Opioid & Substance Abuse Prevalence

Presentation to the House Select Committee on Opioids & Substance Abuse

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Commissioner

March 27, 2018

TEXAS
Health and Human Services

Texas Department of State Health Services

Presentation Overview

- Background
- Texas Data: DSHS Datasets
    - Poison Center Network Data
    - Inpatient Admissions Through Emergency Department Visits
    - Death Certificate Data
- Selected Public Health Concepts
    - Opioid Antagonists
    - Drug Scheduling
    - TexasAIM Initiative
    - Texas Health Data

Background: Opioids

Opioids

- Naturally occurring and synthetic substances
- Pain relief, medical condition treatment, euphoria
- Prescribed and recreational drugs
- Common opioids: morphine, heroin, codeine, oxycodone, fentanyl

Opioid Overdoses

- Slow down bodily functions, including the impulse to breathe
- Characterized by non-responsiveness, blueness around fingertips, eyelids
- Brain damage or death possible

Background: U.S. Historical Context

18th – Early 19th Centuries
- Opium used as common medical tool for acute and chronic ailments
- Morphine extracted from opium, leading to a more potent drug widely prescribed
- Codeine also extracted, a less potent form of extracted opium

First US opioid epidemic – Post Civil War to early 20th Century
- Heroin synthesized from morphine (1874) & introduced for medicinal use (1898)
- Development of hypodermic needles expanded opiate use
- Painful conditions not well understood
- Few alternative pain treatments available
- Side effects of opiates were not well understood

How first epidemic was handled
- Alternative pain medications developed
- Decreased demand due to improved treatments for certain conditions
- Stricter prescription laws
- Professional literature trained physicians on morphine prescribing
- Pure Food and Drug Act of 1906 required better product labeling
- Narcotics taxation, opium importation bans, and eventually making heroin illegal (1924)

Background: Current Epidemic

Contributing Factors

- 1980s: Unsubstantiated claims that opioid addiction is rare

- 1990s-2010s: Increased prescription rates for opiates
  - Access to cheaper and more potent heroin and fentanyl
  - 1995: Pain as the "Fifth Vital Sign" - reinforced by patient satisfaction surveys, accreditation standards
  - (Joint Commission standard by 2000)

Background: Federal Response

Federal Public Health Emergency Declaration

"As a result of the consequences of the opioid crisis affecting our Nation, on this date and after consultation with public health officials as necessary,

I, Eric D. Hargan, Acting Secretary of Health and Human Services, pursuant to the authority vested in me under section 319 of the Public Health Service Act, do hereby determine that a public health emergency exists nationwide."

- **January 24, 2018:** Initial declaration renewed for a 90-day period
- **October 26, 2017:** Opioid crisis declared as public health emergency by the federal government
- **May 2017:** Substance Abuse and Mental Health Services Administration awards $27 Million Texas Targeted Opioid Response Grant

Background: Texas Response

Texas Occupations Code, Sec. 168.003. Legislative Finding

> *"The legislature finds that **deaths resulting from the use of opioids and controlled substances constitute a public health crisis** and that there is a compelling state interest in the board closely regulating the prescribing of opioids and other controlled substances by physicians and their delegates.*

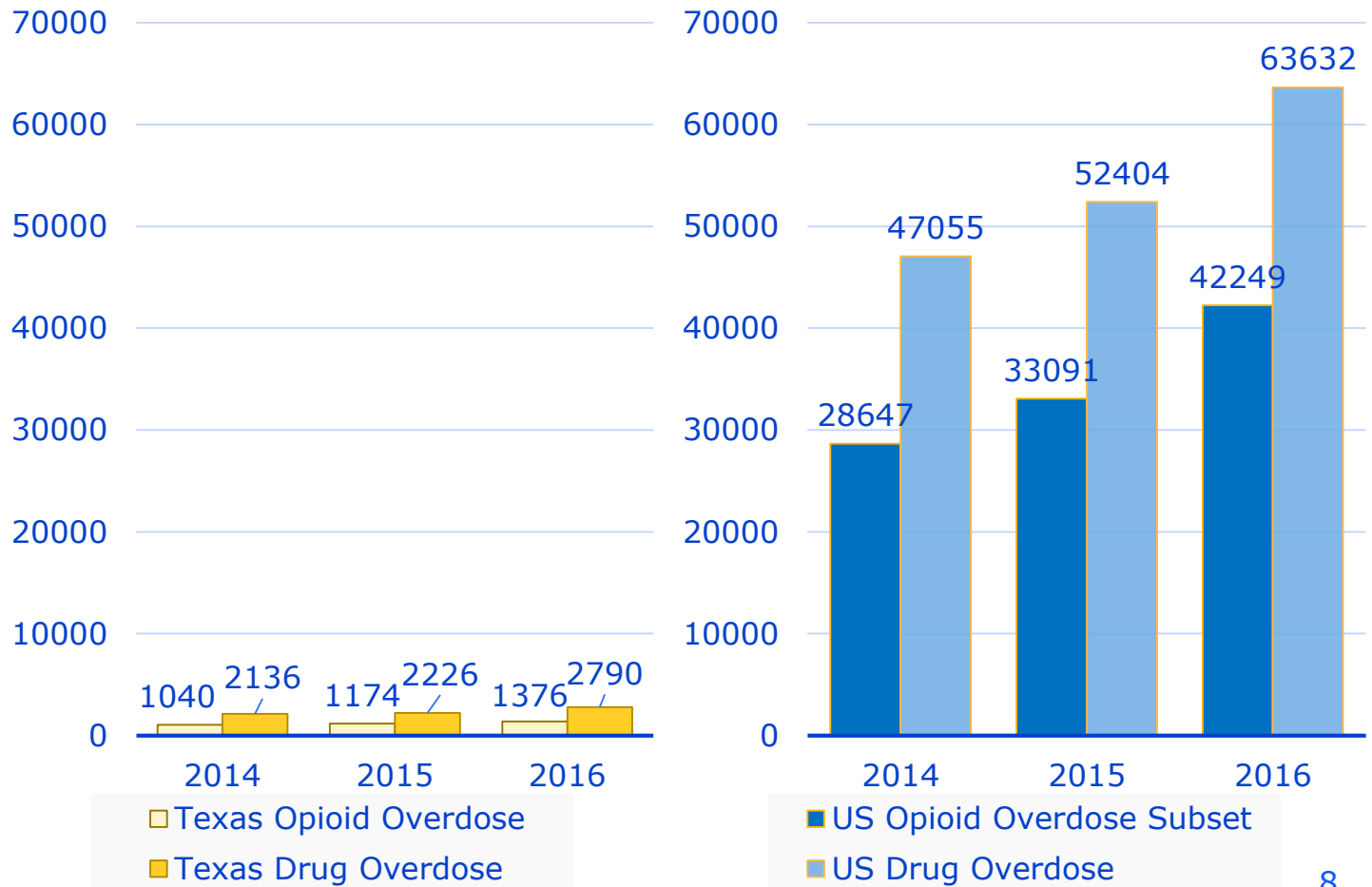- **Senate Bill 315**, 85th Legislature, Regular Session, 2017

Background: National & State Overdose Deaths

Drug Overdose & Opioid Overdose Deaths in the U.S. and Texas, 2014-2016

Texas chart:

Year	Texas Opioid Overdose	Texas Drug Overdose
2014	1040	2136
2015	1174	2226
2016	1376	2790

U.S. chart:

Year	US Opioid Overdose Subset	US Drug Overdose
2014	28647	47055
2015	33091	52404
2016	42249	63632

Texas Data Overview: DSHS Datasets

- Texas Poison Center Network Drug Exposure Calls: 2000-2017

- Inpatient Admissions Through Emergency Department Visits: 2000-2016

- Death Certificate Data: 1999-2015

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Drug Exposure Calls

Texas Poison Center Network Drug Exposure Calls, 2000-2017
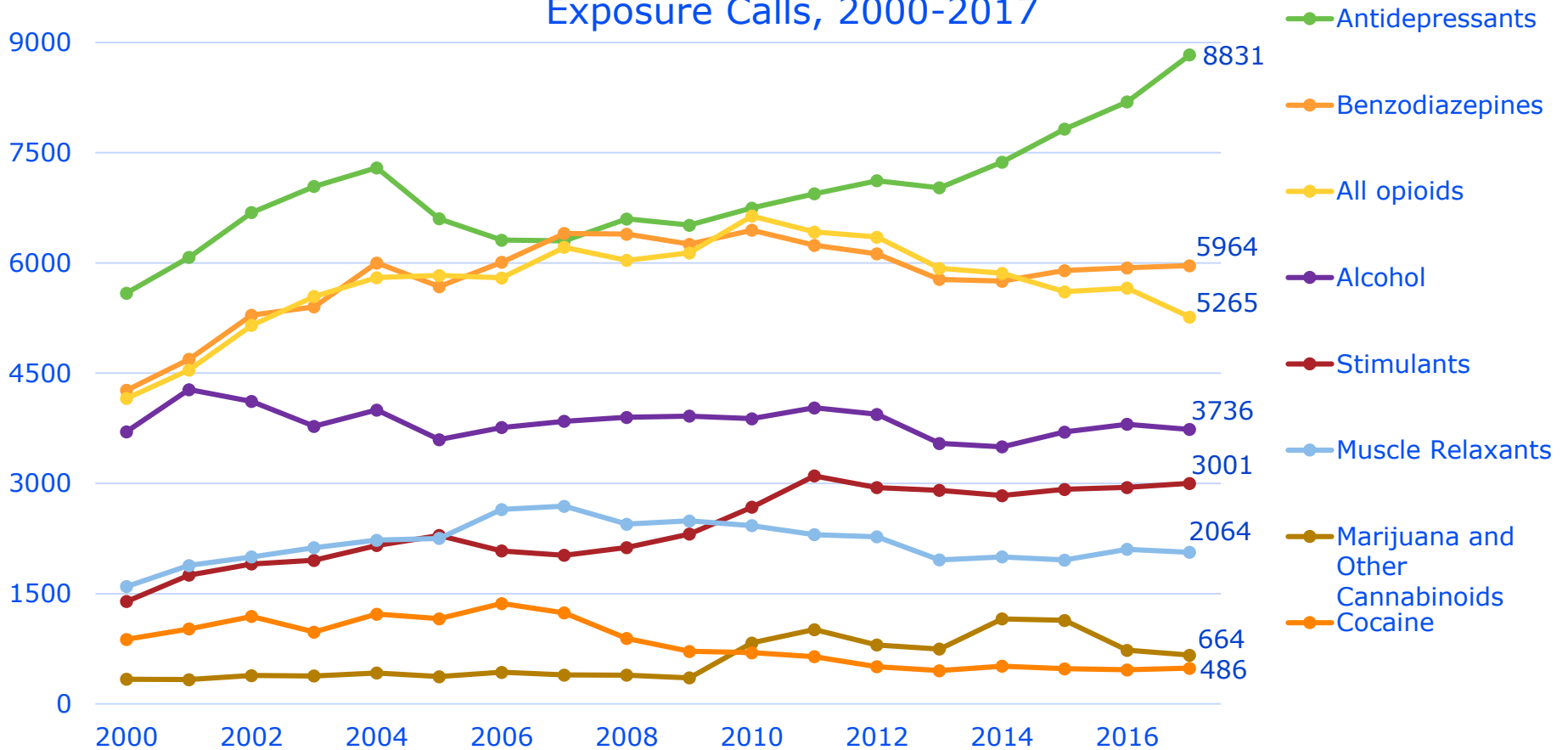
Source: Texas Poison Center Network, 2000-2017. Analyses include only those calls involving drug exposures; calls asking for information were not included.

Drug Exposure Calls: Opioid-Related

Opioid-Related Exposure Calls to the Texas Poison Center Network, 2000-2017
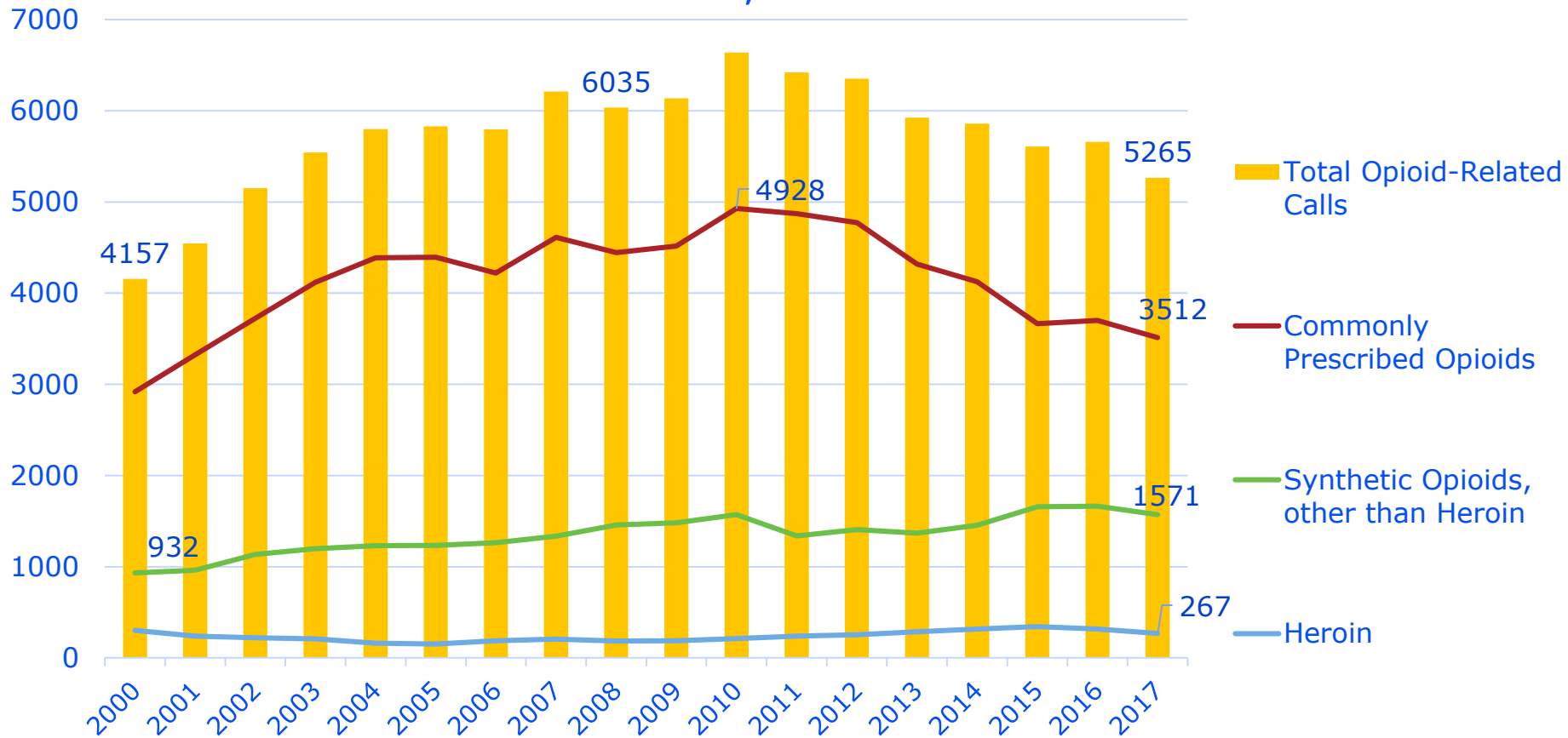
Drug Exposure Calls: Regional Data

