Turning the Curve on Opioid and Heroin Abuse in Tennessee

September 14, 2016
Tennessee’s response to the opioid epidemic

- Public Safety Subcabinet
- Prescription Drug Safety Acts
- Prescription for Success Initiative
- Chronic Pain Guidelines
- Repeal of Intractable Pain Act
- State Epidemiological Outcomes Workgroup (SEOW)
- Heroin Working Group
State partners in the fight against opioid abuse

**Public Safety**
- Department of Safety & Homeland Security
- Law Enforcement Training Academy
- Tennessee Bureau of Investigation
- Department of the Military

**Criminal Justice**
- Department of Correction
- Board of Parole
- Office of Criminal Justice Programs

**Social Services**
- Department of Mental Health & Substance Abuse Services
- Department of Children's Services
- Department of Health
Goals
1. Decrease drug abuse
2. Decrease drug overdoses
3. Decrease amount dispensed
4. Increase drug disposal
5. High impact, low cost services
6. Coordinate with state partners
7. Collaborate with other states
Alcohol, opioids (excluding heroin) and marijuana are the primary substances of abuse for people entering treatment.

Source: TN-WITS, Tennessee Department of Mental Health and Substance Abuse Services, 2016.

Note: TDMHSAS-funded substance abuse treatment admissions only include admissions for Tennessee residents with incomes below 133% of the federal poverty level who have no insurance.

K. Edwards, TDMHSAS Office of Research, 9/16/2016
TDMHSAS treatment admissions for heroin are increasing while admissions for other opioids are decreasing.

Number of heroin and other opioid substance abuse treatment admissions\(^1\) funded by Tennessee Department of Mental Health and Substance Abuse Services (TDMHSAS): 2009-2016\(^2\)

\(^1\)Opioid treatment admissions exclude heroin.

\(^2\)2016 rates estimated as of Jan-Jun, 2016.

\(^3\)TDMHSAS-funded substance abuse treatment admissions only include admissions for Tennessee residents with incomes below 133% of the federal poverty level who have no insurance. Up to three substances can be listed for each treatment admission.

Source: TN-WITS, Tennessee Department of Mental Health and Substance Abuse Services WITS, 2016\(^2\)

Notes:
1) Opioid treatment admissions exclude heroin.
2) 2016 rates estimated as of Jan-Jun, 2016.
3) TDMHSAS-funded substance abuse treatment admissions only include admissions for Tennessee residents with incomes below 133% of the federal poverty level who have no insurance. Up to three substances can be listed for each treatment admission.
Treatment admission patterns differ for the abuse of heroin and other opioids.

TDMHSAS-funded opioid (excluding heroin) treatment admissions (per 10K population): 2014-2015\(^1\)

TDMHSAS-funded heroin treatment admissions (per 10K population): 2014-2015\(^1\)

Source: TN-WITS, Tennessee Department of Mental Health and Substance Abuse Services WITS, 2015.
Notes: Rates are only shown for counties where the combined count during the time period (2014/2015) was greater than 5. Rates based on two-year averages. (1) 2015 rates estimated of Jan-Jun, 2015; rates computed per 10K of the population of those 12 years and older.
Note: TDMHSAS-funded substance abuse treatment admissions only include admissions for Tennessee residents with incomes below 133% of the federal poverty level who have no insurance.
Heroin misuse is occurring in urban areas but moving into the suburbs. The highest rates of other opioid misuse are in small towns and rural areas. Other opioid abuse has leveled off.
Heroin-related arrests are primarily in large cities, while opioid arrests are in small towns and rural areas.

This map shows which counties are considered metro, suburban, small town and rural.

Opioid arrests (per 10K)

Heroin arrests (per 10K)

Source: Tennessee Bureau of Investigation CJIS Support Center 2015

Notes:

1) The four most populated counties were examined apart from their surrounding suburbs. The most densely populated counties are: Shelby, Davidson, Knox, and Hamilton counties.
2) Metropolitan Statistical Areas: urban areas centered on an urban cluster (urban area) with 50,000 or more population. Shelby, Davidson, Knox, and Hamilton counties were excluded from this group and examined individually.
3) Micropolitan Statistical Areas: urban areas centered on an urban cluster (urban area) with a population at least 10,000 but less than 50,000.
4) Not a metro or micropolitan county.
People arrested for heroin-related crimes are increasing and other opioid-related crimes may be increasing.

