HEROIN: WHERE IT IS, WHERE IT’S BEEN, AND WHERE IT’S GOING

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WHERE IT IS

Delaware and Otsego Counties
RX Drugs - Treatment by Age Group

- Rx Drugs (18-24)
- Rx Drugs (25-34)
- Rx Drugs (>35)


Treatment Numbers:
- Rx Drugs (18-24): 64, 145, 118, 86
- Rx Drugs (25-34): 26, 58, 51, 34
- Rx Drugs (>35): 12, 49, 36, 17
Rx Drug and Heroin Treatment <35yrs

- Heroin (18 - 24)
- Heroin (25-34)
- Rx Drugs (18-24)
- Rx Drugs (25-34)
## Takeaways: What Does This Mean

### Percent Change in Heroin Use

<table>
<thead>
<tr>
<th>Group</th>
<th>Percent Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heroin (All Users)</td>
<td>229%</td>
</tr>
<tr>
<td>Heroin (18-24)</td>
<td>320%</td>
</tr>
<tr>
<td>Heroin (25-34)</td>
<td>313%</td>
</tr>
<tr>
<td>Heroin (&gt;35)</td>
<td>48%</td>
</tr>
</tbody>
</table>

### Percent Change in Rx Drug Use

<table>
<thead>
<tr>
<th>Group</th>
<th>Percent Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rx Drugs</td>
<td>34%</td>
</tr>
<tr>
<td>Rx Drugs (18-24)</td>
<td>42%</td>
</tr>
<tr>
<td>Rx Drugs (25-34)</td>
<td>31%</td>
</tr>
<tr>
<td>Rx Drugs (&gt;35)</td>
<td>35%</td>
</tr>
</tbody>
</table>

*Use is driven by <35*

*Use is “fairly” diverse*

*“Prevention Works”*
**Takeaways: Continued**

**Heroin Admissions and Hepatitis C**

- New York Spent $360,000,000 on 4,000 Hep C patients = **$90,000/Patient**

- Delaware & Otsego spent **$7,380,000** on Hep C treatments
A BRIEF HISTORY OF HEROIN (AND OPIUM)

Where It’s Been
SAME DRUG, SAME EFFECTS, DIFFERENT TIMES

She slipped a drug that had the power of robbing grief and banishing all painful memories. No one who swallowed this in their wine could shed a single tear that day, even for the death of his mother or father, or if they put his brother or his own son to the sword and he were there to see it done

--- Homer, 800 BC
SAME DRUG, SAME EFFECTS, DIFFERENT TIMES

...[Opium] cures chronic headache, vertigo, deafness, epilepsy, apoplexy, dimness of sight, loss of voice, asthma, coughs of all kinds, spitting of blood, tightness of breath, colic, the lilac poison, jaundice, hardness of the spleen stone, urinary complaints, fever--- *Galen, 200 AD*
The Heroin Epidemic 1.0 - 1900
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The Heroin Epidemic 1.0 - 1900
The Heroin Epidemic 1.0

- By 1910 between 15-20% of the US was addicted to Heroin
- Congress passes first “anti-drug” legislation in US history
- 1919 - 74,650 pounds of smuggled opium
- 1920 - 528,635 pounds of opium was smuggled
HEROIN EPIDEMIC 2.0

How’d We Even Get Here?
We Are a Nation In Pain

Prevalence of pain at selected body sites among adults

- Any pain: 51%
- Joint: 28%
- Low back: 26%
- Neck: 13%
- Headache/migraine: 12%
- Dental: 12%
- Face/jaw: 4%

Percent of adult population
We Are a Nation in Pain

Low Back Pain in North Carolina by Gender

Low Back Pain in North Carolina by Age
A “Cure” For Our Pain

The "Magic" Cure
A “Cure” For Our Pain

In 2010, 99% of the world’s hydrocodone stock was consumed by the United States.
A “Cure” For Our Pain

Rates of Opioid Sales and Overdose Deaths
United States, 1999-2011

1. In kilograms per 10,000 people.  2. Per 100,000 people.
Source: Centers for Disease Control and Prevention.
National Overdose Deaths
Number of Deaths from Prescription Opioid Pain Relievers

Source: National Center for Health Statistics, CDC Wonder
National Overdose Deaths
Number of Deaths from Heroin

Source: National Center for Health Statistics, CDC Wonder
HEROIN EPIDEMIC 2.0

- Has Increased across *all* demographics
- Mostly young adults
- Mostly women
- Mostly white
Rx Abuse and Heroin
Where Do We Go From Here?
DRUG OVERDOSES KILL MORE THAN CARS, GUNS, AND FALLING.