Opioid-Related Calls to the Texas Poison Center Network by Public Health Region, 2000-2017
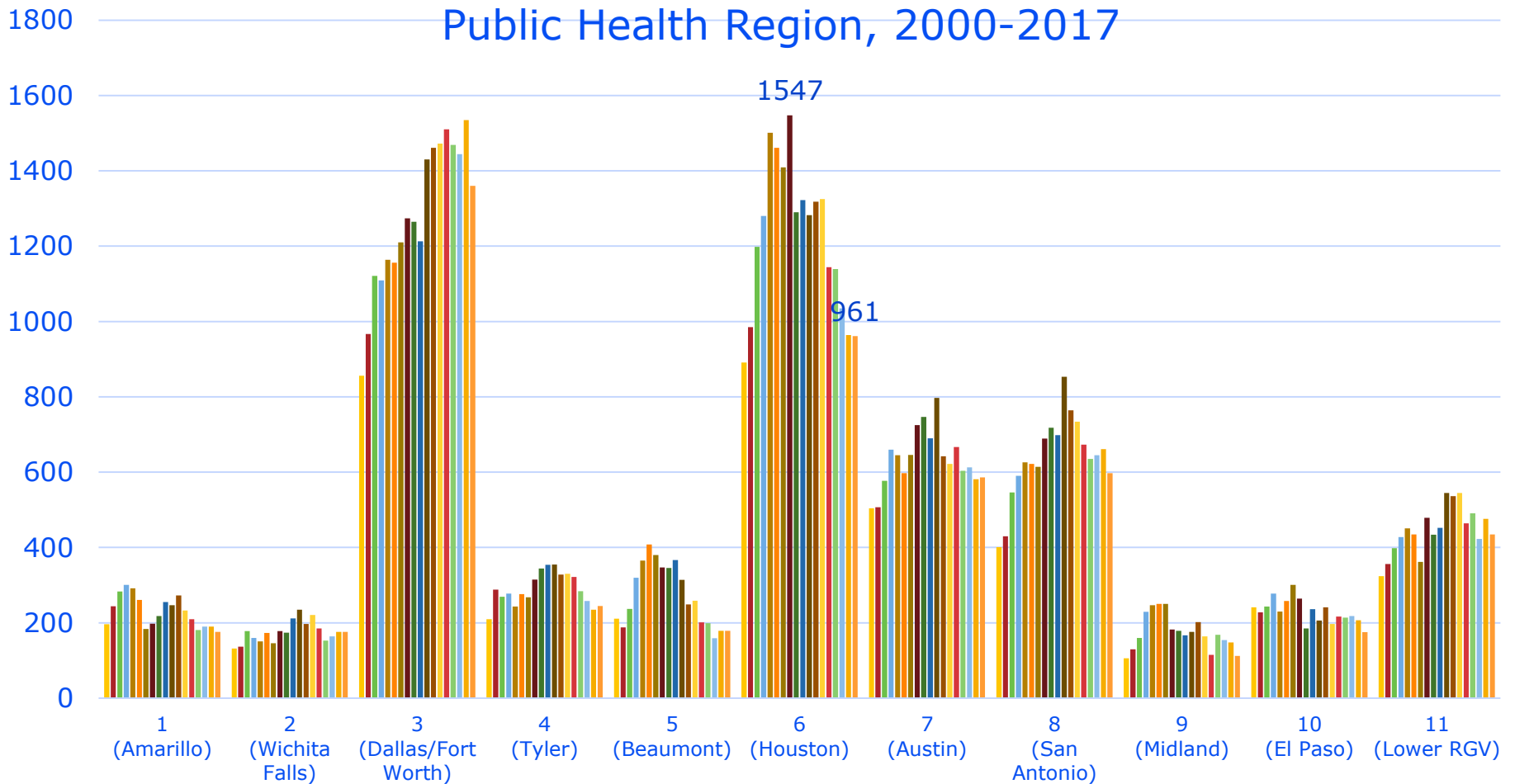
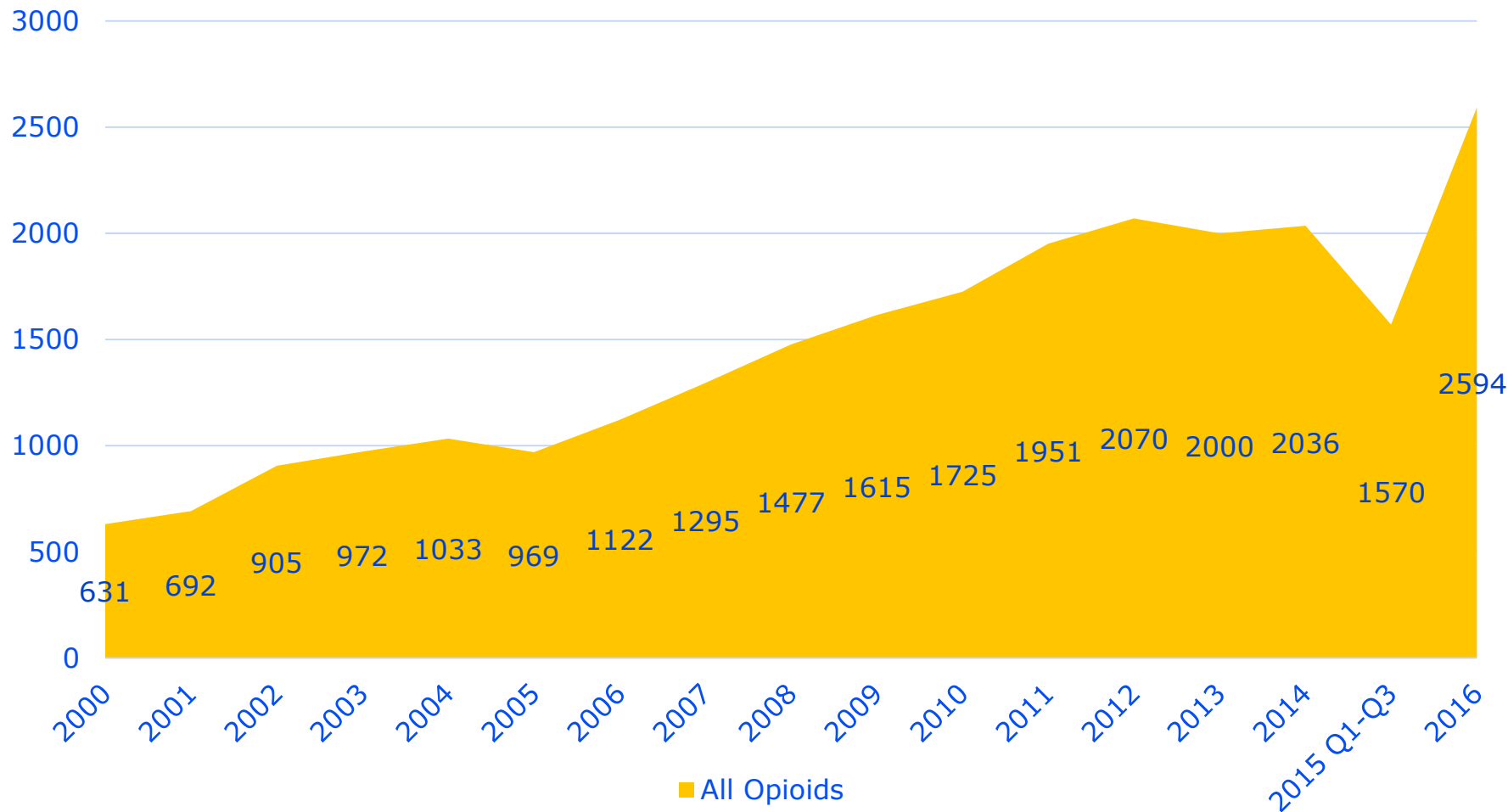# Opioid-Related Drug Exposure Calls: County-Level Data, 2000-2017
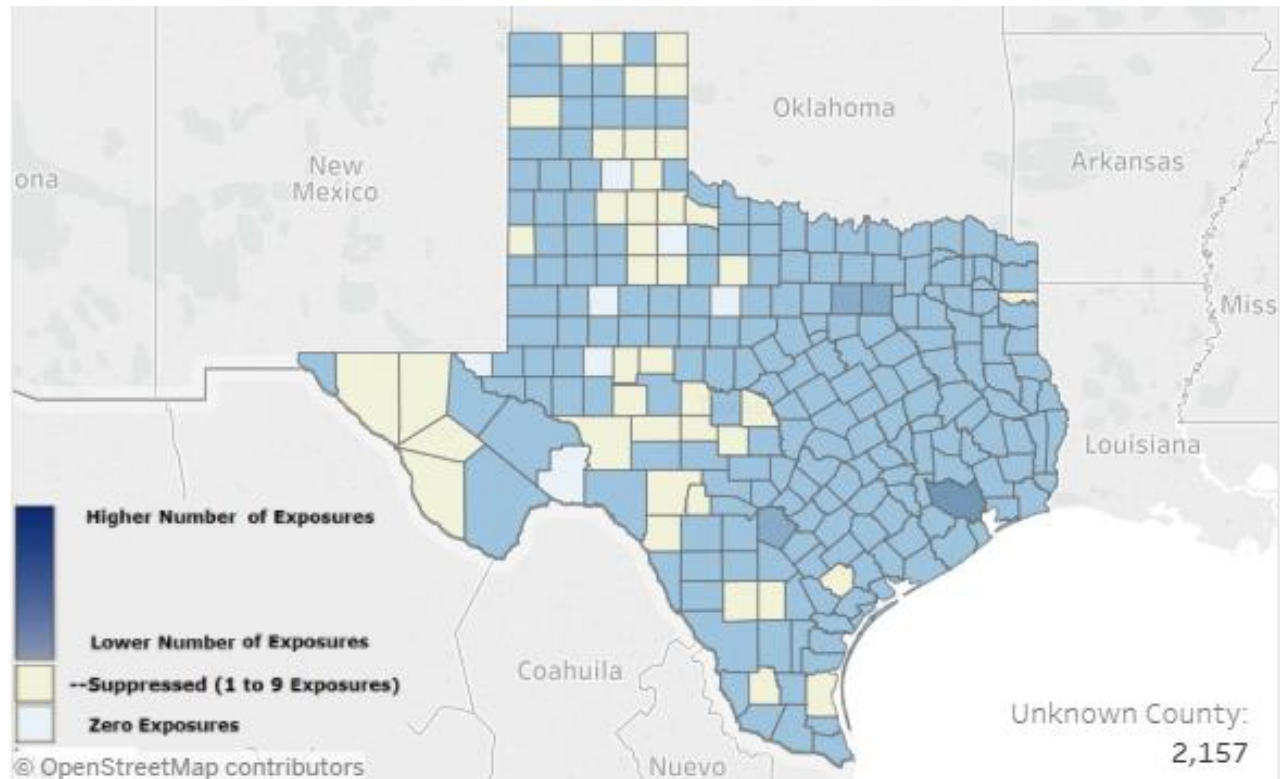
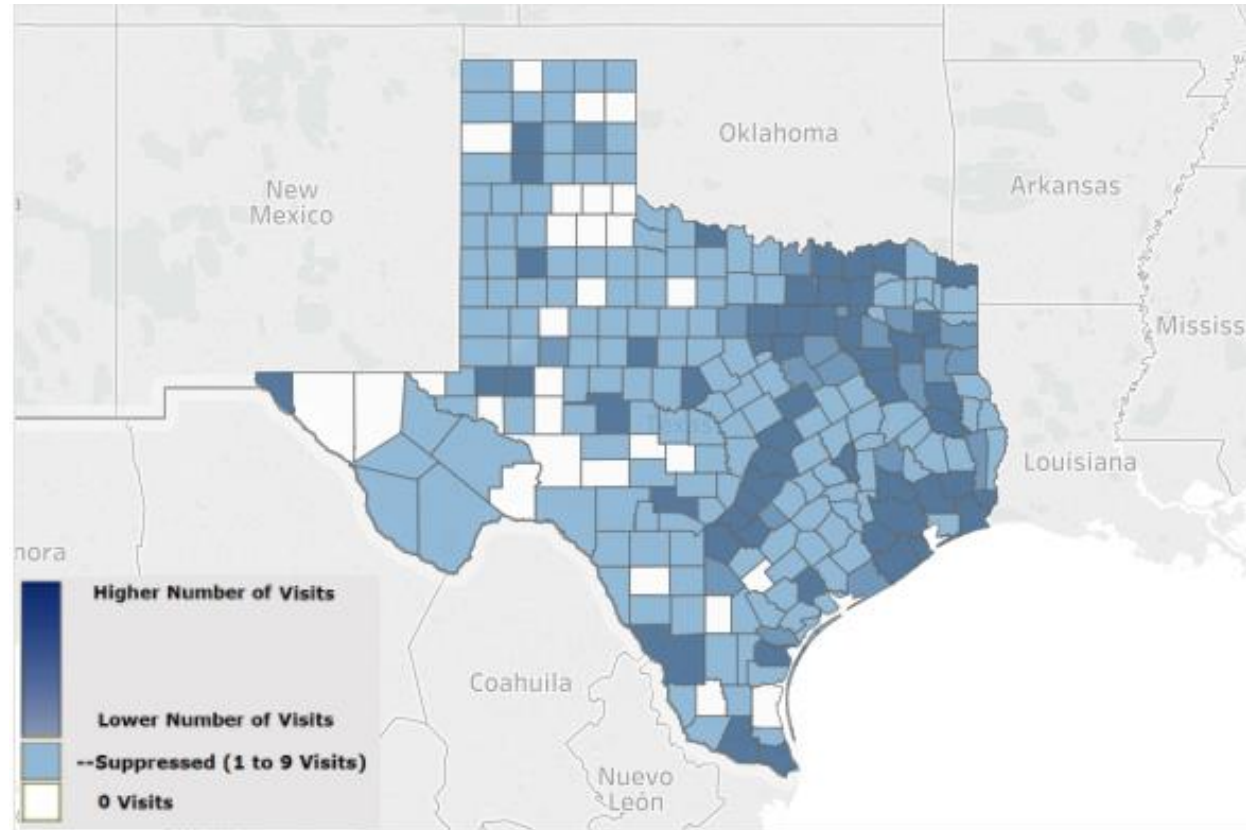# Drug-Related Inpatient Admissions Through ED Visits, Texas, 2016
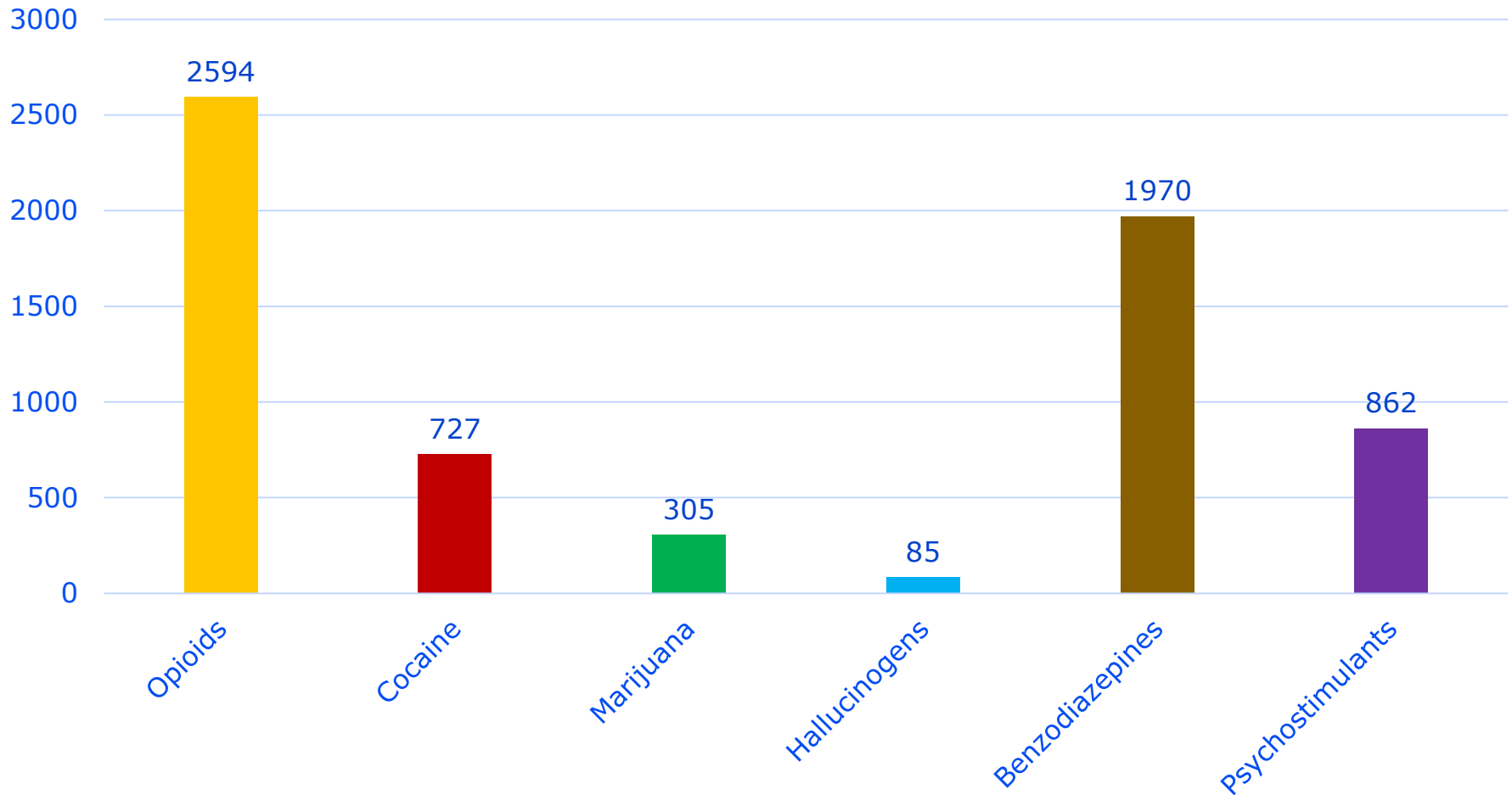
Source: *Texas Hospital Inpatient Discharge Public Use Data Files, Q1 – Q4 2016*. Texas Department of State Health Services, Center for Health Statistics, Austin, Texas. 3/7/2018.

