

# FATAL UNINTENTIONAL POISONING SURVEILLANCE SYSTEM: DATA UPDATE

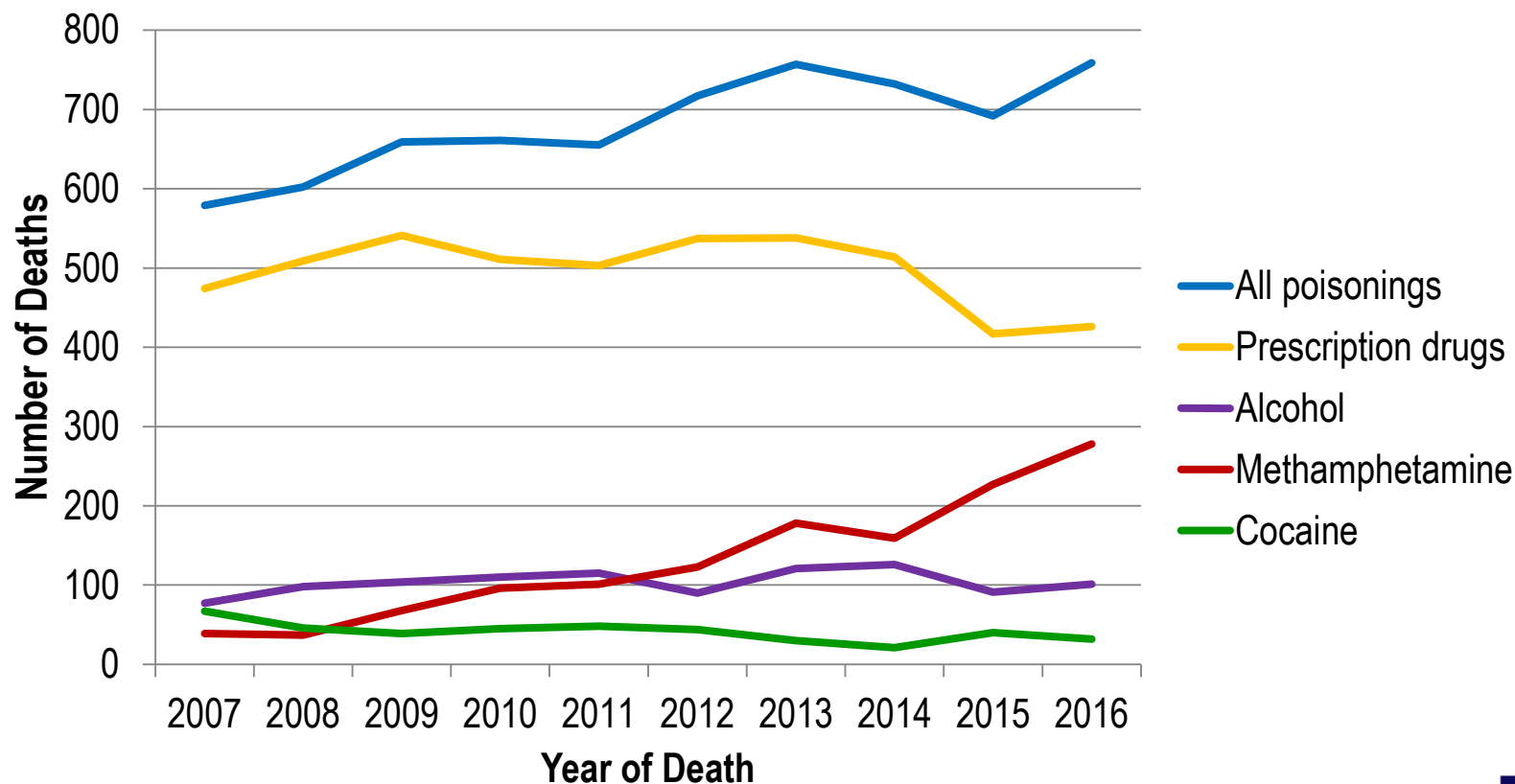
---

Claire Nguyen, MS  
Injury Prevention Service  
Oklahoma State Department of Health

