Public Health: Responding to the Opioid Epidemic

Colleen M. Bridger, MPH, PhD
Director
Pathways to Hope Conference
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A Very Special Thank You

• Dr. Allison Doyle Brackley, UT Health Science Center
  • Dr. Bryan Alsip, University Health System
  • Dr. Lisa Cleveland, UT Health Science Center

For use of research and slides!
Pain in America

#1 reason people seek medical attention

Chronic pain affects more Americans than diabetes, coronary heart disease, stroke and cancer combined

Costs our society $635 billion annually

Institute of Medicine (U.S.) Committee on Advancing Pain Research Care and Education, 2011
Pain Management

Mild Pain
• Over the counter
  – Acetaminophen, Non-steroidal anti-inflammatory drugs (NSAIDs), Topical
• Prescription
  – Muscle relaxants, Anti-anxiety, Antidepressants, NSAIDs

Severe Pain
• Steroidal injection
• Opioid analgesics
  – Morphine, Fentanyl, Percocet, Codeine, Vicodin
The Opioid Epidemic

• Since 1999, the number of overdose deaths involving opioids quadrupled
• Opioids killed more Americans in 2016 than car crashes in 1972 or HIV in 1995—the peak years of each respective epidemic
• Single greatest cause of unintentional death

91 Americans die every day from an opioid overdose.
How Has the Epidemic Changed over Time?

**Distribution of drug deaths by age**

- First wave of drug overdose deaths, primarily from prescription opioids

1200 deaths per year
How Has the Epidemic Changed over Time?
How Has the Epidemic Changed over Time?

Distribution of drug deaths by age

1200 deaths per year

Second wave, primarily heroin and fentanyl

2015

1000

800

600

400

200

10 20 30 40 50 60 70 80 90
Estimated Age-adjusted Overdose Death Rates by County

Opioid Overdose Deaths in the US 2000-2015

Overdose Deaths Involving Opioids, United States, 2000-2015

Commonly Prescribed Opioids (Natural & Semi-Synthetic Opioids and Methadone)
Heroin
Other Synthetic Opioids (e.g., fentanyl, tramadol)

Any Opioid

Prescription Opioid Overdose Data

In 2015, **more than 15,000** Americans died from prescription opioid overdose.

**Highest rates:**
- 25-54 yrs
- Men more likely to die from overdose
- Non-Hispanic whites, American Indian, Alaskan Natives

**Most Commonly Overdosed Opioids:**
- Hydrocodone (Vicodin®)
- Oxycodone (OxyContin®)

Centers for Disease Control and Prevention, National Center for Health Statistics. Multiple Cause of Death 1999-2014 on CDC WONDER Online Database, released 2015. Wide-ranging online data for epidemiologic research (WONDER). Atlanta, GA: CDC, National Center for Health Statistics; 2016 Ossenfort EM. Am J Epidemiol
Heroin use on the rise...

Heroin use has more than doubled in young adults in the past decade.

↑ Heroin Use
• Men and women
• Most age groups
• All income levels

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### Heroin Use Has INCREASED Among Most Demographic Groups

<table>
<thead>
<tr>
<th>Category</th>
<th>2002-2004*</th>
<th>2011-2013*</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SEX</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>2.4</td>
<td>3.6</td>
<td>50%</td>
</tr>
<tr>
<td>Female</td>
<td>0.8</td>
<td>1.6</td>
<td>100%</td>
</tr>
<tr>
<td><strong>AGE, YEARS</strong></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>12-17</td>
<td>1.8</td>
<td>1.6</td>
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<td>3.5</td>
<td>7.3</td>
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<tr>
<td>Other</td>
<td>2</td>
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National Survey on Drug Use and Health (NSDUH), 2002-2013.
Heroin & Concurrent Drug Abuse

9 out of 10 people who use heroin also use at least 1 other drug.

Nearly all people who used heroin also used at least 1 other drug.

Most used at least 3 other drugs.

Heroin is a highly addictive opioid drug with a high risk of overdose and death for users.
Rx Opioids can be gateway drugs to heroin use.

Among new heroin users, approximately 75% report abusing prescription opioids prior to using heroin.

45% of people who use heroin are also addicted to prescription painkillers.

**People who are addicted to...**

- Alcohol: 2x
- Marijuana: 3x
- Cocaine: 15x
- Rx Opioid Painkillers: 40x

...more likely to be addicted to heroin.

Although not “ground zero” of the epidemic, **Texas is not immune.**

Texas is in the **top 5 states for total number of opioid related deaths.**

*Texas has the 2nd highest opioid abuse related health care costs totaling over $1.9 Billion*

Texas ranks in the **bottom 5 states nationally for mental health agency expenditures per capita...** for the last 10 years.

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Opioid-related overdose deaths in San Antonio are higher than the national average.

Opioid-related overdose deaths are on the rise in Bexar County.