Opioid-Related Inpatient Admissions Through ED Visits, 2000-2015 3rd Quarter

All Opioids: 631, 692, 905, 972, 1033, 969, 1122, 1295, 1477, 1615, 1725, 1951, 2070, 2000, 2036, 1570, 2594

Years: 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015 Q1-Q3, 2016

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Opioid-Related Inpatient ED Admissions: County-level Data, 2000-2015Q3

Accidental Poisoning Deaths in Texas, by Substance: 1999-2015
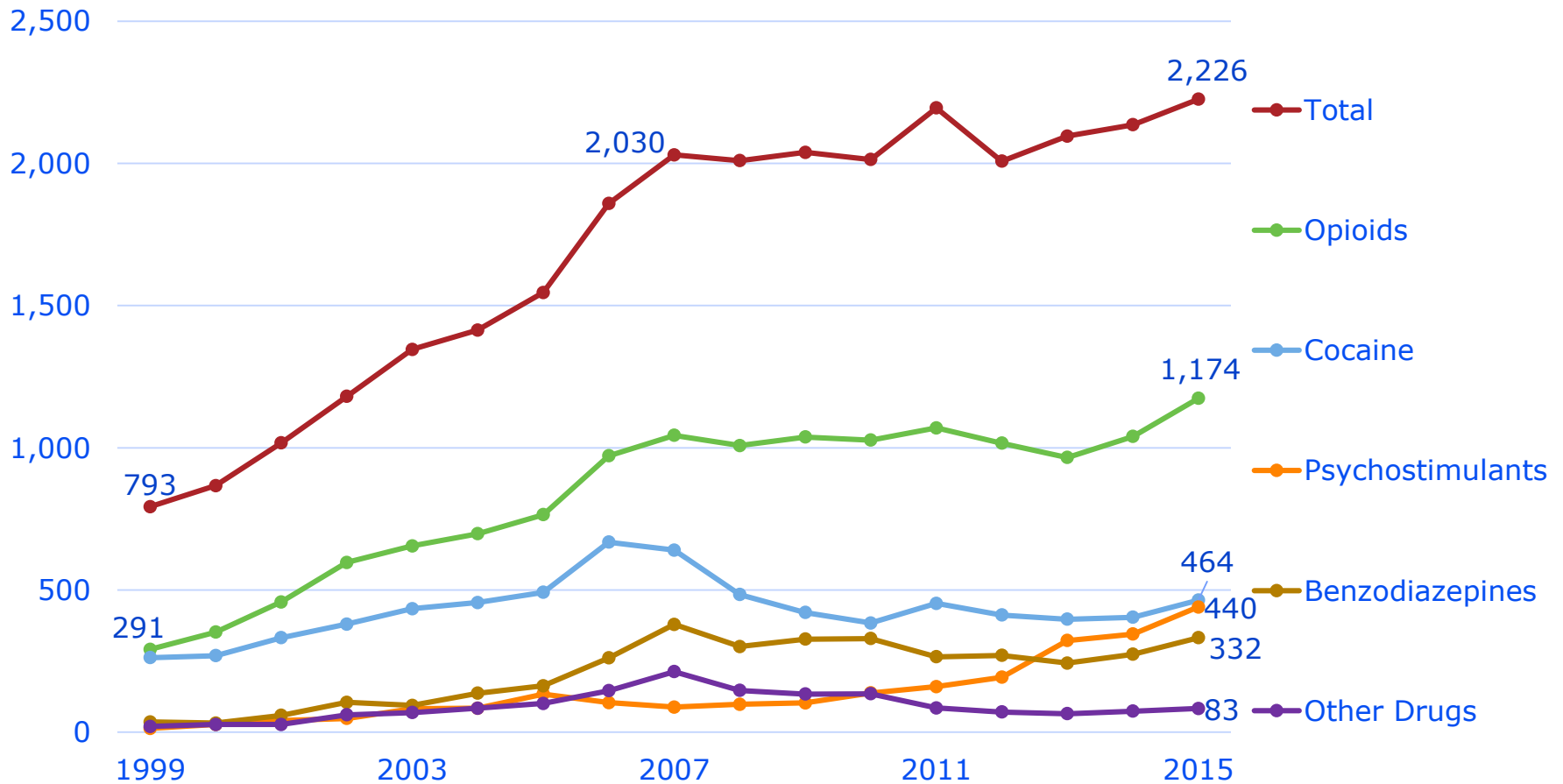
Source: Texas Death Certificates
Accidental Poisonings based on County of Occurrence
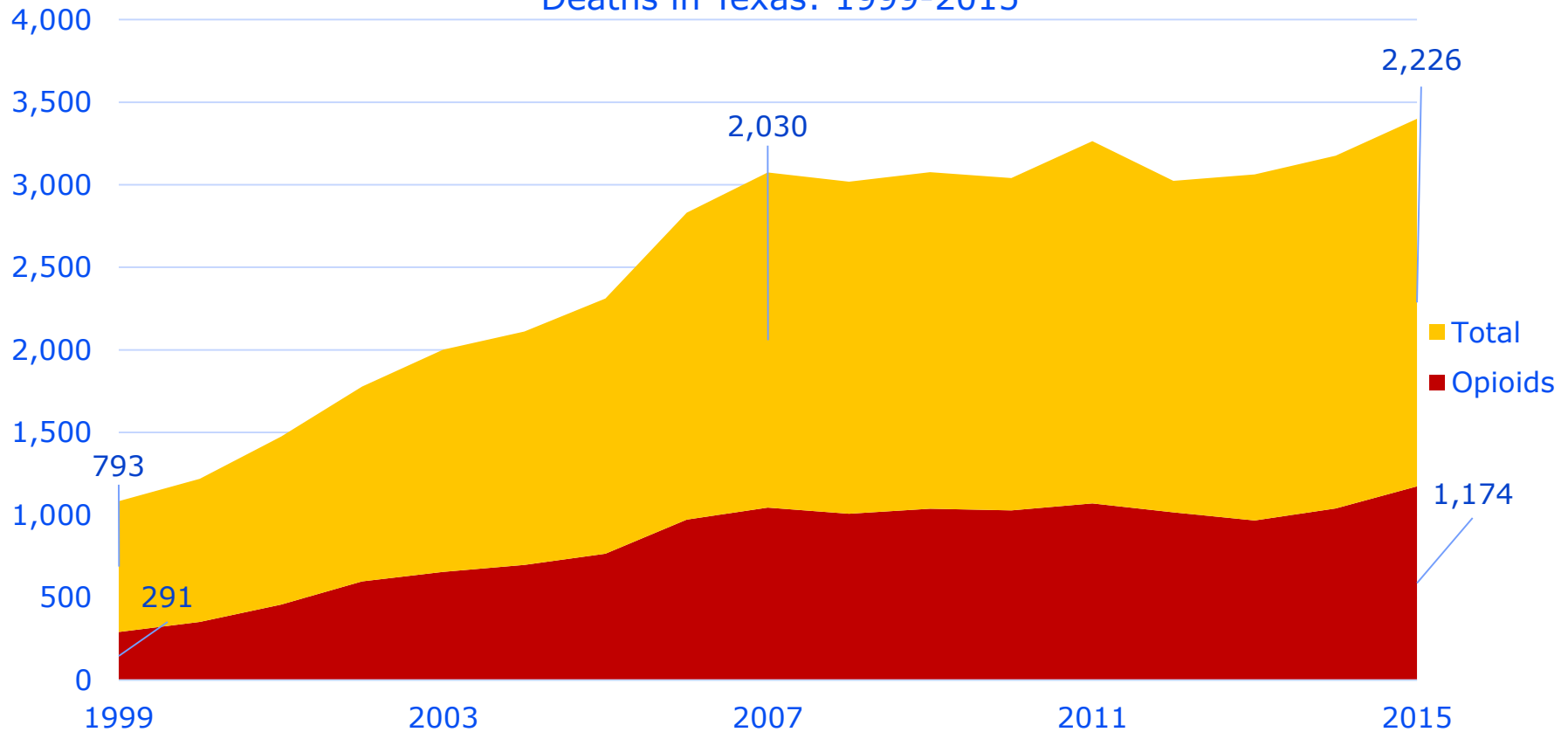Prepared by Texas Department of State Health Services, Center for Health Statistics 3/6/2018
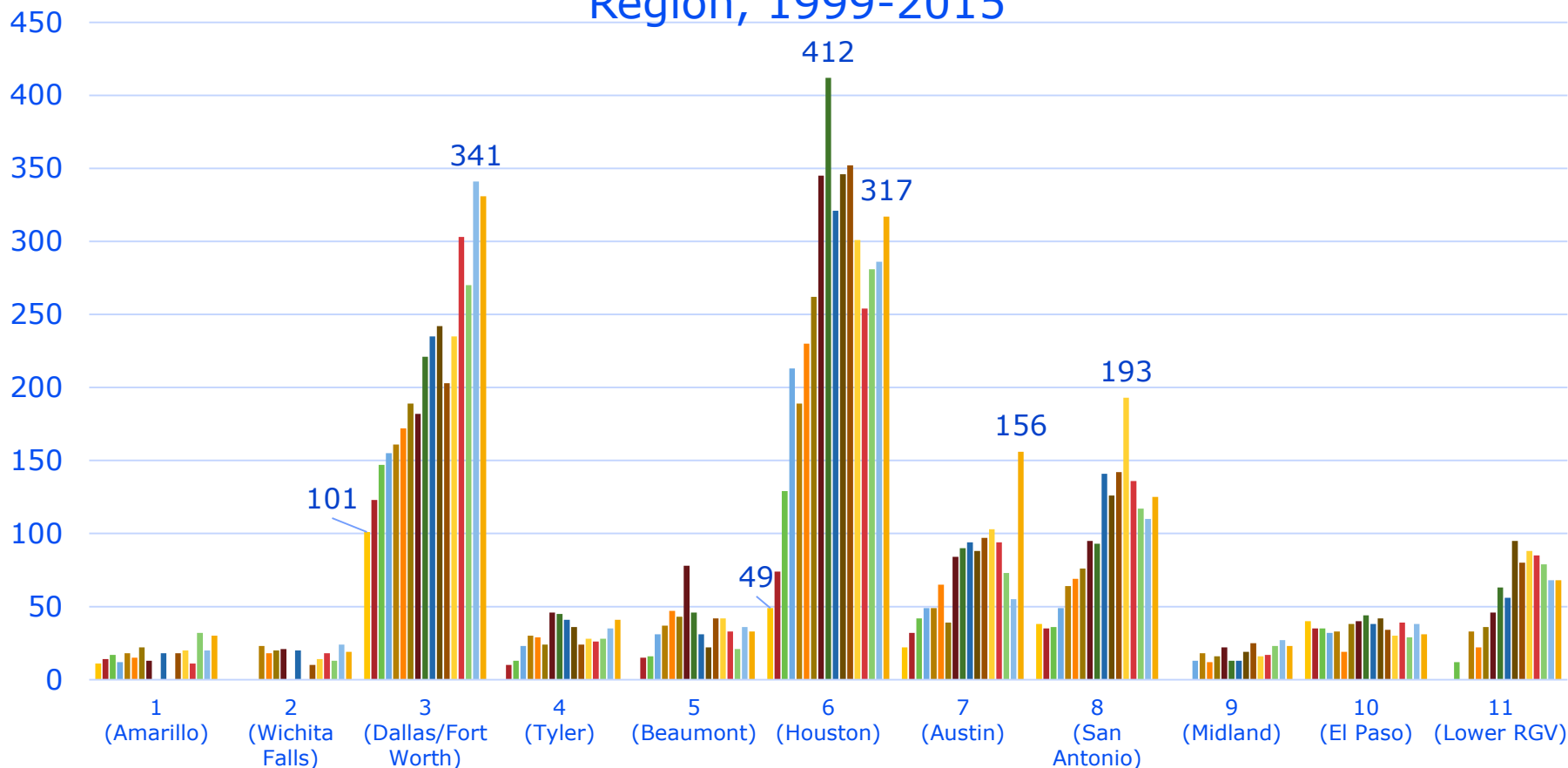
Accidental Poisoning Deaths:

Total and Opioid-Related Accidental Poisoning Deaths in Texas: 1999-2015

Legend: Total (yellow), Opioids (red)

Data points labeled: 793, 291, 2,030, 2,226, 1,174

Y-axis: 0 to 4,000 (increments of 500)
X-axis: 1999, 2003, 2007, 2011, 2015
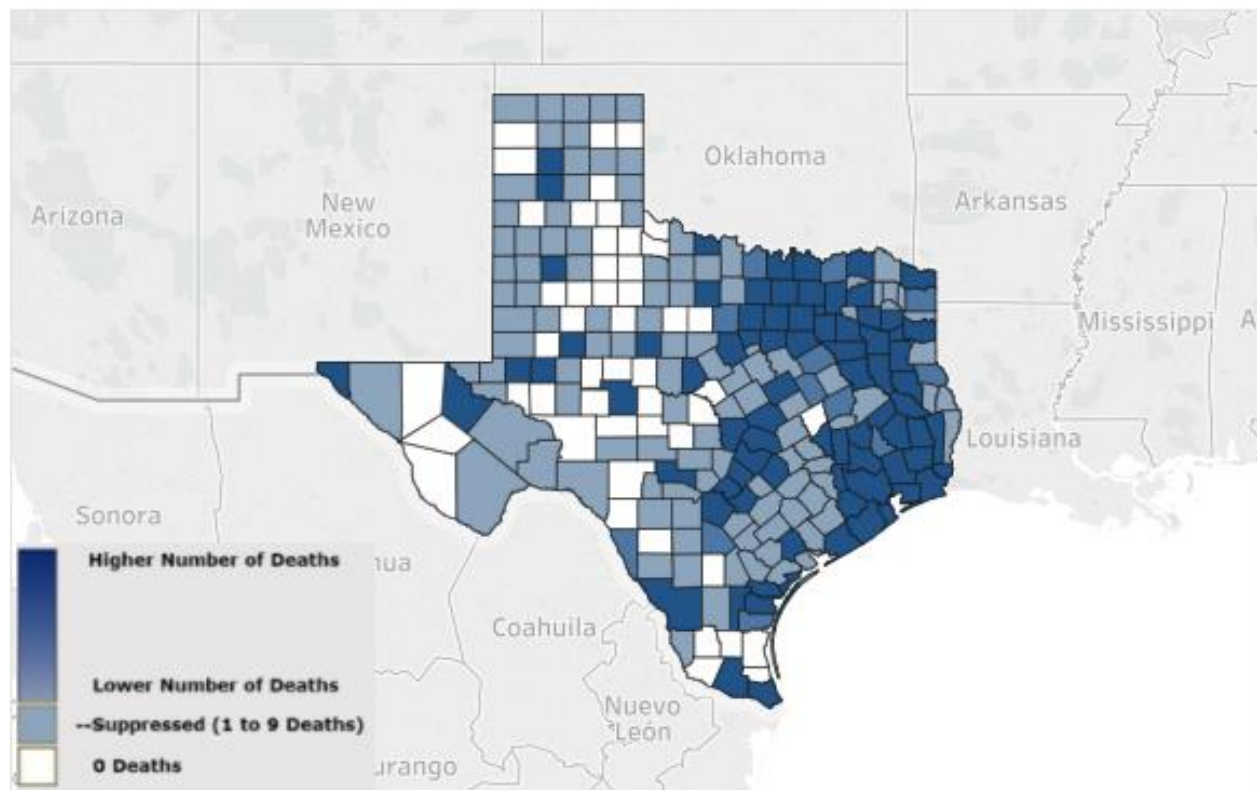
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Accidental Opioid-Related Poisoning Deaths: Regional Data

Accidental Opioid-Related Deaths by Texas Public Health Region, 1999-2015

Accidental Opioid-Related Poisoning Deaths: County-level Data, 1999-2015

Source: Texas Death Certificates
Accidental Poisonings based on County of Occurrence
Prepared by Texas Department of State Health Services, Center for Health Statistics 3/6/2018

Selected Public Health Concepts:

- Opioid Antagonists
- Texas Controlled Substances Scheduling
- Texas AIM Initiative: Opioids
- Texas Health Data Opioid Dashboard

Opioid Antagonists

Antagonists reverse/reduce the effects of an opioid overdose or opioid disorder

- Opioid overdoses involve
  - Non-responsiveness
  - Slowing down of basic bodily functions, especially respiration

- Naloxone: used in opioid overdose situations
  - Pure opioid antagonist – immediate impact but with a short duration (30-60 minutes)
  - Works by binding to opioid receptors but doesn't activate the receptors, preventing response to any opioids in the system

- Administered by: autoinjector or nasal spray

Opioid Antagonists: Standing Orders

SB 1462 (84th Leg., R.S., 2015):

- **Prescribers:** may issue direct or standing orders for opioid antagonists (Naloxone, etc.)
- **Pharmacies:** may dispense opioid antagonists to covered persons, including family members, friends, or other persons in a position to assist
- **Storage/Distribution:** may occur by persons & organizations acting under standing orders without compensation for storage/distribution
- **Civil/Criminal Liability Protections:** provided to persons who administer/choose not to administer opioid antagonists
- **EMS Personnel:** allowed to administer antagonist if there are clinically indicated symptoms

Texas Controlled Substances Scheduling

An ongoing response to emerging opioid and substance abuse-related threats

Scope: Categorization of controlled substances based on medical use-driven categories

Intended Audience:
- Law Enforcement
- Pharmacies
- The Legislature

Regular Scheduling Process:
- Annual Updates
- Federal action

Emergency Scheduling Process:
- Streamlined scheduling

Recent Fentanyl Scheduling based on DEA action:
- Categorical scheduling of fentanyl products
- Previously, DEA scheduled products after detection of slight alterations to fentanyl chemistry

Texas Controlled Substances Scheduling: Factors Considered

Potential for Abuse

Medical Use in the U.S.

Physical Dependence

Psychological Dependence

Texas Health and Safety Code, Section 481.035 (Findings)

Texas Controlled Substances Scheduling: Factors Considered

- **Schedule I:**
  - high potential for abuse
  - no accepted U.S. medical use

- **Schedule II:**
  - high potential for abuse
  - accepted U.S. medical use
  - may lead to dependence

- **Schedule III:**
  - potential for abuse
  - accepted U.S. medical use
  - may lead to low physical/high psych dependence

- **Schedule IV:**
  - lower potential for abuse
  - accepted U.S. medical use
  - limited physical/psych dependence

- **Schedule V:**
  - lower potential for abuse
  - accepted U.S. medical use
  - more limited physical/psych dependence

Texas Controlled Substances Scheduling: Subcategories

Schedule I

Fentanyl, Heroin, Marijuana

- Opiates

- Opium Derivatives

- Hallucinogenic Substances

- Stimulants

- Depressants

- Cannabimimetic Agents

Schedule II

Cocaine, Fentanyl

- Substances, vegetable origin or chemical synthesis

- Stimulants

- Depressants

- Hallucinogenic Substances

- Precursors

Schedule III

Benzodiazepines

- Depressants

- Narcotics

- Stimulants

- Anabolic steroids and hormones

- Hallucinogenic substances

Schedule IV

Benzodiazepines

- Depressants

- Stimulants

- Narcotics and other substances

Schedule V

- Narcotics containing non-narcotic active medicinal ingredients

- Stimulants

- Depressants

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TexasAIM Initiative: Opioids

Medical protocols to decrease the incidence of drug overdoses in maternal mortality and morbidity

- **Overview**: Texas 1 of 10 states invited by Alliance for Innovation on Maternal Health (AIM) to develop and implement Obstetric Care for Women with Opioid Use Disorder Bundle

- **Focus**: Evidence-based practices and data-driven quality improvement strategies to improve substance abuse disorder (SUD) screening, treatment, education, etc.