# Inclusion/Exclusion

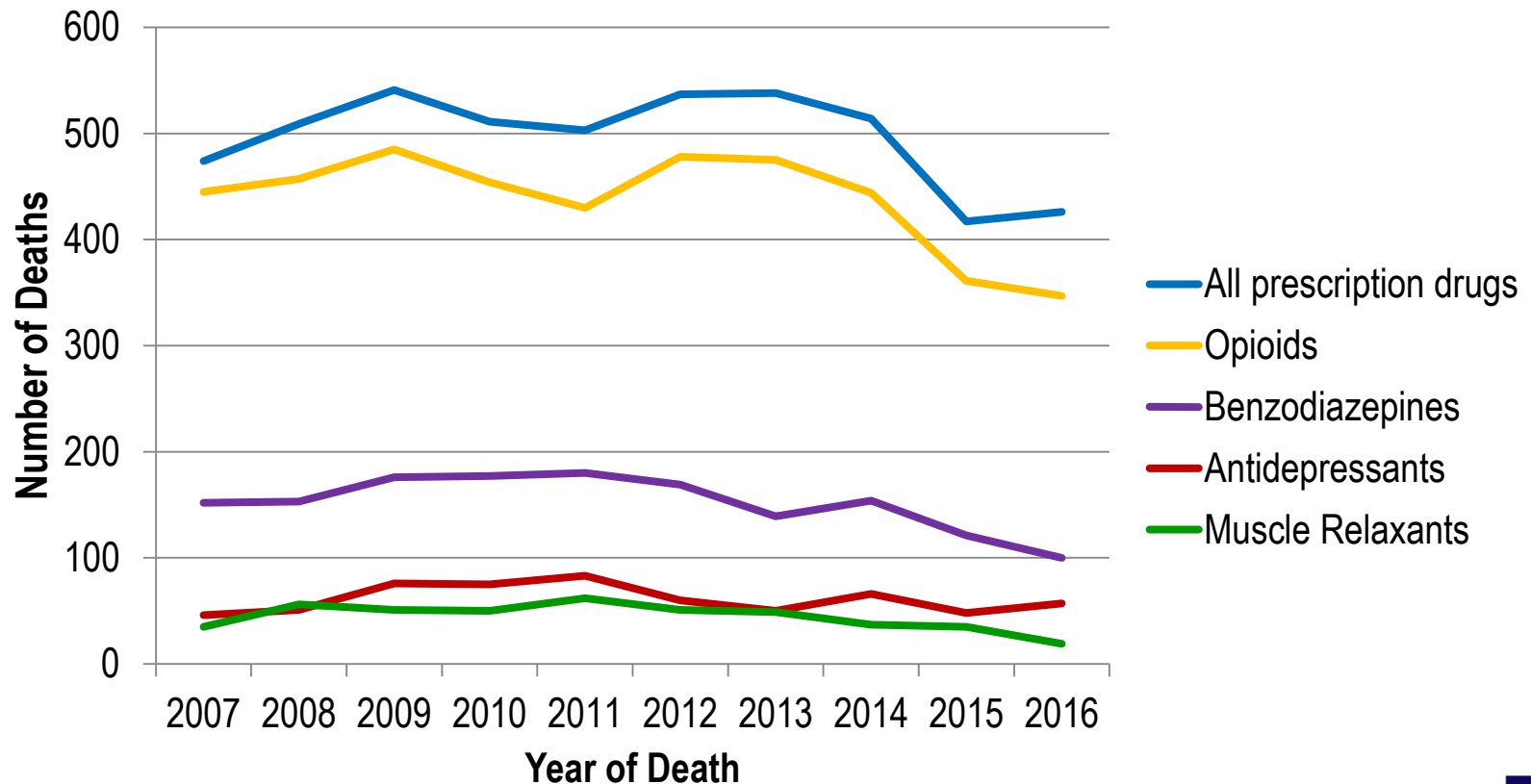
- Review all incoming ME reports
- Include:
  - Manner – Accident
  - Poisoning in cause of death
  - OK resident
- Exclude:
  - Adverse allergy/hypersensitivity reaction
  - Correct drugs, properly administered, correct dose
  - Venomous plants and animals (not ingested)
  - Bacterial food poisoning
  - Smoke inhalation
  - Injury consequences of substance abuse

# Deaths Involving Prescription Drugs, Illicit Drugs, or Alcohol by Year of Death, Unintentional Poisoning, Oklahoma, 2007-2016



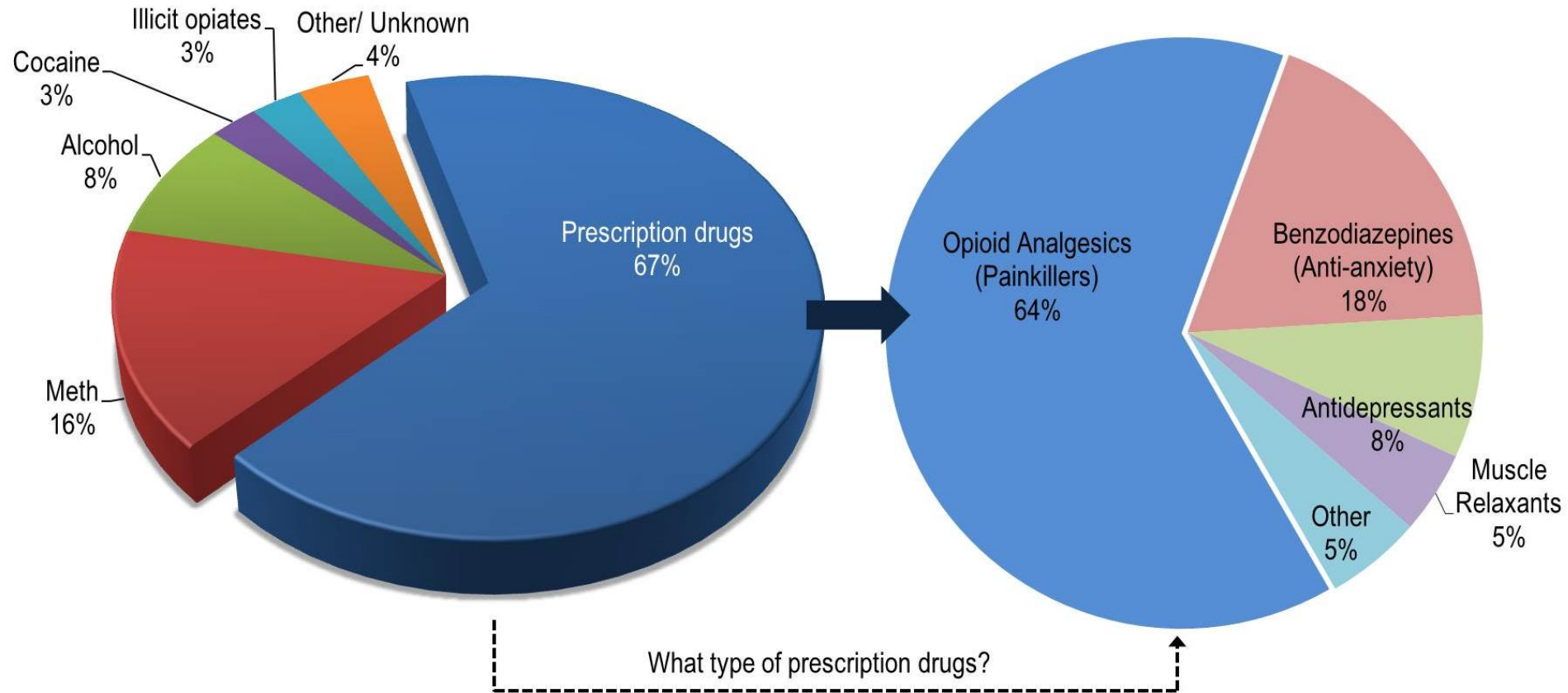
Source: OSDH, Injury Prevention Service, Fatal Unintentional Poisoning Surveillance System (Abstracted from Medical Examiner reports)