Big Cities Health Inventory Data Platform at bchi.bigcities.health.org, Opioid-related Unintentional Drug Overdose Mortality Rate for 2014.
Marquez RJ & Loyd R. How opioid use has impacted overdose in Bexar County in 2014Q5, Heroin overdose deaths increase from 2014 to 2015. KSAT. 2016
In **Bexar County** opioid-related overdose deaths *due to heroin are on the rise.*

**2014**
- More than 1/3 of all overdose deaths were *opioid related.* (34%)
  - 18% Prescription vs. 16% Heroin

**2015**
- Almost 1/2 of all overdose deaths were *opioid related.* (47%)
  - 11% Prescription vs. 21% Heroin

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Marquez & Loyd R. How opioid use has impacted overdose in Bexar County in 2014Q5, Heroin overdose deaths increase from 2014 to 2015. KSAT. 2016
Prescription opioids can be a gateway to heroin use.

**Texas heroin use is 2-4x national rate in teens.**

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### 2016 Texas School Survey: Perceived Danger

<table>
<thead>
<tr>
<th>Drug</th>
<th>Grades 7O12: Very or Somewhat Dangerous</th>
<th>Grade 7: Very or Somewhat Dangerous</th>
<th>Grade 12: Very or Somewhat Dangerous</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any Alcohol Product</td>
<td>82.4%</td>
<td>87.5%</td>
<td>79.3%</td>
</tr>
<tr>
<td>Any Tobacco Product</td>
<td>85.2%</td>
<td>92.3%</td>
<td>78.9%</td>
</tr>
<tr>
<td>Marijuana</td>
<td>71.6%</td>
<td>89.2%</td>
<td>53.8%</td>
</tr>
<tr>
<td>Any Prescription Drug Not Prescribed to Them</td>
<td>88.2%</td>
<td>89.6%</td>
<td>53.8%</td>
</tr>
<tr>
<td>Synthetic Marijuana</td>
<td>89.4%</td>
<td>91.3%</td>
<td>89.7%</td>
</tr>
<tr>
<td>Cocaine</td>
<td>94.2%</td>
<td>95.2%</td>
<td>94.3%</td>
</tr>
<tr>
<td>Ecstasy</td>
<td>89.7%</td>
<td>90.6%</td>
<td>90.0%</td>
</tr>
<tr>
<td>Steroids</td>
<td>89.1%</td>
<td>90.6%</td>
<td>89.0%</td>
</tr>
<tr>
<td>Methamphetamine</td>
<td>93.2%</td>
<td>92.4%</td>
<td></td>
</tr>
<tr>
<td>Crack</td>
<td>94.4%</td>
<td>95.0%</td>
<td>95.2%</td>
</tr>
<tr>
<td>Heroin</td>
<td>93.4%</td>
<td>92.4%</td>
<td>95.2%</td>
</tr>
</tbody>
</table>

Neonatal Abstinence Syndrome (NAS)

Newborns dependent on opioids with neurological, gastrointestinal, and autonomic withdrawal symptoms.

- 60 – 94% of babies exposed to opioids in the womb develop NAS
- 300% increase in NAS since 2000
- Texas 60% increase in last 5 years
- 1/3 of Texas newborns suffering from opioid withdrawal are in Bexar County
Number of Medicaid Newborns diagnosed with NAS in Texas 2011-2015

*87% increase from 2009 - 2015*
## Counties Ranked by NAS Percentage, 2011-2015

<table>
<thead>
<tr>
<th></th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bexar</td>
<td>32%</td>
<td>33%</td>
<td>30%</td>
<td>26%</td>
<td>29%</td>
</tr>
<tr>
<td>Dallas</td>
<td>9%</td>
<td>12%</td>
<td>14%</td>
<td>14%</td>
<td>13%</td>
</tr>
<tr>
<td>Tarrant</td>
<td>9%</td>
<td>10%</td>
<td>10%</td>
<td>9%</td>
<td>10%</td>
</tr>
<tr>
<td>Harris</td>
<td>12%</td>
<td>13%</td>
<td>9%</td>
<td>7%</td>
<td>6%</td>
</tr>
<tr>
<td>Nueces</td>
<td>5%</td>
<td>4%</td>
<td>5%</td>
<td>7%</td>
<td>5%</td>
</tr>
</tbody>
</table>

*Medicaid covered births
~300-400 babies born with NAS in Bexar County per year;
~1/3 of cases in TX
## Locations of Highest Neonatal Abstinence Syndrome Incidence, Texas Hospital Discharge Data, 2016

<table>
<thead>
<tr>
<th>Rank</th>
<th>County</th>
<th>% of Cases</th>
<th>Mean Charge</th>
<th>Mean Days Stayed</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Bexar</td>
<td>23.1</td>
<td>$146,066.11</td>
<td>27.5</td>
</tr>
<tr>
<td>2</td>
<td>Dallas</td>
<td>11.3</td>
<td>$154,166.67</td>
<td>28.8</td>
</tr>
<tr>
<td>3</td>
<td>Harris</td>
<td>7.5</td>
<td>$178,352.48</td>
<td>26.7</td>
</tr>
<tr>
<td>4</td>
<td>Tarrant</td>
<td>7.2</td>
<td>$95,453.91</td>
<td>21.1</td>
</tr>
<tr>
<td>5</td>
<td>Travis</td>
<td>3.5</td>
<td>$260,359.08</td>
<td>30.5</td>
</tr>
<tr>
<td></td>
<td>Texas</td>
<td>100</td>
<td>$146,492.72</td>
<td>24.2</td>
</tr>
</tbody>
</table>