- **Timeline**:
  - Nov. 14, 2017: National kick-off meeting
  - Winter 2017-18: DSHS organized workgroup to steer implementation process
  - March 9, 2018: Letter sent to clinical partners inviting participation in all AIM bundles, including Opioid Use Disorder

Texas Health Data Opioid Dashboard

Texas Health Data: User-friendly data visualization tool on the DSHS website

- **Current Datasets:**
  - Death Certificate Data
  - Texas Poison Center Network
  - Texas Administrative Claims Data (facility diagnoses codes)

- **Future Datasets:**
  - Texas School Health Surveys
  - EMS Run Data
  - Other datasets as partnerships develop

- **Future Dashboard tools:**
  - Visualizations by Public Health Region
  - Other demographic indicators as datasets allow

- **http://healthdata.dshs.texas.gov/**

Texas Health Data Opioid Dashboard
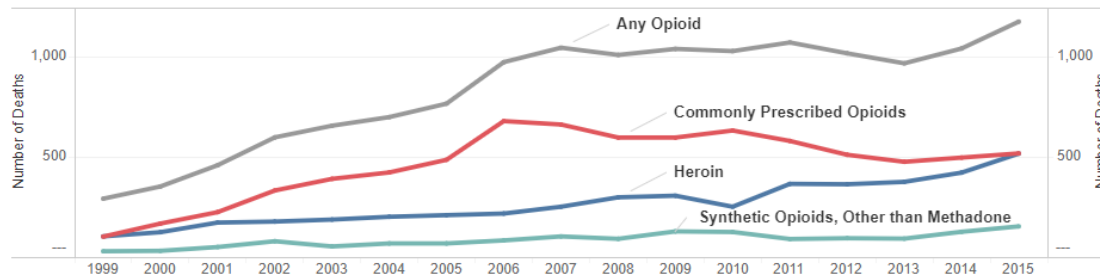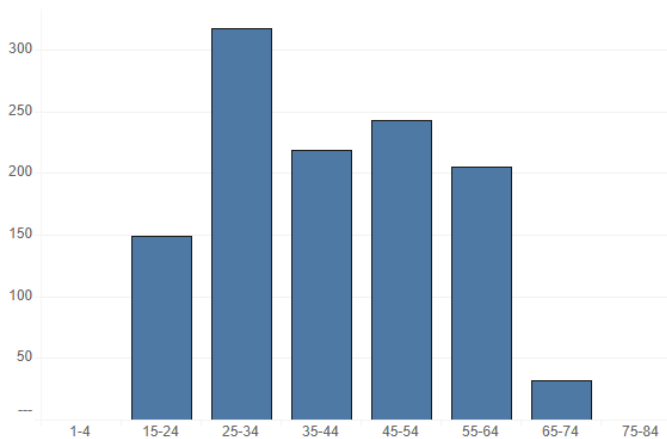
Thank you

Regional Data Overview

- Data Points Covered for Each Public Health Region on Separate Slides:
  - Drug Overdose Deaths Involving Opioids
    - Immediate & underlying causes of death included mention of Opioids
  - Opioid-Involved Drug Exposure Calls to the Texas Poison Control Network
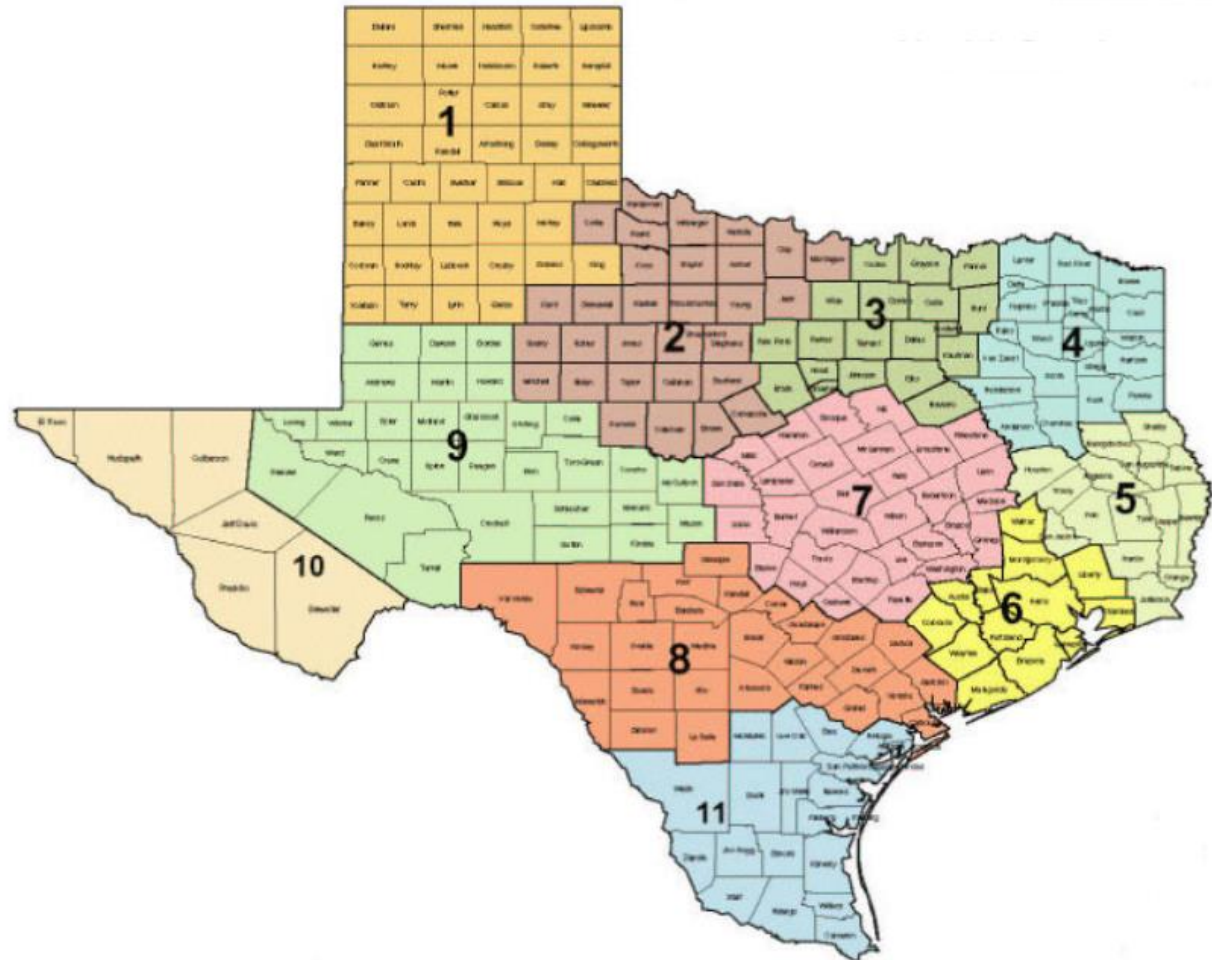   - Reason for reported exposure included mention of opioids

Map of Public Health Regions

Public Health Region 1 (Amarillo):

Accidental Overdose Deaths involving Opioids in Region 1 by Year, 1999-2015
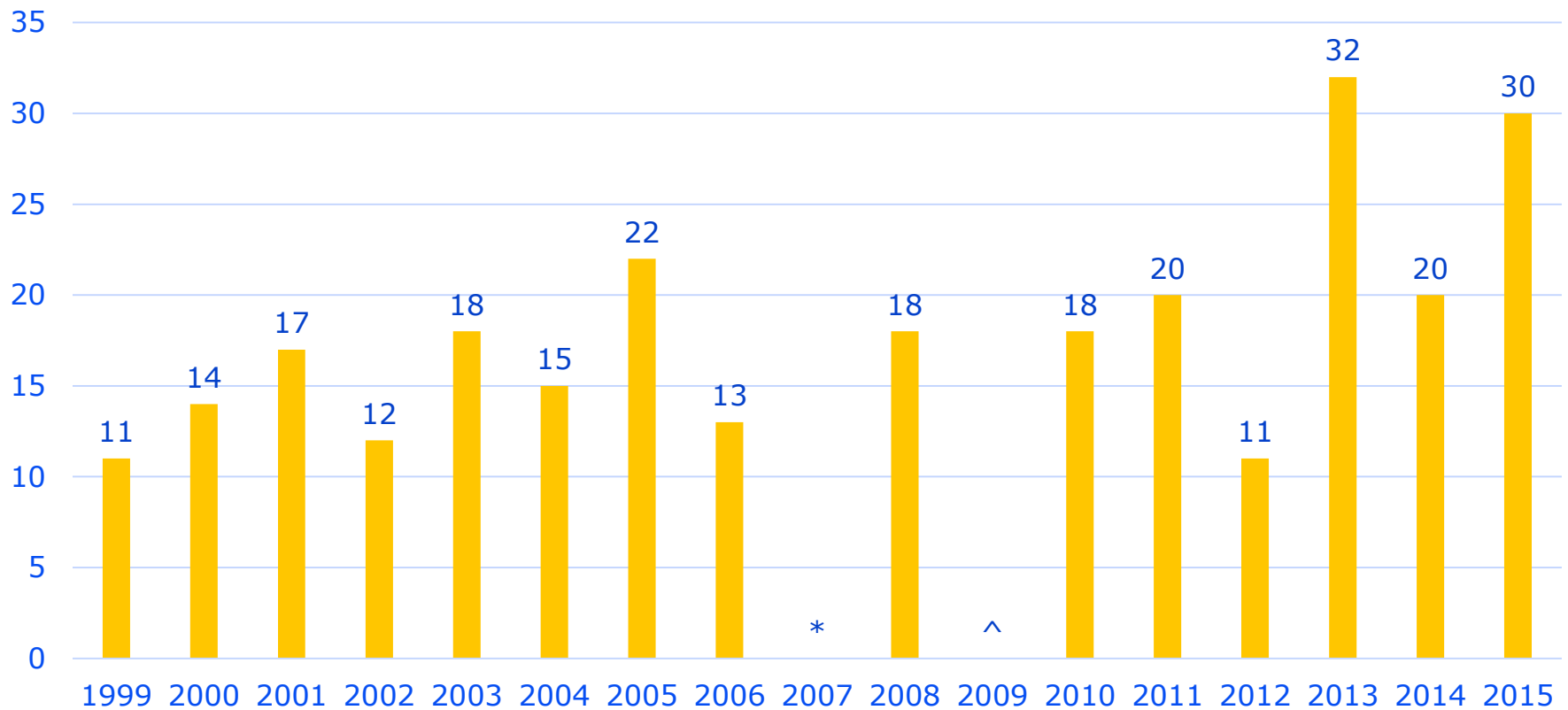
* Counts of 1-9 are suppressed to prevent the identification of individuals in confidential data.
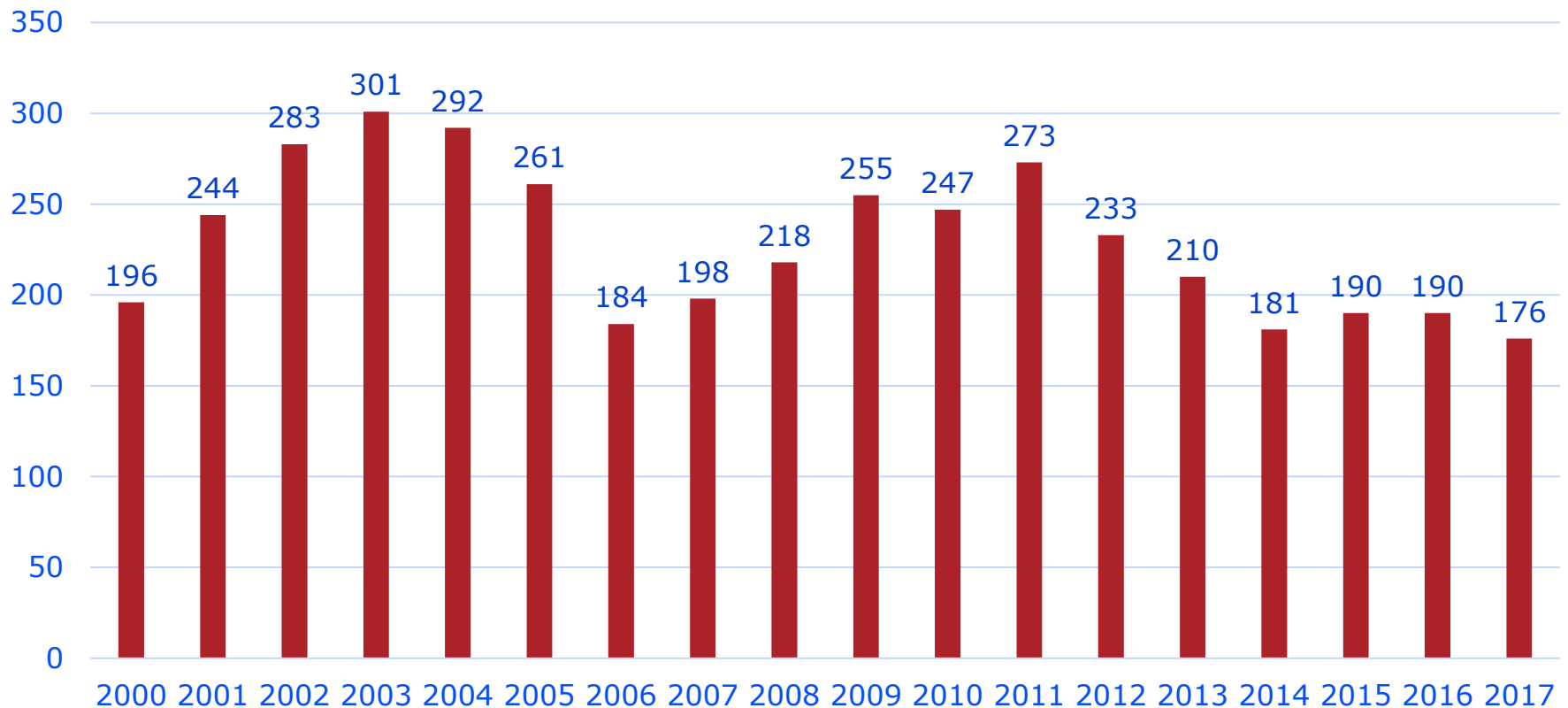^ Value suppressed to prevent back calculation of suppressed small count

Public Health Region 1 (Amarillo):

Opioid-Related Calls to the Texas Poison Center Network in Region 1 by Year, 2000-2017

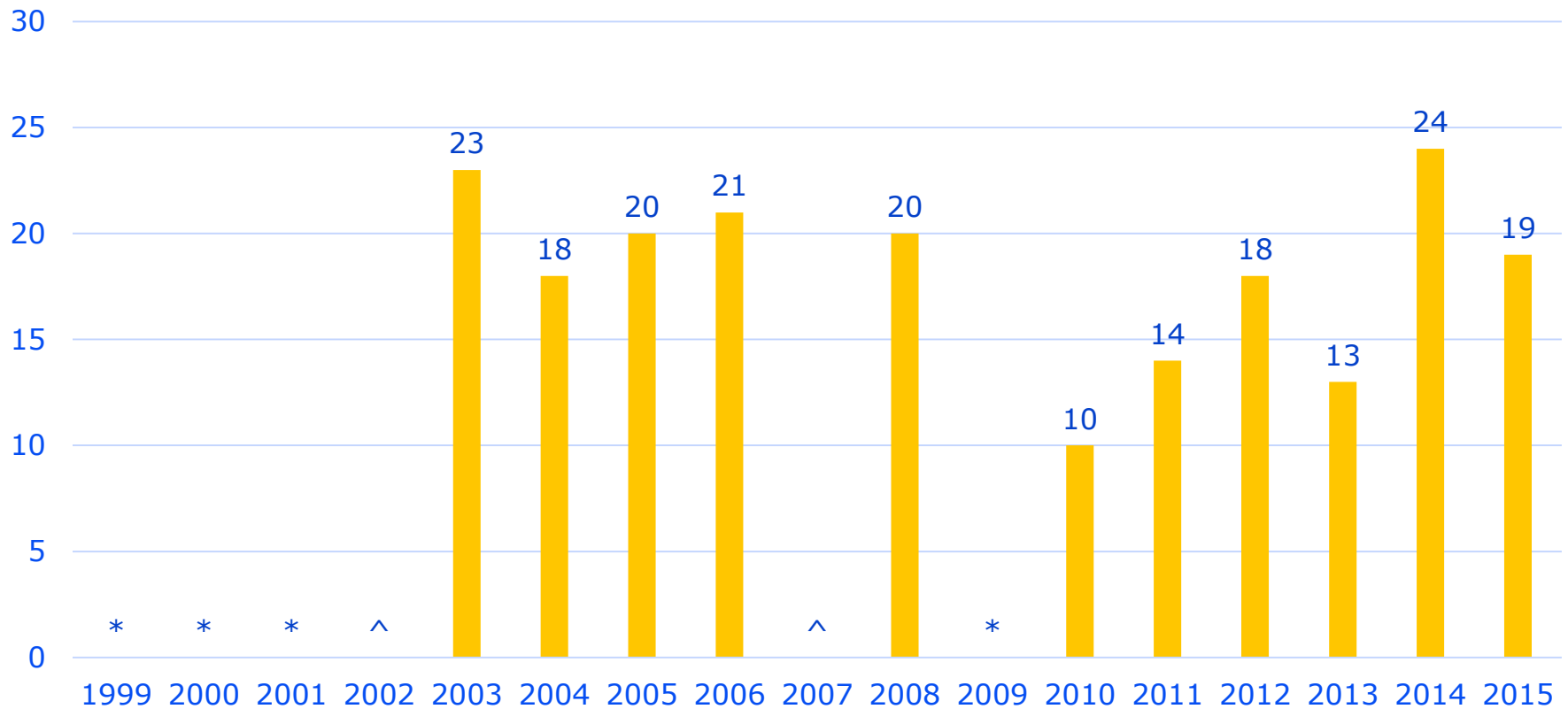| Year	Count
2000	196
2001	244
2002	283
2003	301
2004	292
2005	261
2006	184
2007	198
2008	218
2009	255
2010	247
2011	273
2012	233
2013	210
2014	181
2015	190
2016	190
2017	176

* Counts of 1-4 are suppressed to prevent the identification of individuals in confidential data.