## Deaths Involving Most Common Prescription Drug Categories by Year of Death, Unintentional Poisoning, Oklahoma, 2007-2016



Source: OSDH, Injury Prevention Service, Fatal Unintentional Poisoning Surveillance System (Abstracted from Medical Examiner reports)

# Substances Involved in Unintentional Poisoning Deaths, Oklahoma, 2012-2016



Source: OSDH, Injury Prevention Service, Fatal Unintentional Poisoning Surveillance System (Abstracted from Medical Examiner reports)

# Unintentional Poisoning Deaths Involving Prescription Drugs, Illicit Drugs, or Alcohol by Year of Death, Oklahoma, 2007-2016

Drug	Number of deaths										
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Total
All UP	579	602	659	661	655	717	757	732	692	759	6813
Prescription	474	509	541	511	503	537	538	514	417	426	4970
Narcotic analgesics	445	457	485	454	430	478	475	444	361	347	4376
Anti-anxiety	152	153	176	177	180	169	139	154	121	100	1521
Alcohol	77	98	104	110	115	90	121	126	91	101	1033
Methamphetamines	39	37	68	96	101	123	178	157	227	278	1304
Cocaine	67	46	39	45	48	44	30	21	40	32	412

Drug	Death rates per 100,000 population									
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
All UP	15.9	16.4	17.7	17.6	17.3	18.8	19.7	18.9	17.7	19.3
Prescription	13.0	13.9	14.6	13.6	13.3	14.1	14.0	13.3	10.7	10.9
Narcotic analgesics	12.2	12.5	13.0	12.1	11.4	12.5	12.3	11.5	9.2	8.8
Anti-anxiety	4.2	4.2	4.7	4.7	4.8	4.4	3.6	4.0	3.1	2.5
Alcohol	2.1	2.7	2.8	2.9	3.0	2.4	3.1	3.2	2.3	2.6
Methamphetamines	1.1	1.0	1.8	2.6	2.7	3.2	4.6	4.0	5.8	7.1
Cocaine	1.8	1.3	1.0	1.2	1.3	1.2	0.8	0.5	1.0	0.8

**Source:** OSDH, Injury Prevention Service, Fatal Unintentional Poisoning Surveillance System (abstracted from Medical Examiner reports)

# Most Common Substances by Year of Death, Oklahoma, 2007-2016

Drug	Number of deaths										Total
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	
Hydrocodone	118	116	133	141	127	152	155	145	103	78	1268
Oxycodone	115	121	129	135	130	161	165	158	130	126	1370
Alprazolam	131	114	134	133	109	112	91	102	83	64	1073
Methadone	171	117	100	91	69	80	73	63	58	45	867
Morphine	60	80	75	72	94	82	86	77	56	57	739
Fentanyl	44	56	77	51	48	57	62	39	53	68	555
Diazepam	24	32	41	40	44	31	29	38	26	28	333
Carisoprodol	13	46	34	35	38	32	24	20	21	6	269
Tramadol	11	24	22	23	30	40	25	27	25	20	247
Citalopram	12	20	22	27	22	13	10	12	5	10	153
Alcohol	77	98	104	110	115	90	121	126	91	101	1033
Methamphetamines	39	37	68	96	101	123	178	157	227	278	1304
Heroin	<5	11	18	6	16	29	28	25	33	52	218

**Source:** OSDH, Injury Prevention Service, Fatal Unintentional Poisoning Surveillance System (abstracted from Medical Examiner reports)

