership HealthPlan of California (Solano data) – declining rates of all opioid and initial opioid prescriptions



The opioid prescription rate among PHC members **declined by 42%** in the last 11 quarters. However, it is still **above the target rate** of 5 opioid prescriptions per 100 members per month.

The rate of initial opioid prescriptions among PHC members has also **declined** in the last 11 quarters; it remains above the target of 1.6 initial prescriptions per 100 members per month.

Definitions:
Opioid Prescription: This is the rate of opioid prescriptions per member per month. Calculation: total prescriptions/member months x pending number of members.
Initial Opioid Prescription: This is the rate of initial opioid prescriptions per member per month. Calculation: initial prescriptions/member months x pending number of members. "Initial" is defined as opioid utilization in the measurement period with no utilization in the 90 days before the first day of the measurement period.

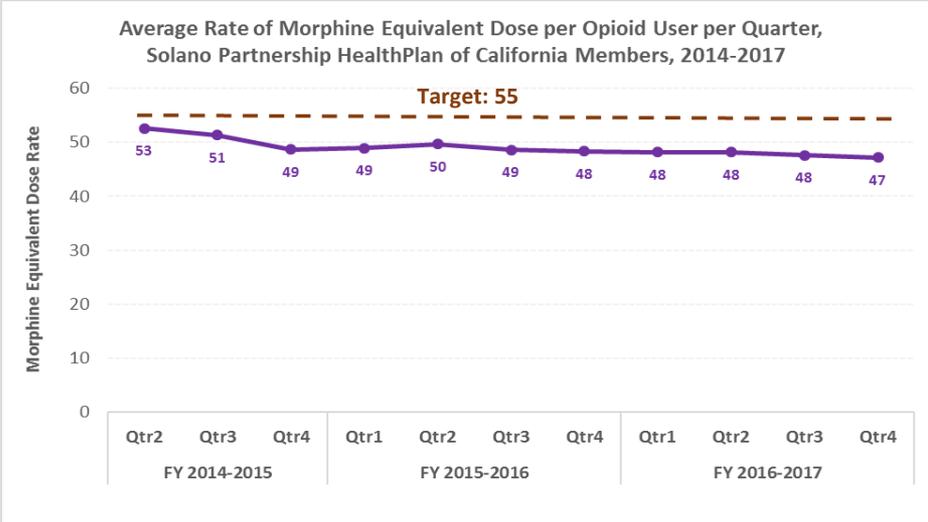
Source: Data provided by Partnership HealthPlan of California.



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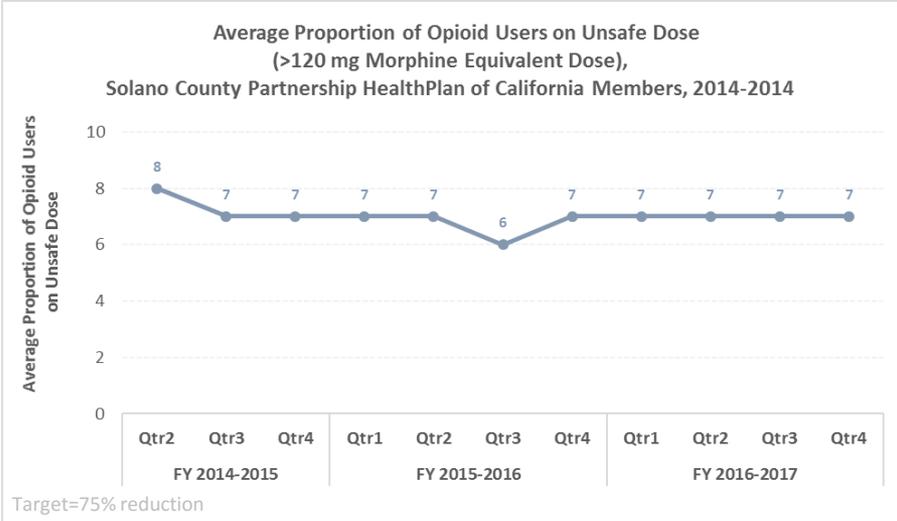


Partnership HealthPlan of California (Solano data) – average MED hitting the target rate but unsafe dose target not met



The average rate of Morphine Equivalent Dose (MED) among PHC members has remained **below** the **target rate** of 55 MED per opioid user per quarter (note, this is good!).

The average proportion of opioid users on unsafe dose has **remained level** at around **7** opioid users per quarter.



Target=75% reduction

Definition:
Unsafe Dose: This is the percentage of total opioid users on a dose >120 mg MED. Denominator—all members prescribed opioids during the measurement period. Numerator—members in denominator whose prescribed average total daily dose was >120 mg MED.

Source: Data provided by Partnership HealthPlan of California.



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