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Public Health Region 2 (Wichita Falls):

Accidental Overdose Deaths involving Opioids in
Region 2 by Year, 1999-2015

* Counts of 1-9 are suppressed to prevent the identification of individuals in confidential data.
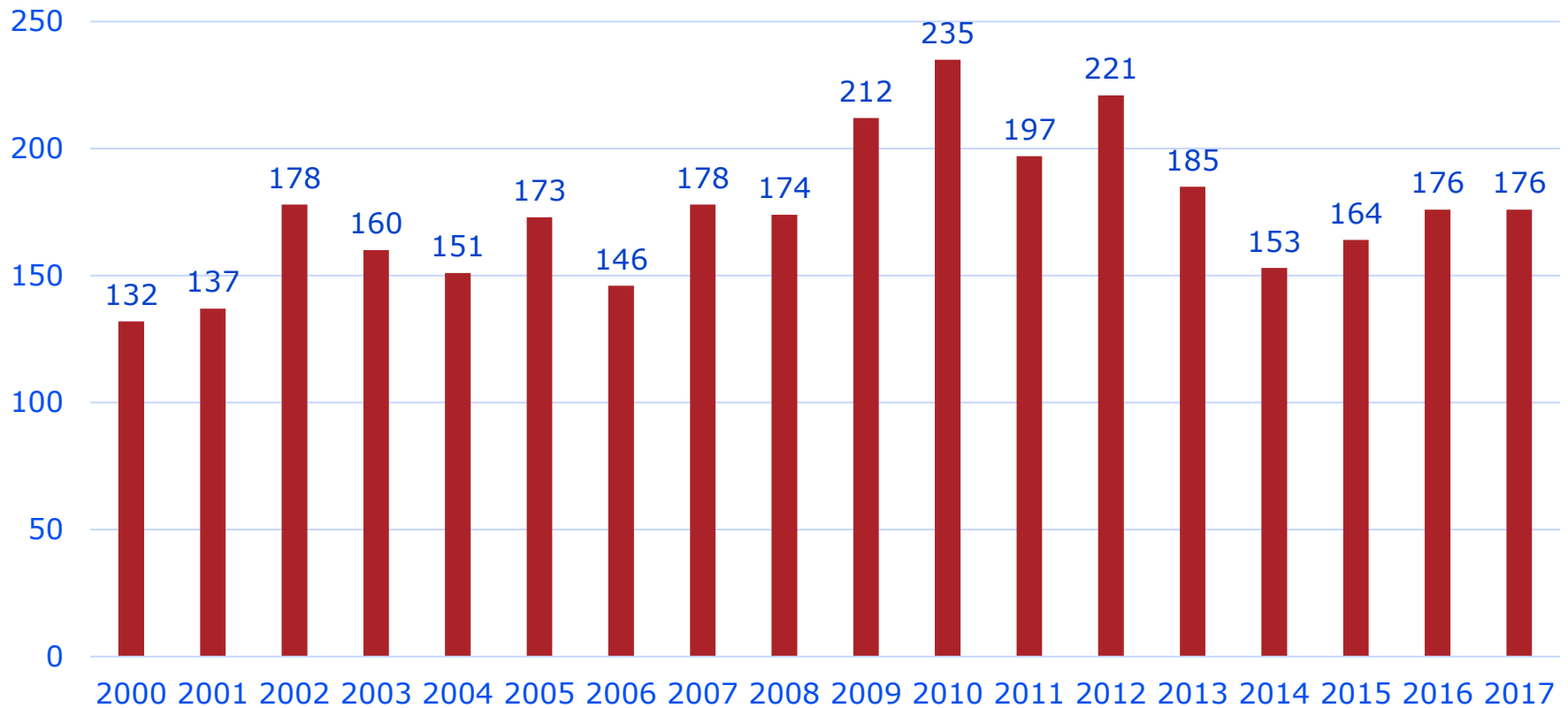^ Value suppressed to prevent back calculation of suppressed small count

Public Health Region 2 (Wichita Falls):

Opioid-Related Calls to the Texas Poison Center Network in Region 2 by Year, 2000-2017

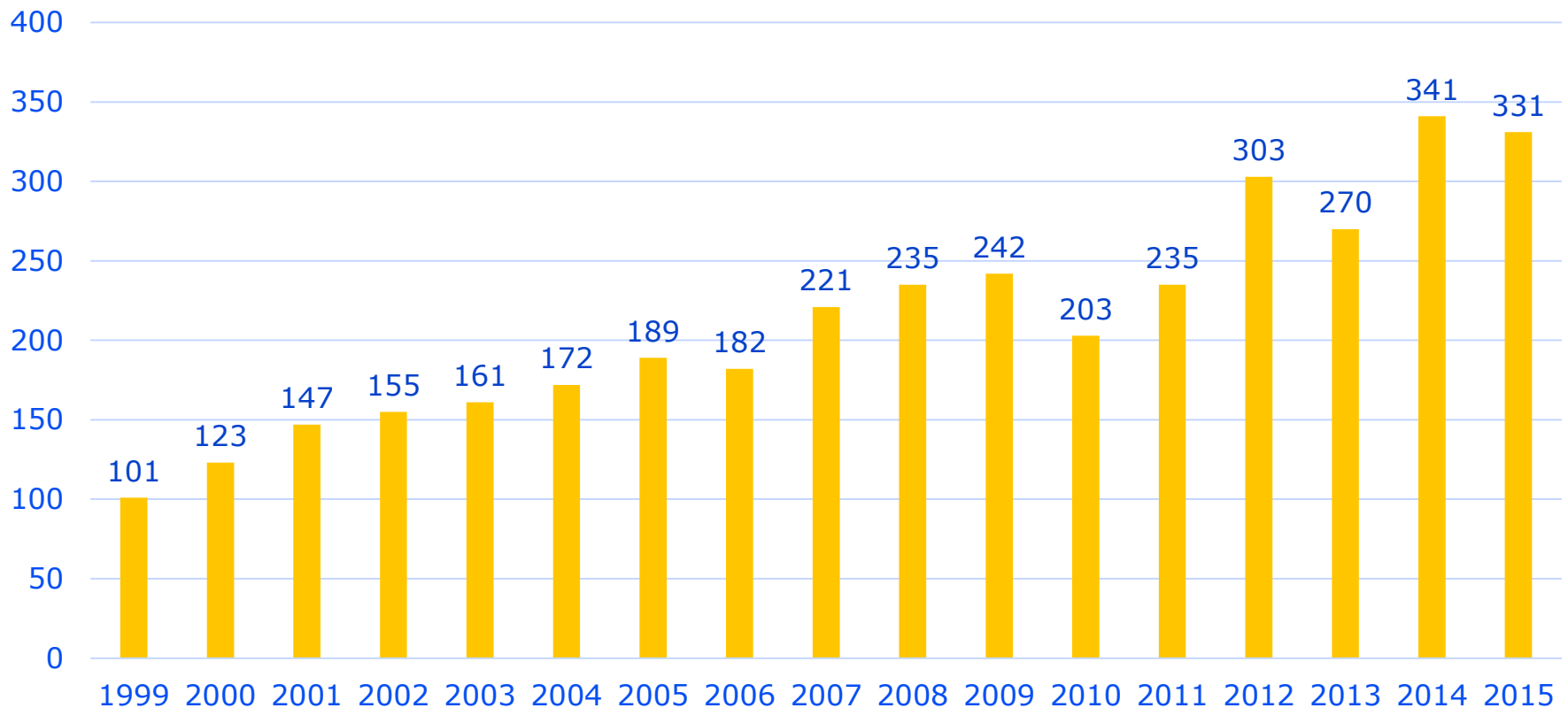* Counts of 1-4 are suppressed to prevent the identification of individuals in confidential data.

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Public Health Region 3 (Dallas/Fort Worth):

Accidental Overdose Deaths involving Opioids in Region 3 by Year, 1999-2015

* Counts of 1-9 are suppressed to prevent the identification of individuals in confidential data.
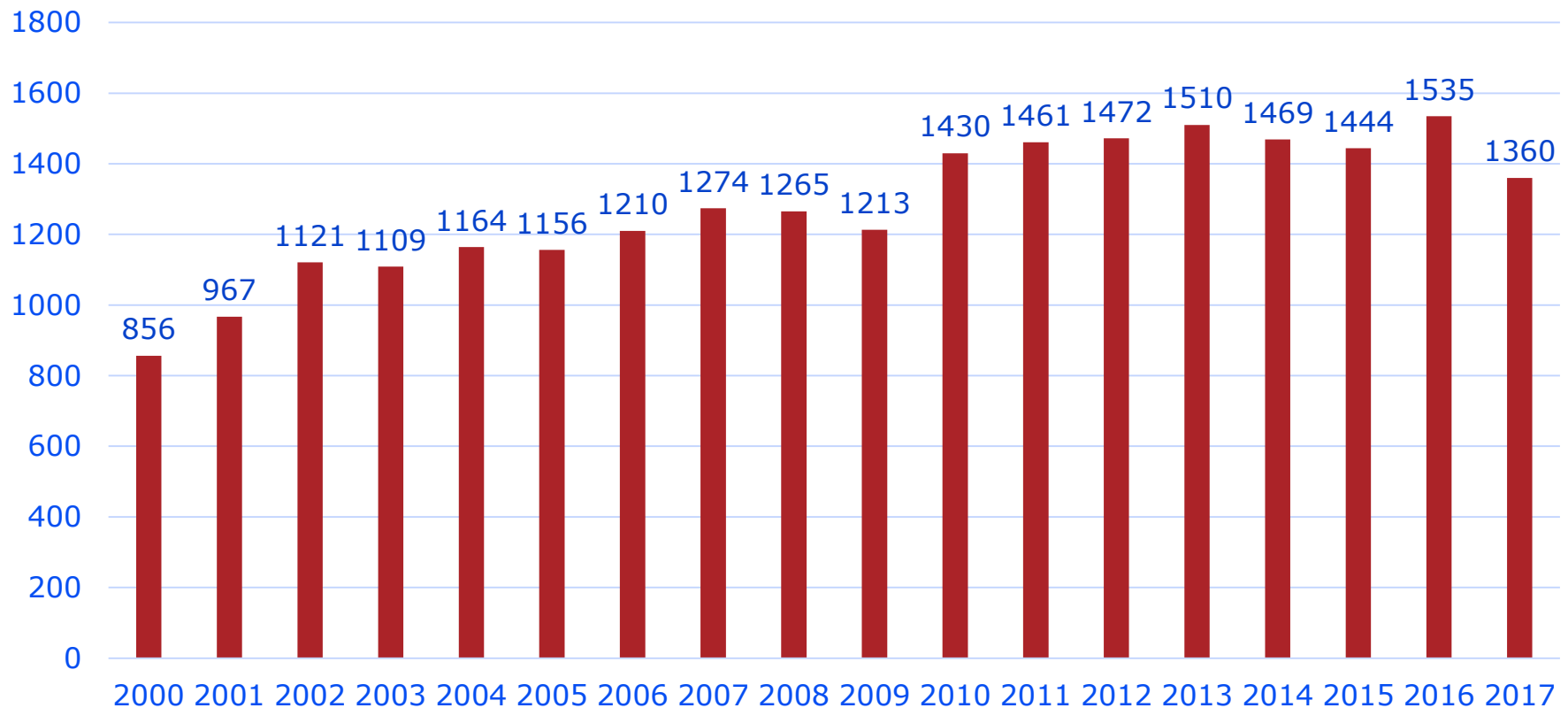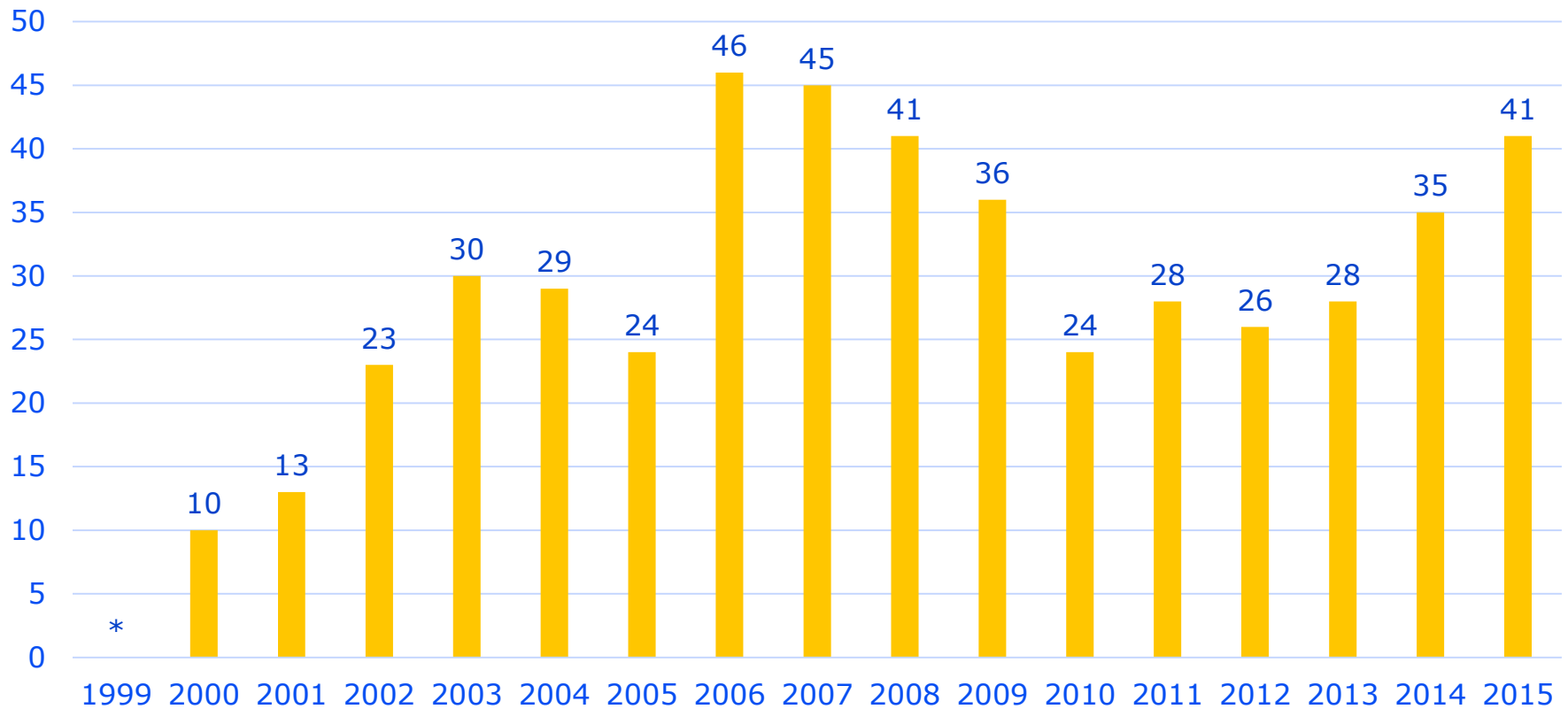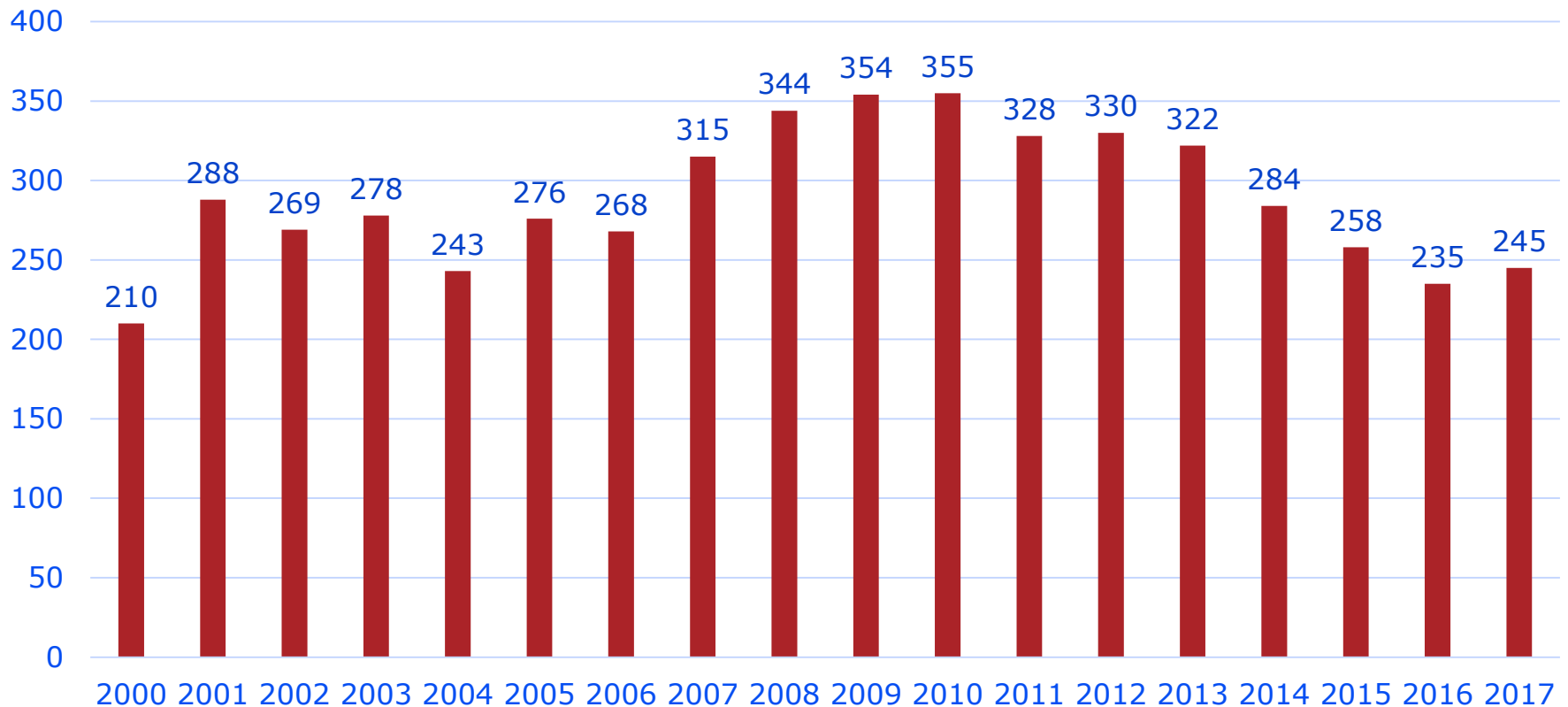^ Value suppressed to prevent back calculation of suppressed small count

Public Health Region 3 (Dallas/Fort Worth):

Opioid-Related Calls to the Texas Poison Center Network in Region 3 by Year, 2000-2017

Year	Count
2000	856
2001	967
2002	1121
2003	1109
2004	1164
2005	1156
2006	1210
2007	1274
2008	1265
2009	1213
2010	1430
2011	1461
2012	1472
2013	1510
2014	1469
2015	1444
2016	1535
2017	1360

* Counts of 1-4 are suppressed to prevent the identification of individuals in confidential data.