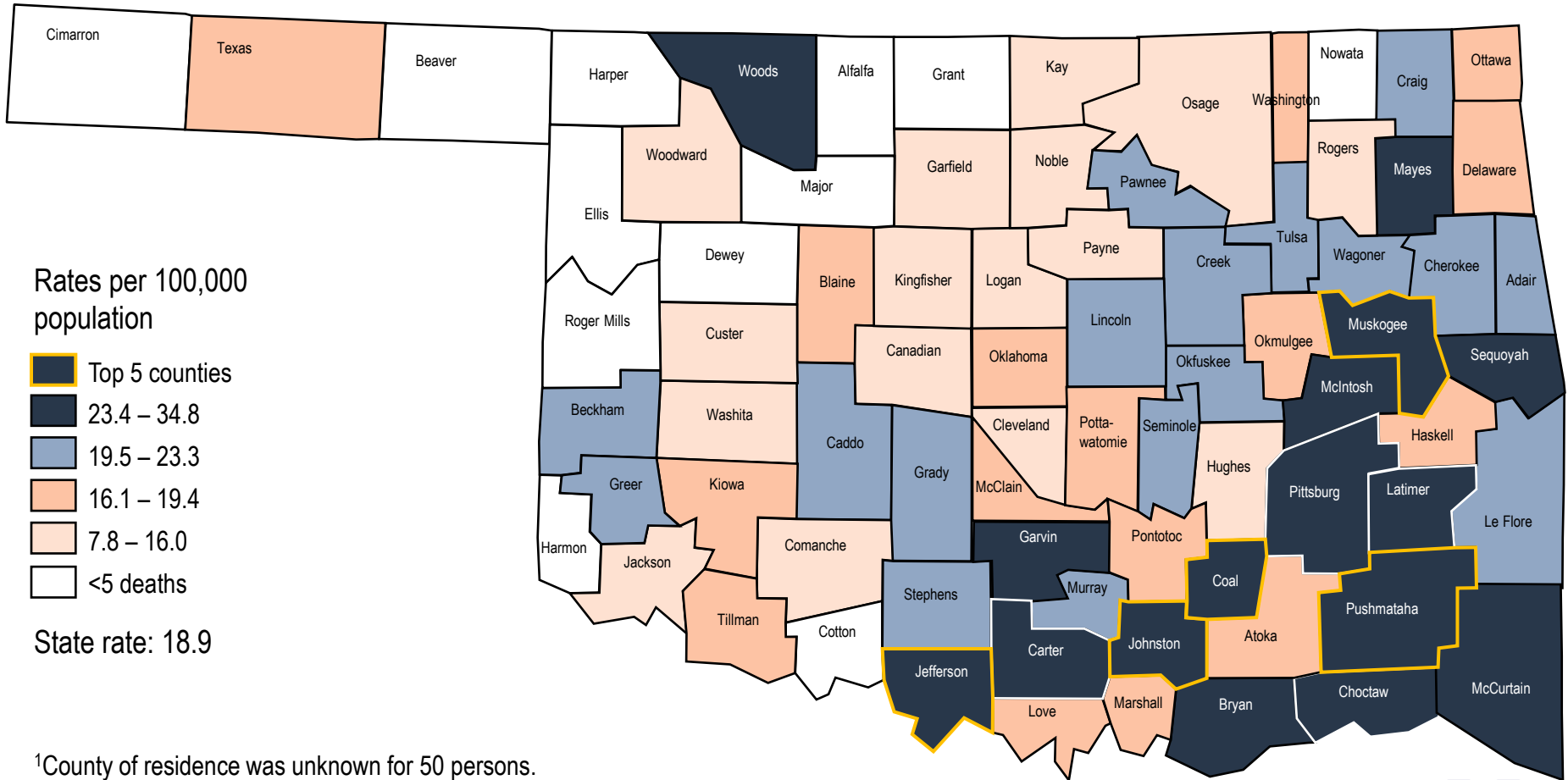
# Most Common Substances by Year of Death, Oklahoma, 2007-2016

Drug	Death rates per 100,000 population									
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Hydrocodone	3.2	3.2	3.6	3.8	3.4	4.0	4.0	3.7	2.6	2.0
Oxycodone	3.2	3.3	3.5	3.6	3.4	4.2	4.3	4.1	3.3	3.2
Alprazolam	3.6	3.1	3.6	3.5	2.9	2.9	2.4	2.6	2.1	1.6
Methadone	4.7	3.2	2.7	2.4	1.8	2.1	1.9	1.6	1.5	1.1
Morphine	1.7	2.2	2.0	1.9	2.5	2.1	2.2	2.0	1.4	1.5
Fentanyl	1.2	1.5	2.1	1.4	1.3	1.5	1.6	1.0	1.4	1.7
Diazepam	0.7	0.9	1.1	1.1	1.2	0.8	0.8	1.0	0.7	0.7
Carisoprodol	0.4	1.3	0.9	0.9	1.0	0.8	0.6	0.5	0.5	0.2
Tramadol	0.3	0.7	0.6	0.6	0.8	1.0	0.6	0.7	0.6	0.5
Citalopram	0.3	0.5	0.6	0.7	0.6	0.3	0.3	0.3	0.1	0.3
Alcohol	2.1	2.7	2.8	2.9	3.0	2.4	3.1	3.2	2.3	2.6
Methamphetamines	1.1	1.0	1.8	2.6	2.7	3.2	4.6	4.0	5.8	7.1
Heroin	*	0.3	0.5	0.2	0.4	0.8	0.7	0.6	0.8	1.3

**Source:** OSDH, Injury Prevention Service, Fatal Unintentional Poisoning Surveillance System (abstracted from Medical Examiner reports)



