Georgia’s Opioid Crisis

Georgia Municipal Association Opioid Workshop

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Opioids and Opioid Use Disorders
What Are Opioids?

Any of various compounds that bind to specific receptors in the central nervous system and have analgesic and narcotic effects, including:

- **naturally** occurring substances such as morphine
- **synthetic** and **semisynthetic** drugs such as methadone and oxycodone
- certain peptides produced by the body such as **endorphins**

Definition from thefreedictionary.com

Also Tramadol and other partial opioids
Opioid Prescription

**Uses**
- Post-surgical
- Chronic (e.g. back pain, osteoarthritis)
- Acute severe
- Cancer
- End of life, hospice
- Dental surgery
- Accidents, sports injuries
- Cough
- Opioid Medication Assisted Treatment (MAT)

**Prescribers**
- Doctors
- Dentists
- Physician Assistants, Nurse Practitioners
- Veterinarians

**Where Obtained**
- Medical, dental offices
- Pain clinics
- Hospitals, emergency rooms
- Pharmacies
- MAT clinics
Non-Prescription Opioids

Heroin
An opioid drug made from morphine, a natural substance extracted from the seed pod of the Asian opium poppy plant.

Synthetics
- U-47700
- Fentanyl analogues
- “Grey Death”

The GBI issued a press release on June 27, 2017, stating its crime labs have identified two new fentanyl analogues, acrylfentanyl and tetrahydrofuran fentanyl, warning that both can be absorbed through the skin and are considered highly dangerous.
Neurochemical Pathway to Addiction

- Opiates bind to opioid receptors in the reward and pain pathways in the brain (limbic system and brainstem) and spinal cord
- Dopamine released
- Tolerance
- Dependence with repeated use
- Addiction
Opioid Overdose (Poisoning)

- When overload of opioids (or opioids and other sedatives – e.g., Xanax) introduced into the body shuts down respiration control in the brain stem
- When opioid amount is too much
- When opioids and other sedatives together is too much
- When tolerance is lowered
Background and History
### Opioid History

LONG history of use to treat pain, cough

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>5500-3400 BC</td>
<td>Opium poppy cultivated by Sumerians</td>
</tr>
<tr>
<td>1803</td>
<td>Morphine discovered (10X as potent as opium)</td>
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<tr>
<td>1827</td>
<td>Merck began commercial morphine manufacture</td>
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<tr>
<td>Civil War</td>
<td>Morphine used to treat civil war soldiers - addiction</td>
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<tr>
<td>1874</td>
<td>Heroin first synthesized from morphine (2X as potent as morphine) by British Chemist Charles Romley Wright</td>
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<tr>
<td>1895</td>
<td>Bayer chemist Felix Hoffmann also synthesizes heroin from morphine, Bayer markets as Heroin in 1898</td>
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<tr>
<td>1905</td>
<td>US bans opium</td>
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<tr>
<td>1914</td>
<td>Harrison Narcotic Tax Act</td>
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<tr>
<td>1917-1960</td>
<td>Synthetics and semi-synthetics developed</td>
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<tr>
<td>1923</td>
<td>US Treasury bans all legal narcotic sales</td>
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<tr>
<td>1925</td>
<td>Black market for heroin begins to thrive</td>
</tr>
<tr>
<td>Post WWII</td>
<td>(Late 1940s-early 1950s) heroin epidemic</td>
</tr>
<tr>
<td>1965-1979</td>
<td>Vietnam war and post-war heroin epidemic</td>
</tr>
<tr>
<td>1973</td>
<td>DEA established</td>
</tr>
<tr>
<td>1978</td>
<td>Buprenorphine available in UK; 2002 approved in US</td>
</tr>
<tr>
<td>Early 1980s</td>
<td>Xalisco migrants set up heroin trafficking in CA</td>
</tr>
</tbody>
</table>
Current Opioid Epidemic History

- **1980, 1986**: Studies published suggesting opioids not addictive for some uses.
- **1980s**: Drug company aggressive marketing of pain medication to physicians, funding to pain-related non-profits (American Pain Society, American Academy of Pain Management).
- **Early 1990’s**: Restrictions on direct marketing to physicians by drug companies.
- **1996**: Purdue Pharma – OxyContin introduced, aggressively marketed.
- **2001**: Joint Commission on Accreditation of Healthcare Organizations (JCAHO) introduces pain scale, Purdue Pharma funds JCAHO’s pain management education.
- **2002**: CMS asks AHRQ to develop Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS); includes pain management satisfaction items.
- **2007**: Purdue Pharma admits false claims of OxyContin’s lower addictive properties due to time release formulation.
- **2008**: First public reporting of HCAHPS, including assessments of patient satisfaction with pain management.
- **2010**: OxyContin reformulated; more difficult to inject, snort (not crushable).
- **2016**: CDC releases *Guideline for Prescribing Opioids for Chronic Pain*.
- **2016**: American Hospital Association requests from CMS to delink pain management items from payment through value-based purchasing program.
Why Do We Have an Opioid Epidemic in the U.S. Today?