Public Health Region 4 (Tyler):

Accidental Overdose Deaths involving Opioids in Region 4 by Year, 1999-2015

Chart data (deaths by year):

Year	Deaths
1999	*
2000	10
2001	13
2002	23
2003	30
2004	29
2005	24
2006	46
2007	45
2008	41
2009	36
2010	24
2011	28
2012	26
2013	28
2014	35
2015	41

* Counts of 1-9 are suppressed to prevent the identification of individuals in confidential data.
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Public Health Region 4 (Tyler):

Opioid-Related Calls to the Texas Poison Center Network in Region 4 by Year, 2000-2017

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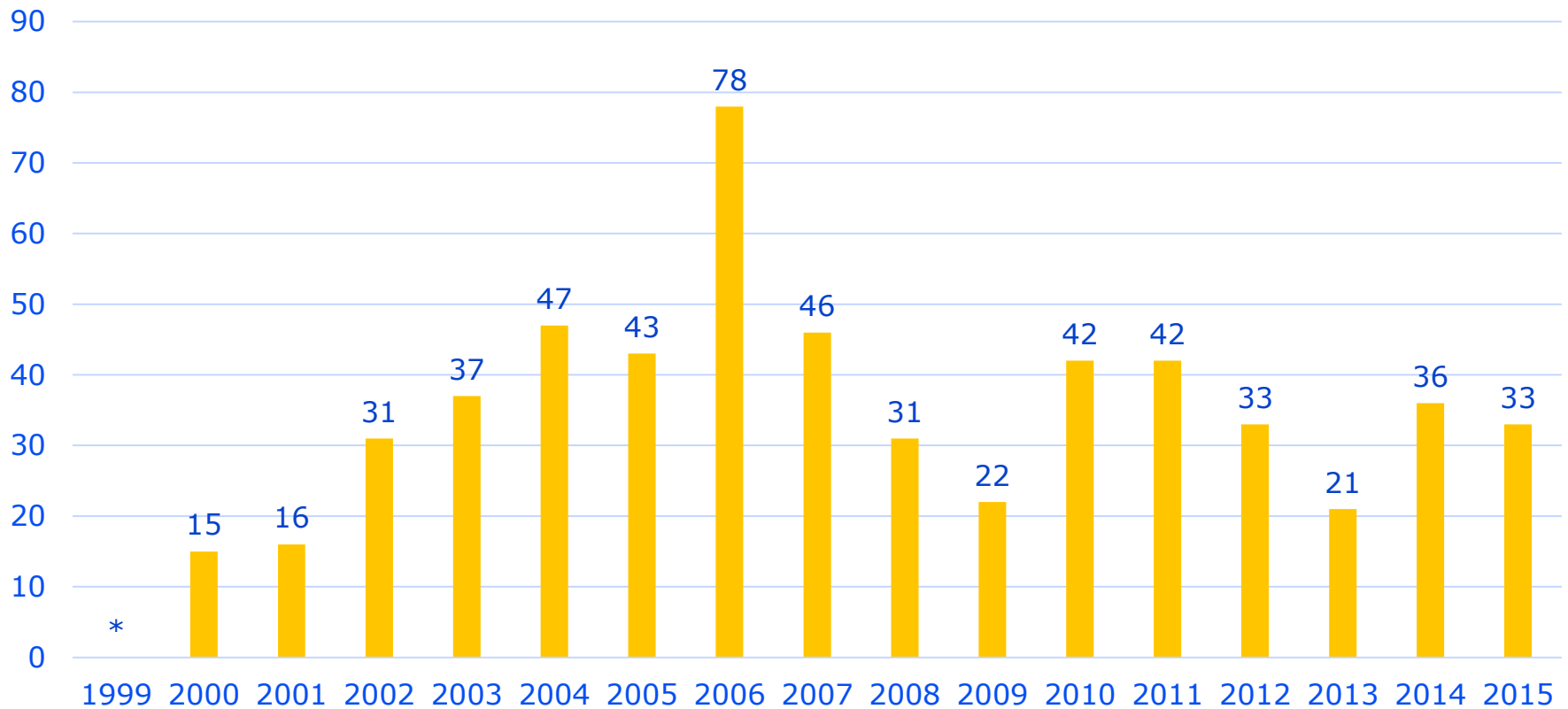
Public Health Region 5 (Beaumont):

Accidental Overdose Deaths involving Opioids in Region 5 by Year, 1999-2015

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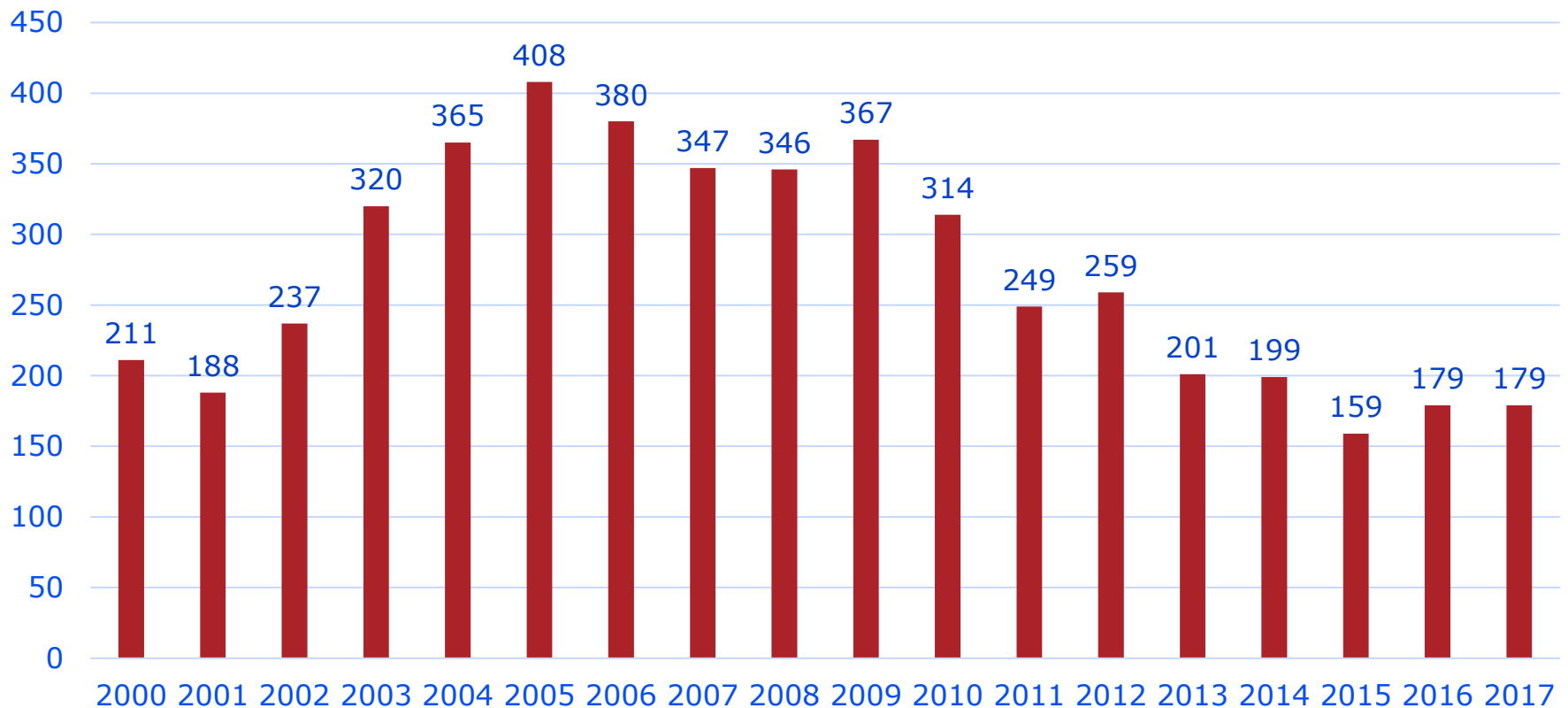^ Value suppressed to prevent back calculation of suppressed small count

Public Health Region 5 (Beaumont):

Opioid-Related Calls to the Texas Poison Center Network in Region 5 by Year, 2000-2017

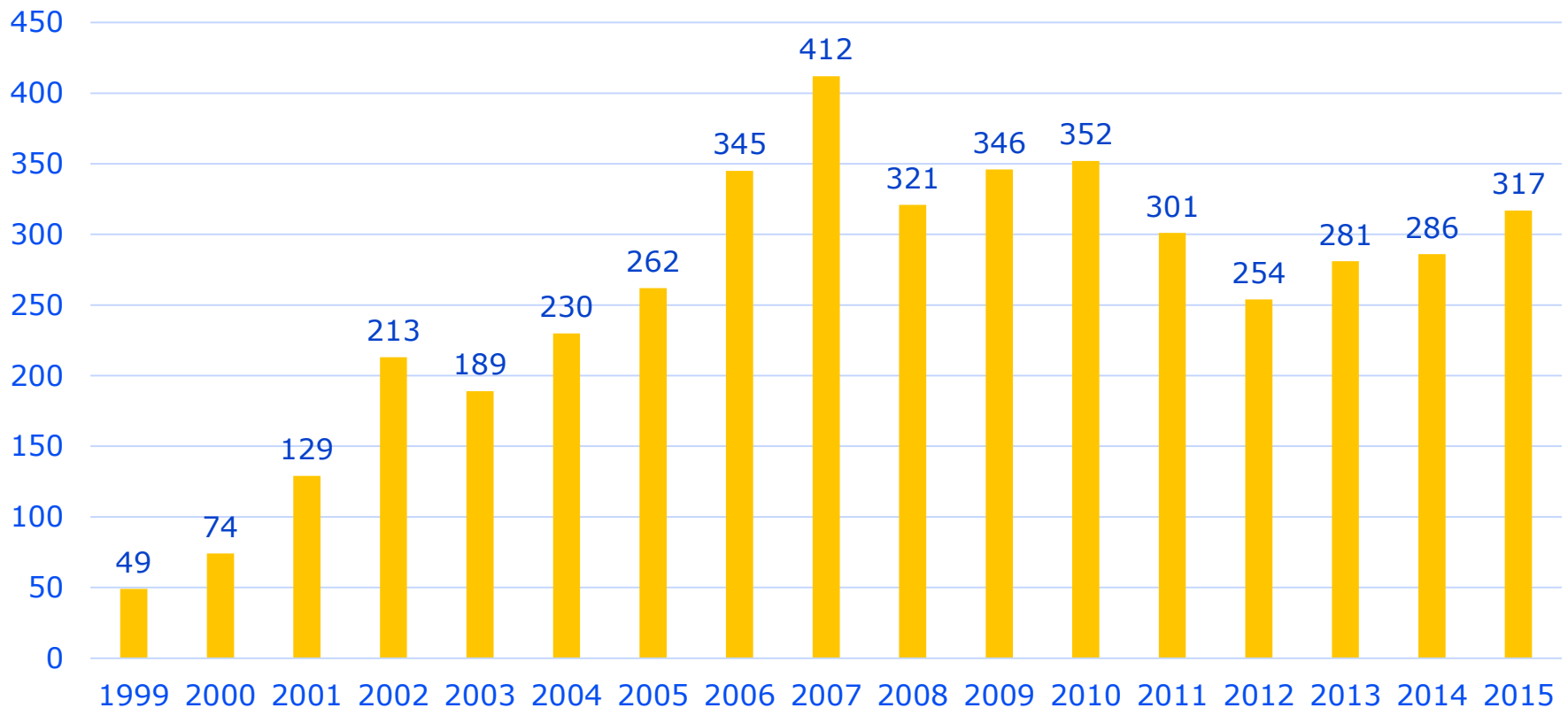* Counts of 1-4 are suppressed to prevent the identification of individuals in confidential data.

Public Health Region 6 (Houston):

Accidental Overdose Deaths involving Opioids in Region 6 by Year, 1999-2015

Year	Deaths
1999	49
2000	74
2001	129
2002	213
2003	189
2004	230
2005	262
2006	345
2007	412
2008	321
2009	346
2010	352
2011	301
2012	254
2013	281
2014	286
2015	317

* Counts of 1-9 are suppressed to prevent the identification of individuals in confidential data.
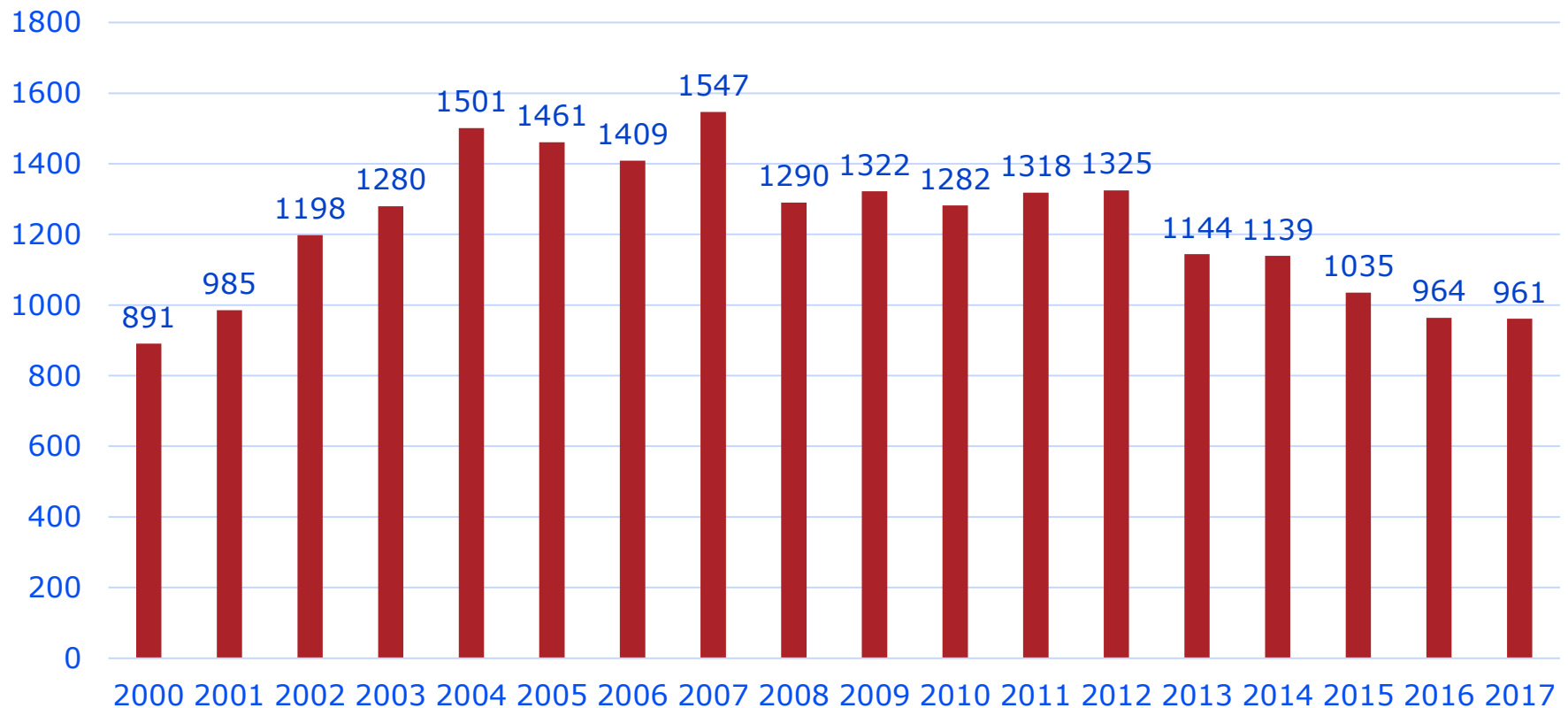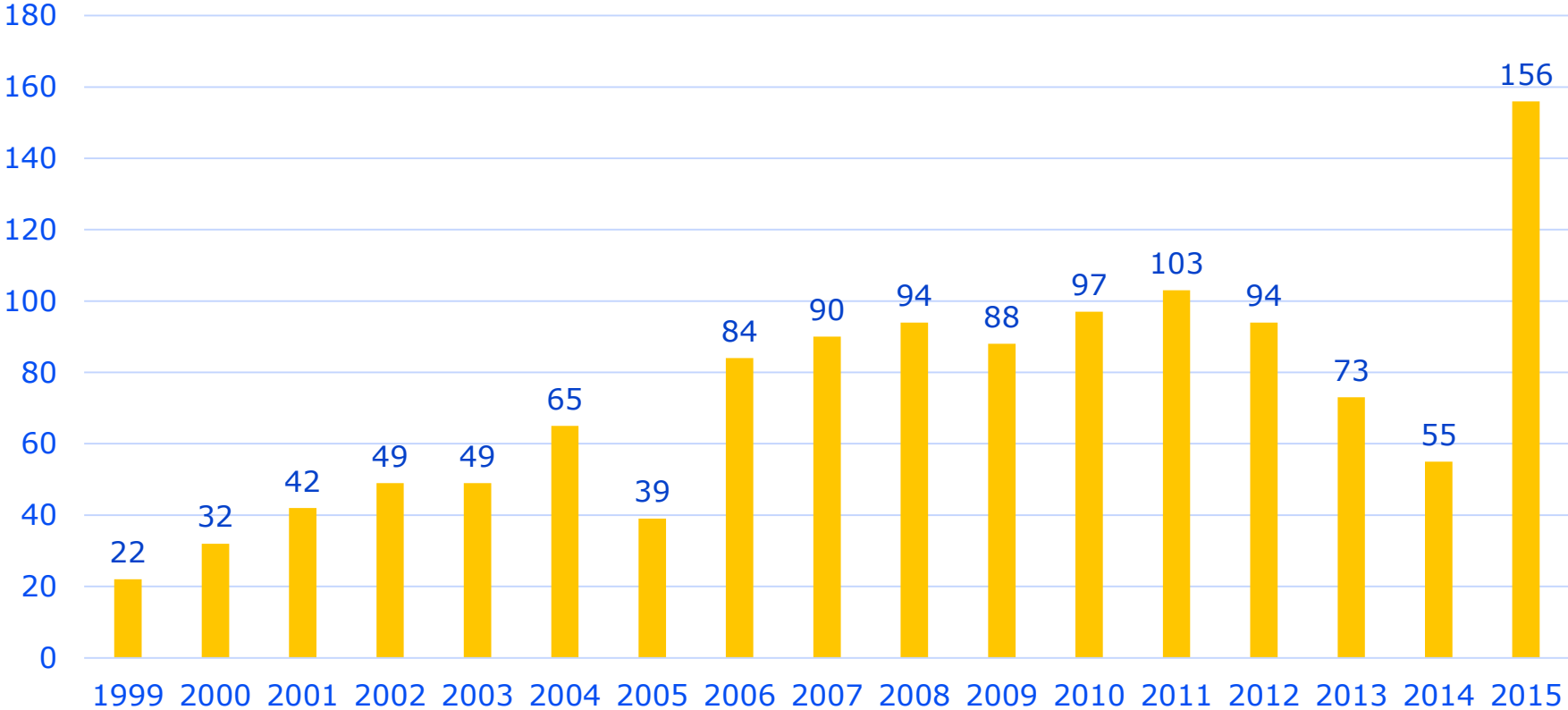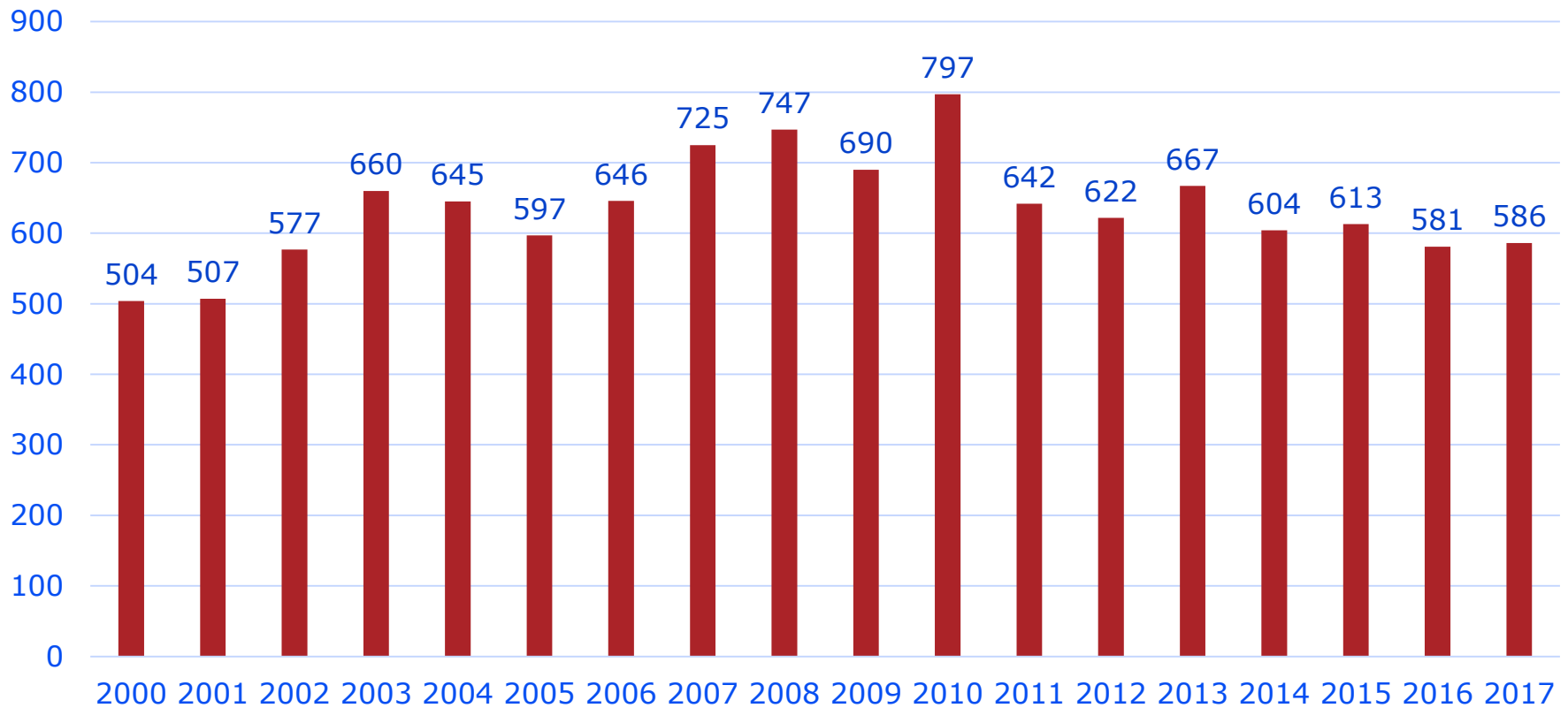^ Value suppressed to prevent back calculation of suppressed small count