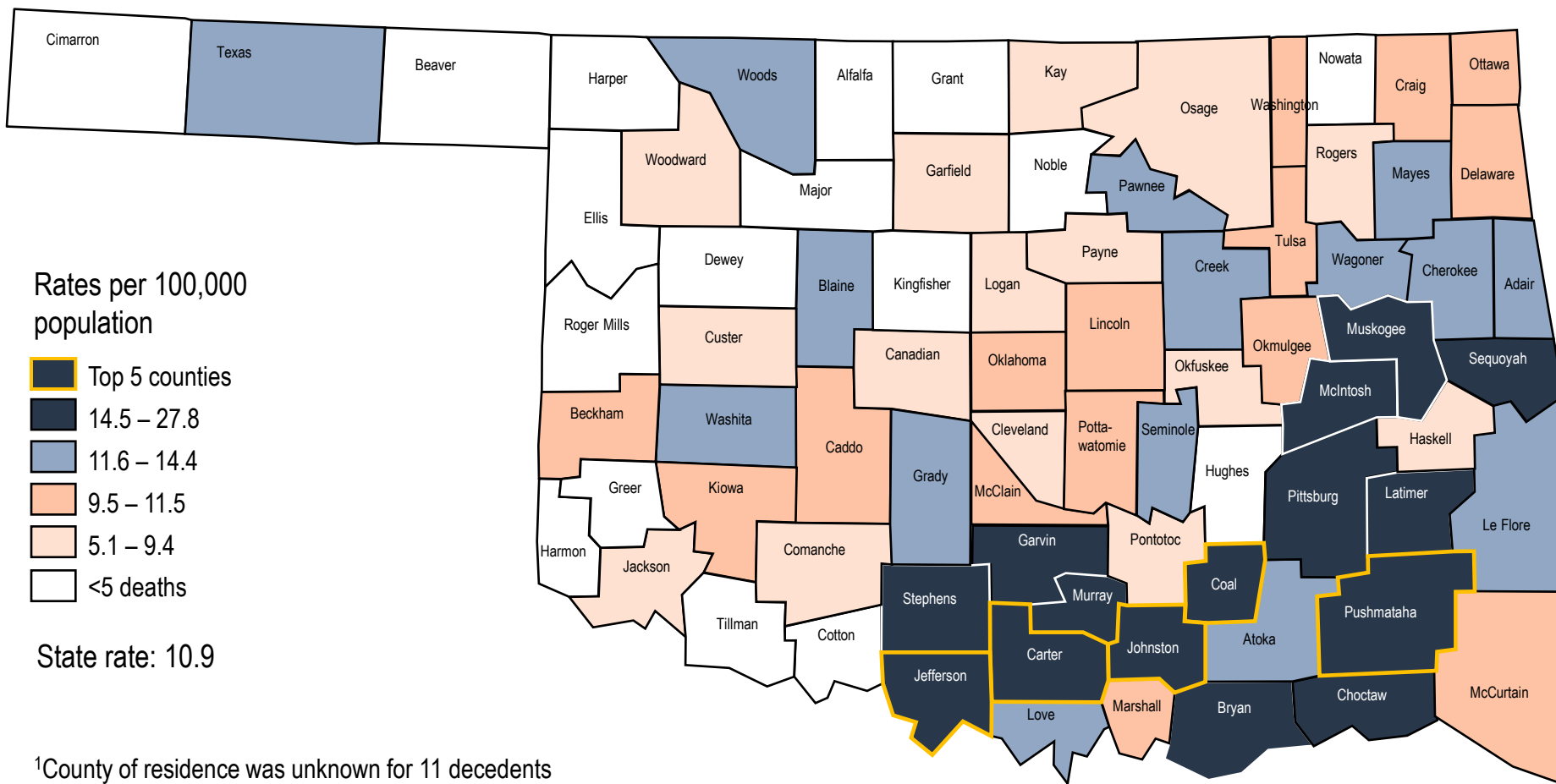
# Unintentional Poisoning Death Rates by County of Residence<sup>1</sup>, Oklahoma, 2012-2016



<sup>1</sup>County of residence was unknown for 50 persons.