Neonatal Abstinence Syndrome Hospital Discharges per 1,000 Live Births in the State of Texas and Bexar County, 2011-2015

Hospital Discharges per 1,000 Live Births

Year | Texas Rate/1,000 Live Births | Bexar County Rate/1,000 Live Births
--- | --- | ---
2011 | 10.7 | 2.1
2012 | 10.4 | 2.2
2013 | 10.2 | 2.4
2014 | 10.9 | 2.8
2015 | 10.6 | 2.7

Neonatal Abstinence Syndrome Hospital Discharges per 1,000 Live Births by Race/Ethnicity for Bexar County, 2011-2015

**Discharges per 1,000 Live Births by Race/Ethnicity**

- **White**
  - 2011: 7.7
  - 2012: 7.7
  - 2013: 8.0
  - 2014: 12.1
  - 2015: 12.1

- **Black**
  - 2011: 5.2
  - 2012: *
  - 2013: 5.7
  - 2014: 4.5
  - 2015: 3.9

- **Hispanic**
  - 2011: 12.7
  - 2012: 12.6
  - 2013: 12.1
  - 2014: 11.2
  - 2015: 11.9

**Source**
- NAS case source: Texas Hospital Inpatient Discharge Public Use Data File, 2011-2015. Texas Department of State Health Services, Center for Health Statistics, Austin, Texas.

*unstable rate
Addressing the Epidemic Requires Synergy

- Increase Naloxone use
- Prescription drug monitoring
- Community Education
- Provider Education
- Treatment
Naloxone – an opioid antidote

Evidence-based strategy = Increase use of Naloxone
Prescription Drug Monitoring Program

Evidence-based strategy = Increase % of medical providers entering prescriptions in the PDMP
Community Education

Evidence-based strategy = Increase community education on safe storage and disposal

MEDDROPSA
Your safe and easy way to dispose of unwanted medicines.

DON'T
Throw in the trash
Helps keep medications out of landfills and out of the environment.

DON'T
Flush down the toilet
Helps keep medications out of our water treatment plants and waterways.

DO
Bring to MedDropSA
A free, safe alternative to dispose of unwanted or expired medications.
Provider Education

Evidence-based strategy = Increase provider training on prescribing/dispensing of opioids
Treatment and Recovery

Evidence-based strategy = Increase knowledge of and access to treatment services including Medication Assisted Therapies

Methadone
Buprenorphine
Naltrexone
Syringe Services Programs

Supply sterile syringes and help with disposal of used syringes
Joint Opioid Taskforce

- Judge Nelson Wolff and Mayor Ron Nirenberg, convened the Joint Opioid Overdose Prevention Task Force in June 2017

- Goal to address the increase in opioid overdose deaths in Bexar County and San Antonio

- The Task Force held its first meeting August 8, 2017 and will present its final report in September
Taskforce Workgroups

- Naloxone - expand the availability and use of naloxone
- Provider Education - improve training for providers on evidence-based opioid prescribing and the Prescription Monitoring Program (PMP)
- Community Education - educate community on safe disposal of prescribed opioids and risks of heroin and other opioids
- Treatment - improve access/navigation of treatment services for addiction
Naloxone – Update

• Secured two grants to expand access to naloxone
• Monitoring the use of naloxone in the community and mapping EMS utilization by zip code
• Purchased $1 million of naloxone for distribution

Goals by September, 2018

• Naloxone trainings for law enforcement and community
• Deployment of reversal tracking database to evaluate naloxone distribution program
Provider Education – Update

- Opioid trainings curriculum map for medical students
- San Antonio Substance Use Symposium
- Launch of the “Get Waivered SA” website
- Discussions with HASA to link to the PMP

*Goals by September, 2018*

- Provider education about the required use of the TX PMP in 2019
- Increase the number of MAT waivered prescribers
Community Education – Update

• Map of permanent drug drop off locations
• Distribution of Deterra®
• SACADA Youth prevention toolkit and videos developed for use by ISDs

Goals by September, 2018

• Treatment map for the community
• Work with naloxone group on community trainings
• Share toolkit and videos in community settings for wider use
Treatment – Update

• Identified existing treatment providers
• Explored treatment options and selected a federal framework to determine which treatment options will be mapped

Goals by September, 2018

• Work with Community Education Workgroup to develop treatment map for the community
• Work with Task Force to prepare “shovel-ready” grant ideas for rapid submission
Additional Interest Groups

• Neonatal Abstinence Syndrome (NAS)
  – Exploring treatment and recovery options

• Syringe Services Programs
  – Hosted a Syringe Services Summit in May
  – Hosted a “how to” training in July
  – Plan launch of map of Syringe Services Programs in October
Thank you. Any Questions?

CITY OF SAN ANTONIO
METROPOLITAN HEALTH DISTRICT

Colleen M. Bridger, MPH, PhD
Director