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Public Health Region 6 (Houston):

Opioid-Related Calls to the Texas Poison Center Network in Region 6 by Year, 2000-2017

Year	Calls
2000	891
2001	985
2002	1198
2003	1280
2004	1501
2005	1461
2006	1409
2007	1547
2008	1290
2009	1322
2010	1282
2011	1318
2012	1325
2013	1144
2014	1139
2015	1035
2016	964
2017	961

* Counts of 1-4 are suppressed to prevent the identification of individuals in confidential data.

Public Health Region 7 (Austin):

Accidental Overdose Deaths involving Opioids in Region 7 by Year, 1999-2015

* Counts of 1-9 are suppressed to prevent the identification of individuals in confidential data.
^ Value suppressed to prevent back calculation of suppressed small count

Public Health Region 7 (Austin):

Opioid-Related Calls to the Texas Poison Center Network
in Region 7 by Year, 2000-2017

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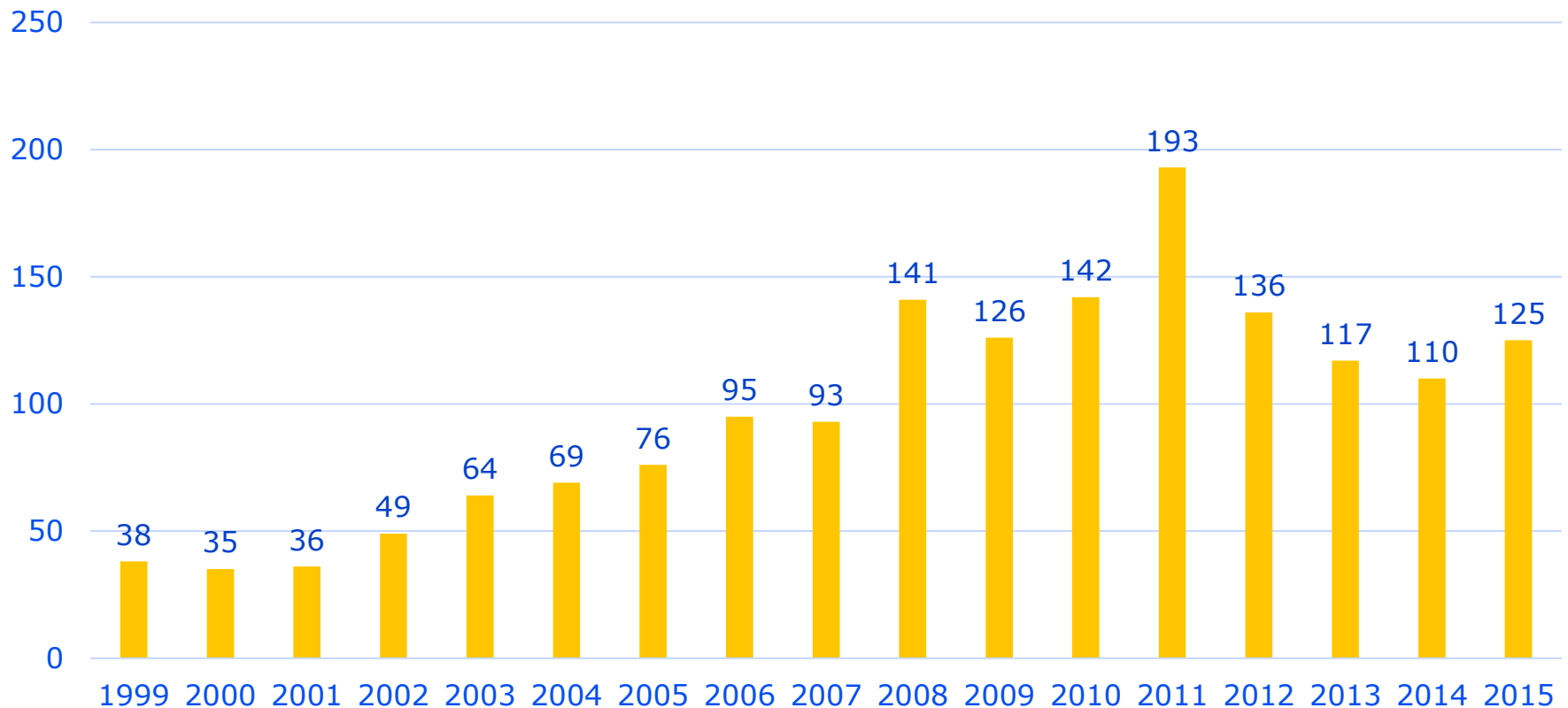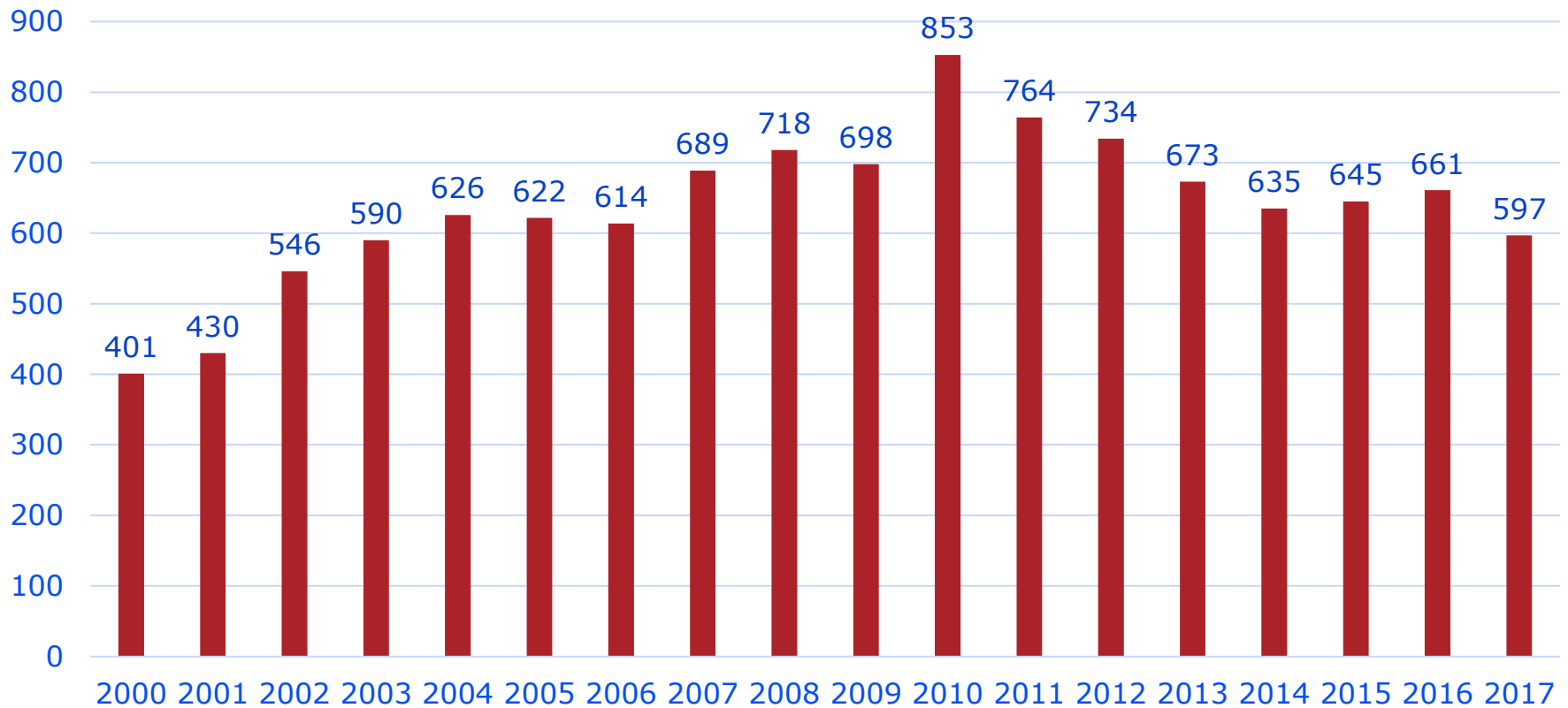
Public Health Region 8 (San Antonio):

Accidental Overdose Deaths involving Opioids in Region 8 by Year, 1999-2015

Bar chart of accidental overdose deaths involving opioids by year:

Year	Deaths
1999	38
2000	35
2001	36
2002	49
2003	64
2004	69
2005	76
2006	95
2007	93
2008	141
2009	126
2010	142
2011	193
2012	136
2013	117
2014	110
2015	125

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Public Health Region 8 (San Antonio):