**Marketing Opioids and Pain Control**
- Pharmaceutical Companies
  - Purdue Pharma
  - OxyContin
- Pain as 5th Vital Sign
  - Pain Scale
- Government Agencies
  - CMS – Provider satisfaction ratings linked to payment

**Regulating Bodies**
- Joint Commission (JCAHO)

**Concurrent Trends**
- Opioid dependence, addiction
- Changes in access to prescription opioids
- Legalization of marijuana – medical and recreational

**Market Opportunity**
- Drug Cartel shifts from marijuana to heroin
- Illicit manufacture and sale of fentanyl, and other synthetics
- Increased opium production in Afghanistan, Mexico, Columbia

Increased Marketing and Pain Control

Marketing Opioids and Pain Control

Regulating Bodies

Joint Commission (JCAHO)

Concurrent Trends

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Market Opportunity

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Opioid Overdose Trends
A Few Statistics in Brief

- **259 million** prescriptions written for pain killers in 2012 (enough for every U.S. adult)
- **125 million** Americans reported misusing prescription opioids in 2015
- **80 %** of heroin users used prescription opioids non-medically before using heroin
- 2015: **52,404** overdose deaths, **33,091** with opioids
  - 19% increase projected for 2016
- 2015: **91 opioid overdose deaths/day, ~140/day**, 2016
- **>200% increase** in prescription opioid overdose deaths since 2000
- **72.2%** death rate increase from synthetic opioids including fentanyl (2014-15), doubled from 2015-2016
- **20.6%** increase in heroin deaths rates (2014-15)
Opioid Prescribing by County

High Opioid Prescribing Counties

- Small cities or large towns
- Higher percent of white residents
- More dentists and primary care physicians
- More people who are uninsured or on Medicaid, or unemployed
- More people who have diabetes, arthritis, or disability
- Higher suicide rates
Overdose Deaths Involving Opioids, by Type of Opioid, United States, 2000-2015

- Any Opioid
- Heroin
- Natural & Semi-Synthetic Opioids
- Other Synthetic Opioids (e.g., fentanyl, tramadol)
- Methadone

Number of Drug Overdose Deaths Related to Opioids including Heroin in Georgia, 2001-2015
Number of Prescription Opioid Overdose Deaths in Georgia, 2001-2015
Estimated Rates of Drug Overdose Deaths By County, 2014

Deaths Per 100,000 population, age-adjusted

- 2.1-4.0
- 4.1-6.0
- 6.1-8.0
- 8.1-10.0
- 10.1-12.0
- 12.1-14.0
- 14.1-16.0
- 16.1-18.0
- 18.1-20.0
- >20

Atlanta Journal-Constitution; CDC data
Overdose Trends by Age, Gender, Race 1999-2014

• Highest overdoses
  – White men ages 25-34
  – White women ages 45-54
• Steep increases for all age groups for white men and women 25-64
• Black and Hispanic overdose trends
  – Highest overdoses – 45-54, Lowest 25-34
  – Slight increases for all age groups since 2010
  – Greatest increases for 55-64 year-olds

New York Times, 1/16/2016
Who Else is Affected?

- **Newborn babies**
  - Neonatal Abstinence Syndrome (NAS)
  - CPS placement
- **Children and Youth**
  - Abuse, neglect, exposure to substances, Child Protective Services placement/separation from family
  - Stressors impacting well-being (health, education, etc.)
- **Families**
- **Communities**
- **Employers**
- **Service providers**
Addressing the Opioid Epidemic in Georgia
Georgia Strengths

• Prescription Drug Monitoring Program (PDMP)
  – legislation, 2011, and subsequent revisions
• Pain Management Clinic Act, 2013
• 911 Good Samaritan Law, 2014
  – Removes criminal liability due to illegal substances for those needing/seeking help
• Opioid Agonist Access
  – Naloxone (Narcan) available without prescription from any pharmacies by standing order, December 2016
Georgia Resources and Innovations

- Program funding (SAMHSA, CDC, ONDCP, others)
  - e.g., State Targeted Response to Opioids, Data Driven Strategic Planning, Strategic Prevention Framework, Drug Free Communities, SBIRT, Law Enforcement Assisted Diversion)
- Medication Assisted Treatment (MAT) providers
- Georgia Crisis and Access Line (and card)
- First responder naloxone/Narcan access
- Drug take-back programs
Georgia Resources and Innovations

• Local programs with potential for replication and expansion, such as:
  – Neonatal abstinence syndrome treatment
  – Emergency room opioid prescribing practice change
• Prevention and recovery organizations
• Certified Peer Specialists - recovery support
• Drug courts/diversion programs
• Opioid education program and training for schools
Who is Involved in Response?