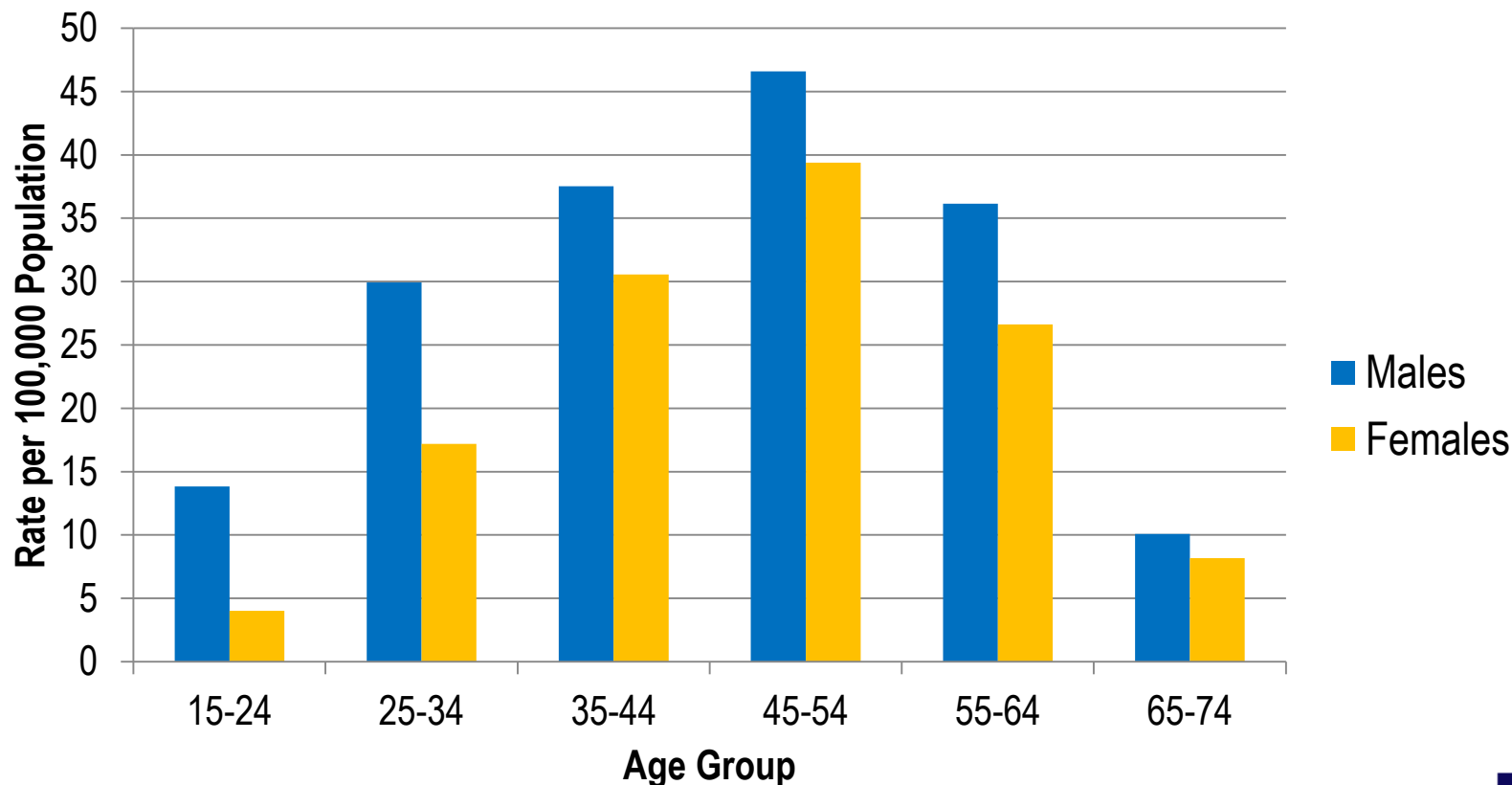
**Source:** OSDH, Injury Prevention Service, Fatal Unintentional Poisoning Surveillance System (abstracted from Medical Examiner reports)

# Unintentional Poisoning Death Rates Involving at Least One Prescription Opioid by County of Residence<sup>1</sup>, Oklahoma, 2012-2016



**Source:** OSDH, Injury Prevention Service, Fatal Unintentional Poisoning Surveillance System (abstracted from Medical Examiner reports)

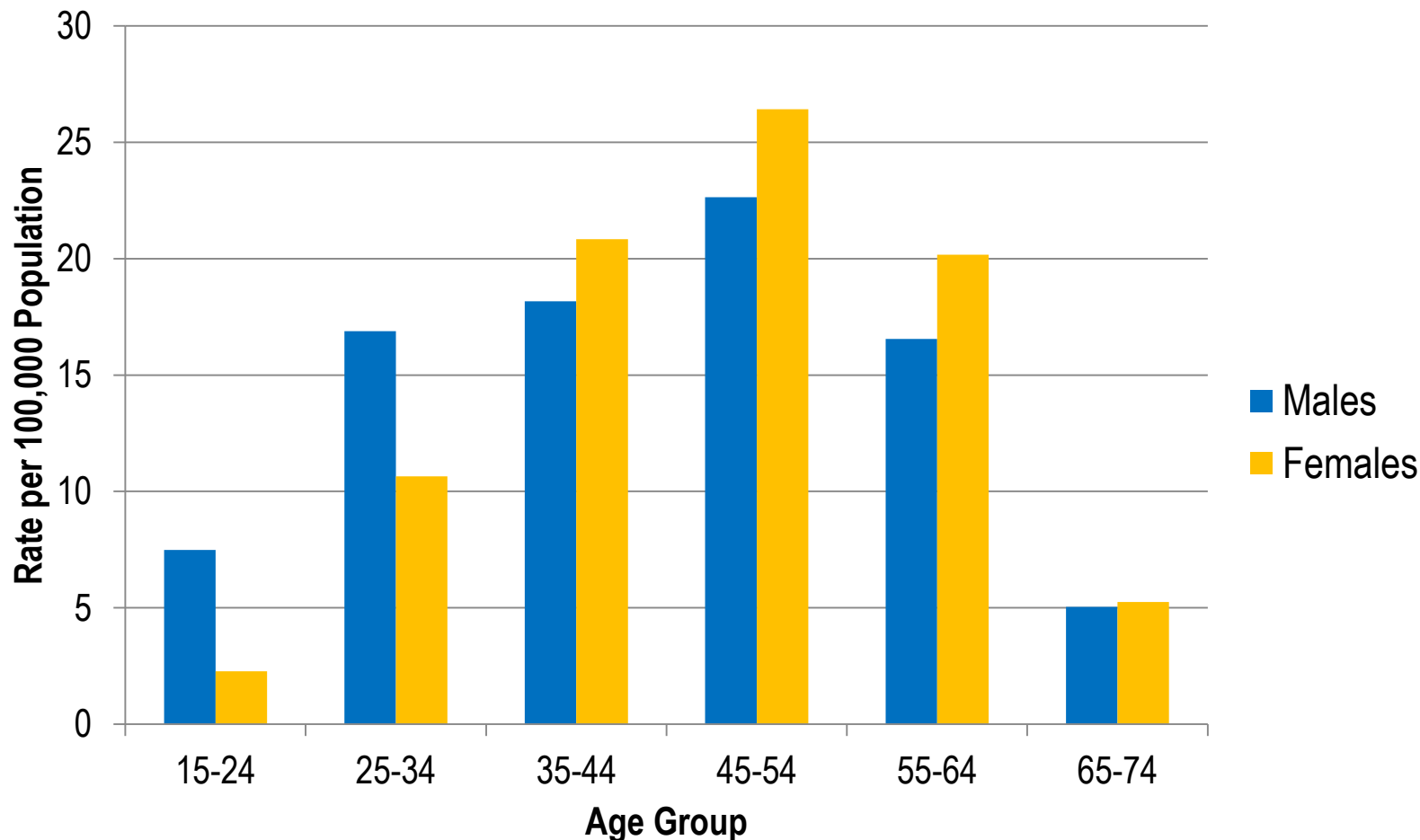
# Unintentional Poisoning Death Rates by Age Group\* and Gender, Oklahoma, 2012-2016