Number of people arrested for heroin- and other opioid*-related crimes: 2010-2016**

<table>
<thead>
<tr>
<th>Year</th>
<th>Opioids</th>
<th>Heroin</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>5,788</td>
<td>141</td>
</tr>
<tr>
<td>2011</td>
<td>6,890</td>
<td>209</td>
</tr>
<tr>
<td>2012</td>
<td>7,082</td>
<td>358</td>
</tr>
<tr>
<td>2013</td>
<td>7,125</td>
<td>527</td>
</tr>
<tr>
<td>2014</td>
<td>6,504</td>
<td>645</td>
</tr>
<tr>
<td>2015</td>
<td>6,332</td>
<td>1,036</td>
</tr>
<tr>
<td>2016</td>
<td>7,048**</td>
<td>1,252**</td>
</tr>
</tbody>
</table>

*Opioid-related arrests include arrests for morphine, opium, and all narcotic-related arrests with the exception of cocaine and crack-cocaine arrests. Data represent the number of people arrested.

** The 2016 data is preliminary and represents the number of people arrested between January-June 2016. An annual estimate was made with the assumption of no change for the remainder of the year. Source: Data provided by the Tennessee Bureau of Investigation and projections provided by the Tennessee Department of Mental Health and Substance Abuse Services.

K. Edwards, TDMHSAS Office of Research, 9/16/2016
TBI seizures of heroin are on the rise while seizures of other opioids dropped from 2012-14, then rose in 2015.

Number of opioid\(^3\) and heroin confirmed TBI seizures\(^1\): TN 2011-2015\(^2\)

Source: Tennessee Bureau of Investigation (TBI) lab data, 2015.

Notes: (1) The data represent the number of incidents in which a drug was seized, tested by the TBI lab, and confirmed to be the substance. This data does not reflect the amount of the drug that was seized; (2) 2015 rates estimated as of Jan-Jun, 2015; (3) opioid seizures exclude buprenorphine and heroin.
Overdose deaths for heroin and other opioids are rising.

Number of drug overdose deaths\(^1\) for heroin and other opioids reported to the Death Statistical System: Tennessee 2009-2014

Notes:
Not all drug overdose deaths specify the drug(s) involved, and a death may involve more than one specific substance.
Increases in overdose deaths may be due to increases in reporting by medical examiners.

1) Drug overdose deaths are based on the following ICD-10 underlying cause of death codes: X40-X44, X60-X64, X85, Y10-Y14.

2) "Opioid Analgesic" overdose deaths include non-heroin opioid overdose deaths and were summarized based on an underlying cause of death being a drug overdose and the multiple causes of death containing at least one of the following ICD-10 codes: T40.2, T40.4, T40.6.

3) "Heroin" overdose deaths were summarized based on an underlying cause of death being a drug overdose and the multiple causes of death containing at least one of the following ICD-10 codes: T40.0 - T40.1.

Number of hospital discharges\(^1\) for heroin poisoning:
Tennessee 2009-2014

Source: Tennessee Department of Health, Division of Policy, Planning and Assessment; Hospital Discharge Data System, 2009-2014.

Notes: (1) The data represents all outpatient (emergency room visits, observations less than 24 hours, and inpatient stays of 24-hours or longer) hospital discharges of Tennessee residents. All 18 diagnoses and all three e-codes were evaluated. (2) Heroin poisonings include hospital discharges with ICD-9 codes of 965.01, E850.0, E935.0.

K. Edwards, TDMHSAS Office of Research, 9/16/2016
Significant risk factors for treatment participants switching to heroin from other opioids:

- **Injection drug use** = 4.2x (more likely to switch)
  489 out of 6,085 (8%) injection drugs users switched.

- **Starting opioid use after the age of 18** = 1.6x
  197 out of 7,165 (3%) opioids user switched.

- **Age 25-34** = 1.5x
  410 out of 8,712 (5%) people age 25-34 switched.

- **Multiple previous treatment admissions** = 1.4x
  400 out of 8,558 (5%) people with prior admissions switched.

Notes: From July 2011-December 2015, 736 out of 18,769 people (4%) receiving TDMHSAS services switched from using prescription opioids as the primary substance of abuse to heroin. Those 736 people are described above.
Prescription for Success Achievements

- Decreased prescription opioids
- Increased drug disposal options
- Increased treatment and recovery options
- Increased agency collaboration
Decreased supply of prescription opioids


- Controlled Substance Monitoring Database
- Pain clinic regulations
- Chronic pain guidelines for providers
- Intractable Pain Act repeal
Increased drug disposal options

Drug collection and disposal sites increased from 33 to 208 (2012-16).

- *Take Only as Directed* ad campaign
- New disposal options for medications
- Pharmacy participation in drug disposal
- 43 drug abuse community coalitions
Increased treatment and recovery services

Investments in low-cost, high-impact treatment and recovery initiatives:

- 52 recovery courts reaching 225% more enrollees. (2012-2015)
- 42 Oxford House sober living locations with 300 beds
- 2,466 Lifeline recovery trainings
- 233 new recovery meetings
- 123 faith-based recovery communities
Increased collaboration with partners

- Collaboration with other states to monitor controlled substances
- SEOW analysis of interdepartmental substance abuse data
- Interagency working groups
  - Heroin
  - Neonatal Abstinence Syndrome
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