- Federal, state, local governments, agencies
- Providers/practitioners, hospitals, healthcare corporations
- Pharmacists, pharmacy corporations
- First responders
- Insurers, Medicaid
- Professional organizations
- Persons in recovery, recovery specialists, families, friends
- Prevention and harm reduction specialists
- Community organizations
- Employers, HR and EAP associations
- Law enforcement, courts, corrections
- Medical examiners
- Data managers
## What Can We Do Locally?

<table>
<thead>
<tr>
<th>Community Engagement</th>
<th>Public Awareness</th>
<th>Education</th>
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<tbody>
<tr>
<td>Engage stakeholders across community</td>
<td>Build knowledge</td>
<td>Address constituent educational needs (e.g., prevention, early intervention, treatment, overdose, recovery)</td>
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<tr>
<td>Hold community meetings</td>
<td>Reduce stigma</td>
<td>Teachers</td>
</tr>
<tr>
<td>Understand the problem, gather and use</td>
<td>Increase help-seeking</td>
<td>Students</td>
</tr>
<tr>
<td>Develop strategic plans, action agendas, working groups</td>
<td>Engage in solutions</td>
<td>Parents</td>
</tr>
<tr>
<td>Build coalitions</td>
<td></td>
<td>First Responders</td>
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<td></td>
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<td>Medical Providers</td>
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<td></td>
<td></td>
<td>Community groups</td>
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<tr>
<td></td>
<td></td>
<td>Others</td>
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</tbody>
</table>
What Can We Do Locally?

<table>
<thead>
<tr>
<th>Reduce Access</th>
<th>Reduce Misuse</th>
<th>Reduce Overdose</th>
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<tbody>
<tr>
<td>Medical</td>
<td>PDMP registration and use by prescribers and</td>
<td>Overdose awareness</td>
</tr>
<tr>
<td>• Use of CDC opioid</td>
<td>pharmacists</td>
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<tr>
<td>prescribing guidelines</td>
<td>Drug drop boxes</td>
<td>Naloxone available</td>
</tr>
<tr>
<td>• Non-opioid pain management</td>
<td>Drug take back programs</td>
<td>• Pharmacies</td>
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<tr>
<td>• Coordination with</td>
<td>Medication lock boxes</td>
<td>• First responders</td>
</tr>
<tr>
<td>behavioral health</td>
<td></td>
<td>• Medical settings</td>
</tr>
<tr>
<td>• Pain clinic regulation</td>
<td></td>
<td>• Schools</td>
</tr>
<tr>
<td>• Emergency rooms</td>
<td></td>
<td>• Public places</td>
</tr>
<tr>
<td>Law Enforcement</td>
<td></td>
<td>• In first aid kits</td>
</tr>
<tr>
<td>• Pill mills</td>
<td></td>
<td>• With opioid prescriptions</td>
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<tr>
<td>• Trafficking</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Overdose as crime scene</td>
<td></td>
<td>Protection &amp; safe handling</td>
</tr>
<tr>
<td></td>
<td></td>
<td>– potential contact with illicit synthetic opioids</td>
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</tbody>
</table>
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<tr>
<th>Safe Detoxification</th>
<th>Treatment</th>
<th>Relapse Prevention and Recovery Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Availability</td>
<td>Availability, Access &amp; Quality</td>
<td>Continuing care and support</td>
</tr>
<tr>
<td>Medical Providers</td>
<td>Developing provider alternatives for treatment provision</td>
<td>• Formal services</td>
</tr>
<tr>
<td>Jails</td>
<td>Medication assisted treatment</td>
<td>• Medication assisted treatment</td>
</tr>
<tr>
<td>Neonatal care to address Neonatal Abstinence Syndrome</td>
<td>• Medication: buprenorphine, methadone, vivitrol</td>
<td></td>
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<tr>
<td>Other</td>
<td>Stigma reduction</td>
<td>• Drug testing</td>
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<tr>
<td></td>
<td>Family support</td>
<td>• Psychosocial services</td>
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<tr>
<td></td>
<td></td>
<td>• Certified peer specialists</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Community recovery groups</td>
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<td></td>
<td></td>
<td>Start and link to services after detoxification in jail</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Family support</td>
</tr>
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Selected Resources

- SAMHSA Treatment Locator
- CDC Opioid Website
- American Society for Addiction Medicine
- National Institute on Drug Abuse (NIDA)
- Partnership for Drug-Free Kids
- HIDTA - ODMAP

- Georgia Crisis and Access Line
- Heroin Working Group
- Georgia Prevention Project
- The Council on Alcohol and Drugs
- Georgia Council on Substance Abuse
- Substance Abuse Research Alliance (SARA)
- Kennesaw Collegiate Recovery
- The Zone – A Recovery Community Organization
THANK YOU

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