\*Decedents under age 15 and over age 74 were excluded due to small number of cases (<1% of all UP deaths)

Source: OSDH, Injury Prevention Service, Fatal Unintentional Poisoning Surveillance System (Abstracted from Medical Examiner reports)

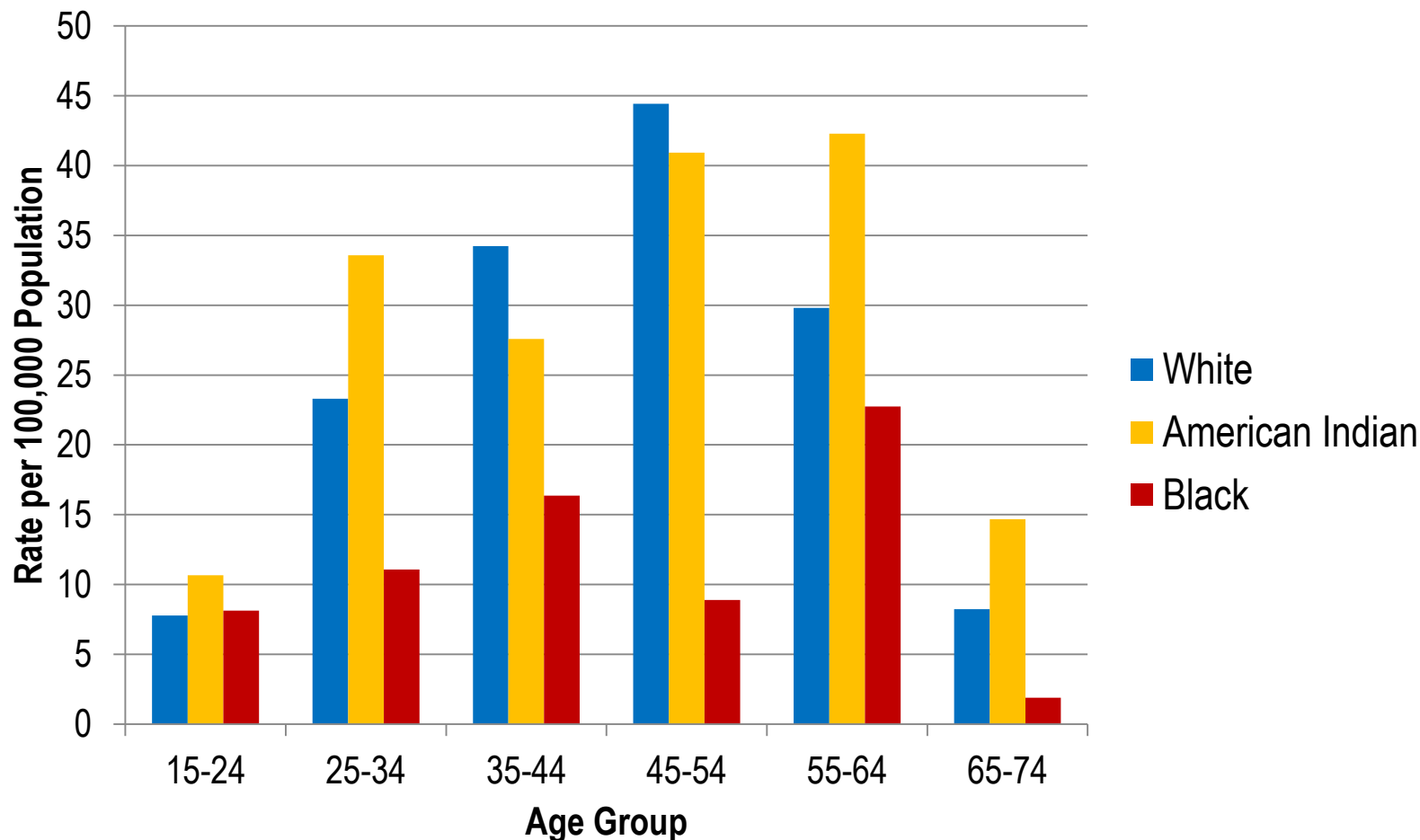
# Unintentional Prescription Opioid Overdose Death Rates by Age Group\* and Gender, Oklahoma, 2012-2016