Opioid-Related Calls to the Texas Poison Center Network in Region 8 by Year, 2000-2017
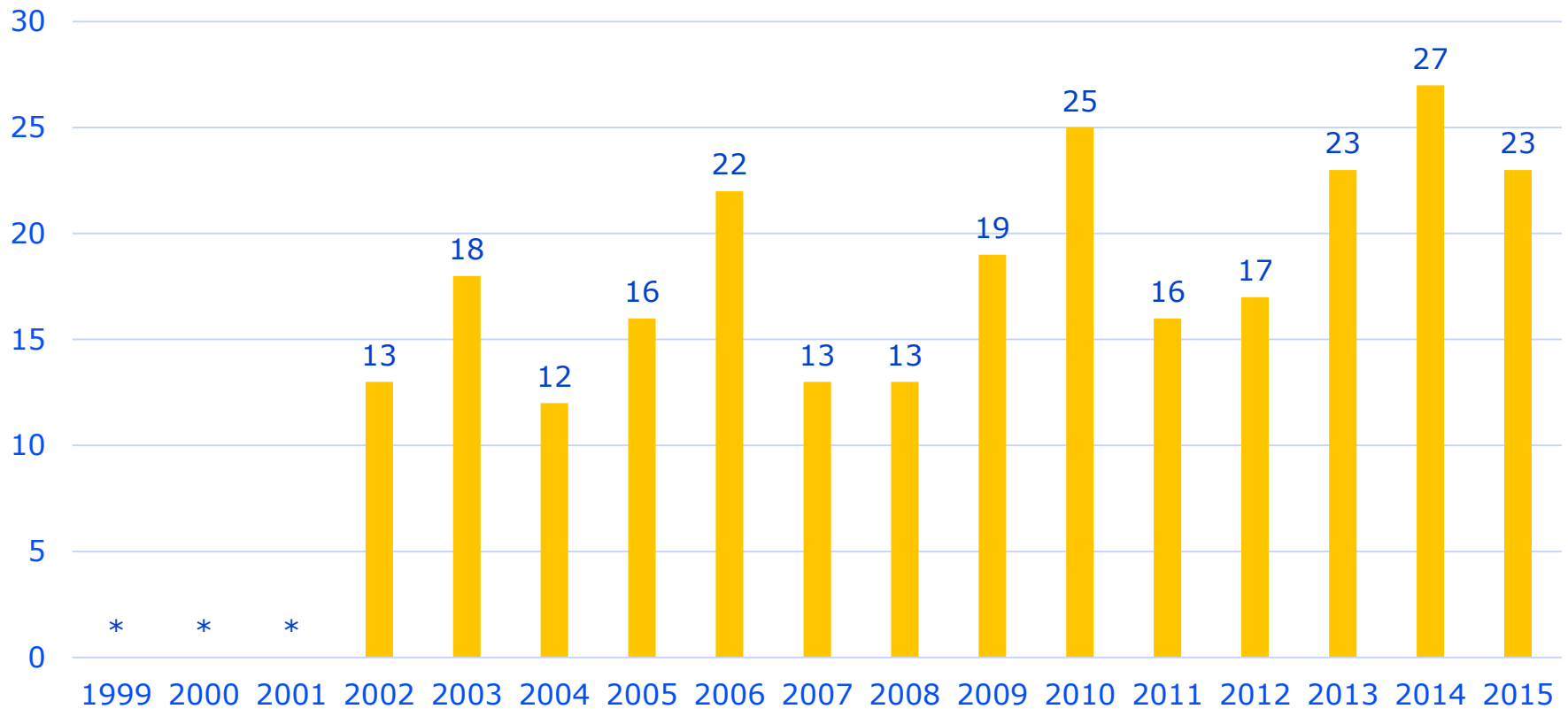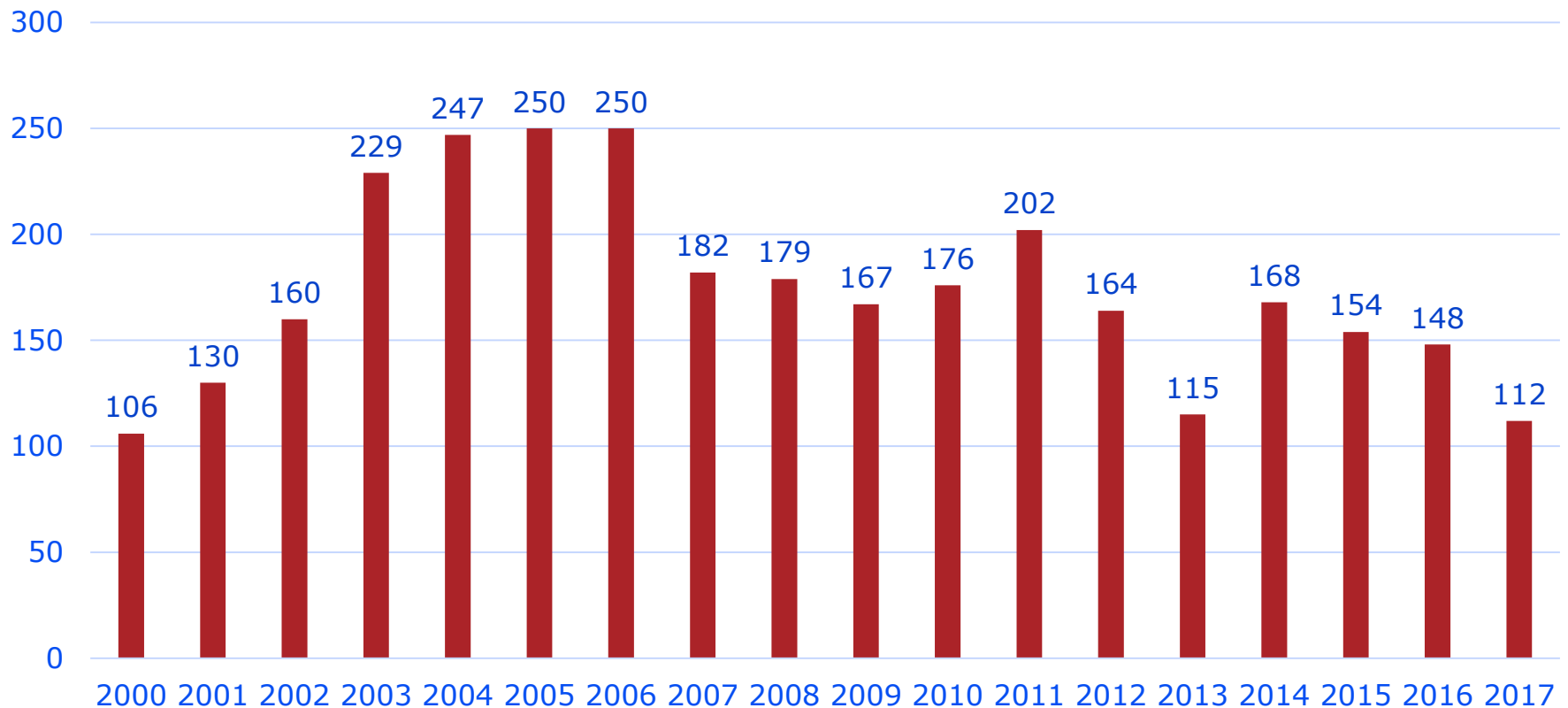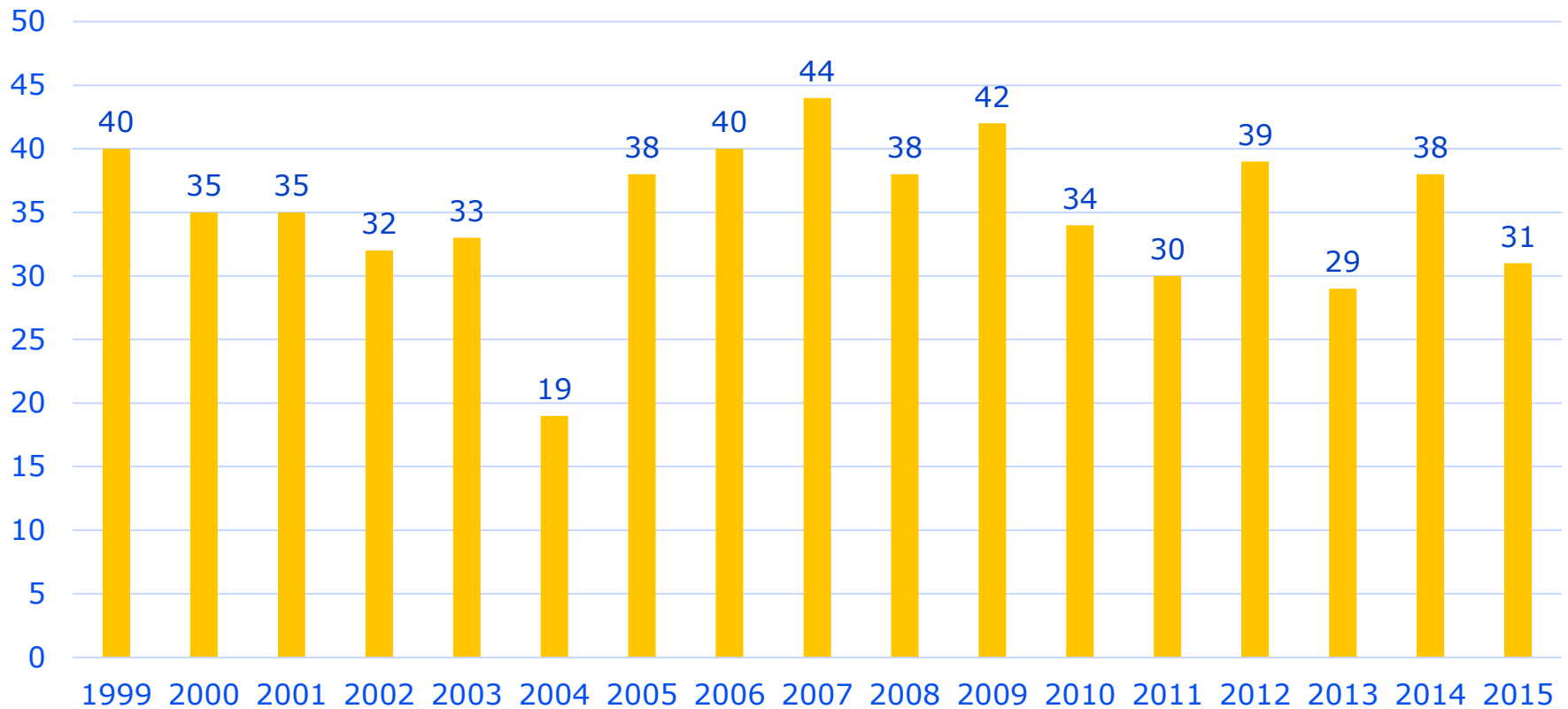

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Public Health Region 9 (Midland):

Accidental Overdose Deaths involving Opioids in Region 9 by Year, 1999-2015

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Public Health Region 9 (Midland):

Opioid-Related Calls to the Texas Poison Center Network in Region 9 by Year, 2000-2017

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Public Health Region 10 (El Paso):

Accidental Overdose Deaths involving Opioids in Region 10 by Year, 1999-2015

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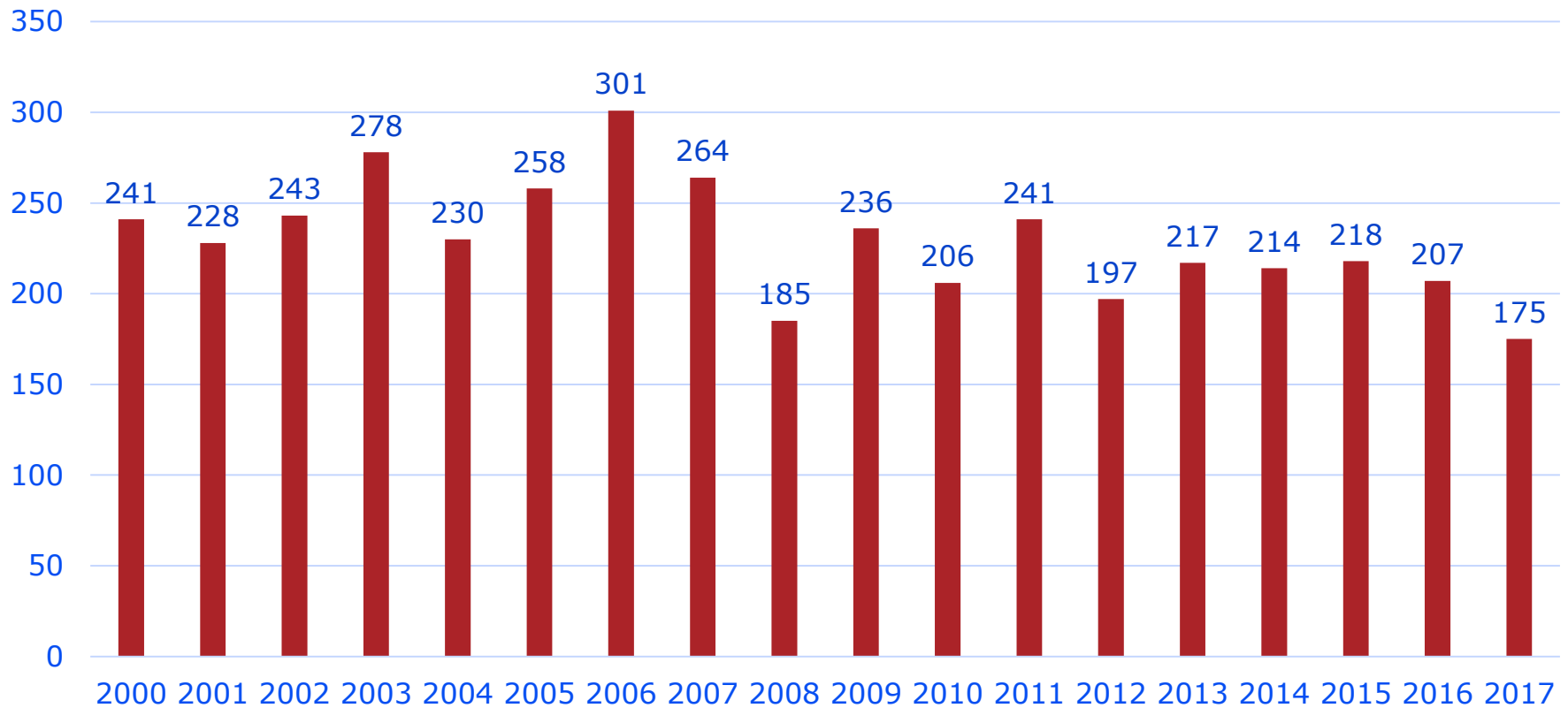^ Value suppressed to prevent back calculation of suppressed small count

Public Health Region 10 (El Paso):

Opioid-Related Calls to the Texas Poison Center Network in Region 10 by Year, 2000-2017

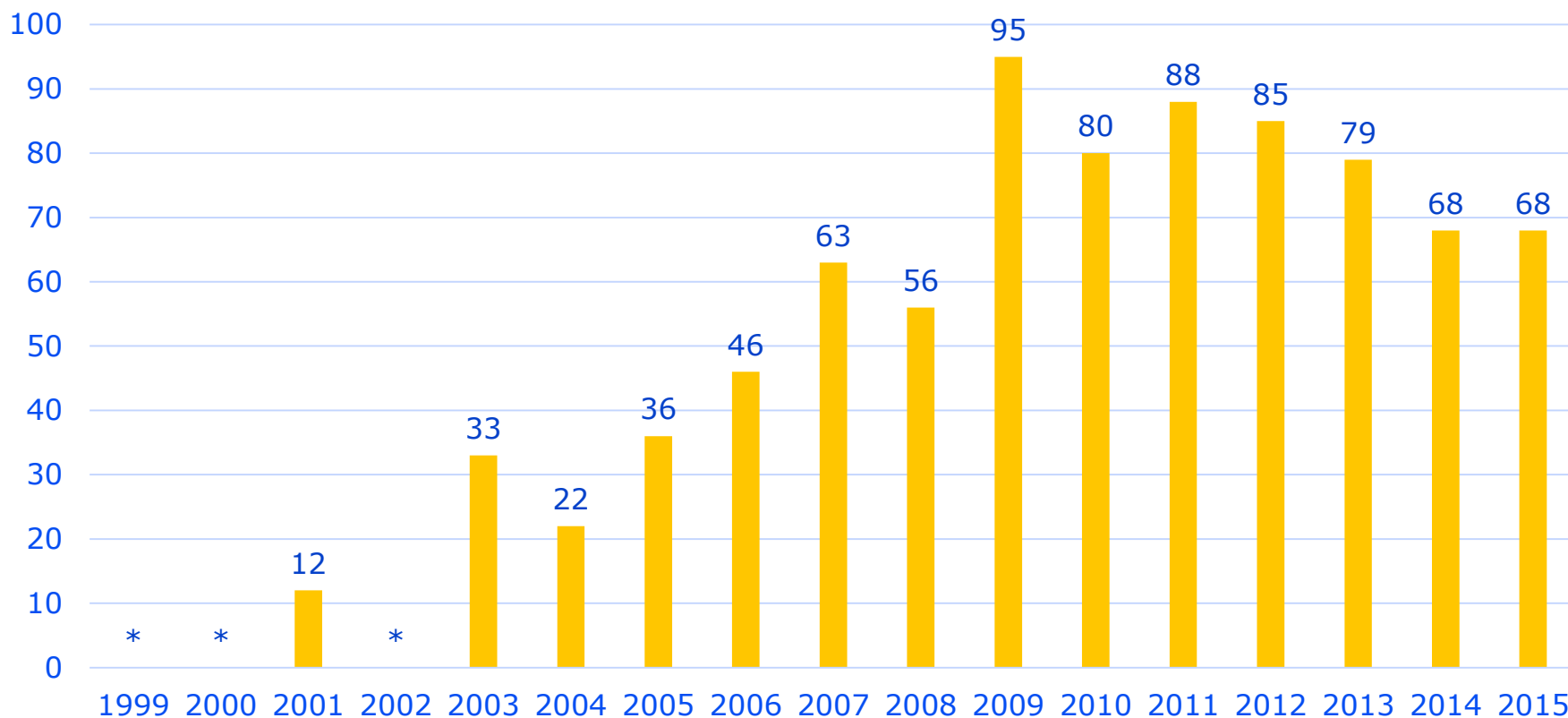* Counts of 1-4 are suppressed to prevent the identification of individuals in confidential data.

Public Health Region 11 (Lower Rio Grande Valley):

Accidental Overdose Deaths involving Opioids in Region 11 by Year, 1999-2015

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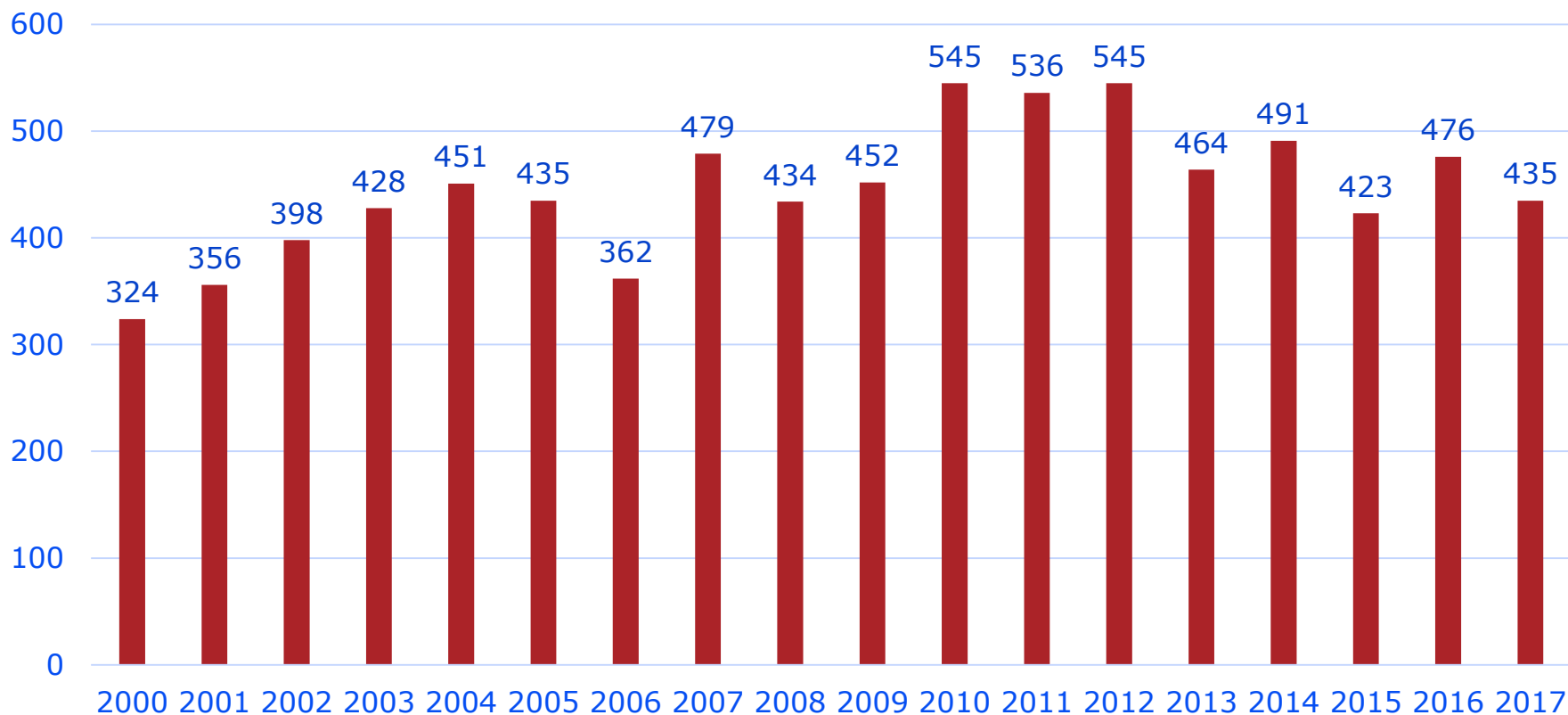^ Value suppressed to prevent back calculation of suppressed small count

Public Health Region 11 (Lower Rio Grande Valley):

Opioid-Related Calls to the Texas Poison Center Network in Region 11 by Year, 2000-2017

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