\*Decedents under age 15 and over age 74 were excluded due to small number of cases (<1% of all UP deaths)

Source: OSDH, Injury Prevention Service, Fatal Unintentional Poisoning Surveillance System (Abstracted from Medical Examiner reports)

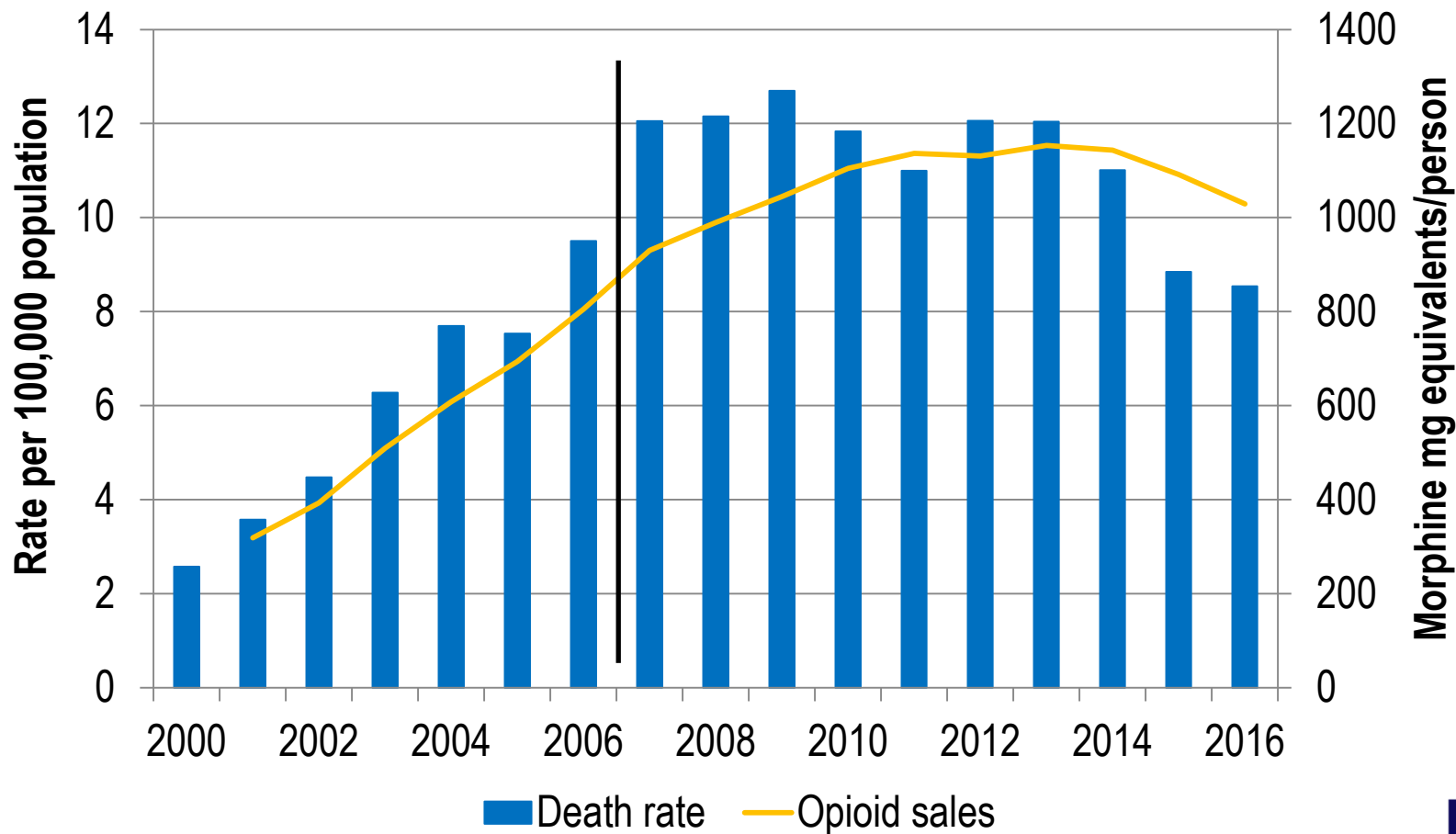
# Unintentional Prescription Opioid Overdose Death Rates by Age Group\* and Race, Oklahoma, 2012-2016



\*Decedents under age 15 and over age 74 were excluded due to small number of cases (<1% of all UP deaths)

Source: OSDH, Injury Prevention Service, Fatal Unintentional Poisoning Surveillance System (Abstracted from Medical Examiner reports)

# Unintentional Opioid-related Overdose Death Rates<sup>1</sup> and Opioid Sales per Person<sup>2</sup>, Oklahoma, 2000-2016



Sources: OSDH, Injury Prevention Service, Fatal Unintentional Poisoning Surveillance System (Abstracted from Medical Examiner reports) and U.S. Department of Justice, Drug Enforcement Administration, Office of Diversion Control, Automation of Reports and Consolidated Orders System (ARCOS) Reports, Retail Drug Summary Reports by State, Cumulative Distribution Reports (Report 4).

# Questions?

Claire Nguyen

[clairen@health.ok.gov](mailto:clairen@health.ok.gov)

(405) 271-3430