- Falling: 28,360 deaths
- Guns: 32,351 deaths
- Traffic accidents: 33,692 deaths
- Drug overdoses: 41,340 deaths (16,917 from opioid pain medicine)

So What Do We Do About All of This?
RISK AND PROTECTIVE FACTORS

The Lessons of Rat Park
**RISK AND PROTECTIVE FACTORS**

- A **risk factor** is any attribute or exposure that increases the likelihood of developing a disease or injury.

- **Protective factors** are conditions or attributes in individuals, families, communities or society that, can mitigate or eliminate risk in families and communities.
RISK AND PROTECTIVE FACTORS

Safety at School (%) – Delaware Co.

- Skipped School - Unsafe
- Been Threatened at School

Violence and Abuse (%) – Delaware Co.

- Physical Fight
- Partner Violence
- Forced Sex

2007
2013
RISK AND PROTECTIVE FACTORS

Depression and Suicide – Delaware Co.

- Felt Hopless for 2 weeks
- Considered Suicide
- Made Suicide Plan
- Attempted Suicide

<table>
<thead>
<tr>
<th>Year</th>
<th>Felt Hopless for 2 weeks</th>
<th>Considered Suicide</th>
<th>Made Suicide Plan</th>
<th>Attempted Suicide</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>26%</td>
<td>12%</td>
<td>9%</td>
<td>6%</td>
</tr>
<tr>
<td>2013</td>
<td>26%</td>
<td>13%</td>
<td>11%</td>
<td>7%</td>
</tr>
</tbody>
</table>
## Risk and Protective Factors

~ Some Risk factors increase the odds of future health problems ~

<table>
<thead>
<tr>
<th>Health Problem</th>
<th>Number of “Risks”</th>
<th>Odds of Health Problem</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcoholism</td>
<td>2</td>
<td>4.0x</td>
</tr>
<tr>
<td>Illicit Drug Use</td>
<td>2</td>
<td>2.9x</td>
</tr>
<tr>
<td>Injection Drug Use</td>
<td>2</td>
<td>3.8x</td>
</tr>
<tr>
<td>Severe Obesity &gt;35</td>
<td>2</td>
<td>1.4x</td>
</tr>
<tr>
<td>Heart Disease</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Bronchitis</td>
<td>2</td>
<td>1.6x</td>
</tr>
<tr>
<td>Suicide</td>
<td>2</td>
<td>3.0x</td>
</tr>
</tbody>
</table>
So What Do We Do About *All of This*?
a lower level of risky health behaviors (binge drinking, illicit drug use, unsafe sex, and the lack of exercise and diet control) was also found to be associated with meaning in life
Kids Want To Feel Important (or at least Human)

- Sports Participation as a Protective Factor Against Depression and Suicidal Ideation in Adolescents as Mediated by Self-Esteem and Social Support
- Teachers as Builders of Respectful School Climates: Implications for Adolescent Drug Use Norms and Depressive Symptoms in High School
- Family Acceptance in Adolescence and the Health of LGBT Young Adults
- Prospective prediction of suicide in a nationally representative sample: religious service attendance as a protective factor
- An exploratory study of the relationship between parental attitudes and behaviour and young people's consumption of alcohol
- Protective Factors and the Development of Resilience in the Context of Neighborhood Disadvantage
- From Racial Discrimination to Substance Use: The Buffering Effects of Racial Socialization
- Suicidal Thinking and Behavior Among Youth Involved in Verbal and Social Bullying: Risk and Protective Factors
- Trajectories or Parental Monitoring and Communication and Effects on Drug Use Among Urban Young Adolescents
- The association between family and community social capital and health risk behaviours in young people: an integrative review
- Adolescent Self-Control Predicts Joint Trajectories of Marijuana Use and Depressive Mood into Young Adulthood Among Urban African Americans and Puerto Ricans
- God Forbids or Mom Disapproves? Religious Beliefs That Prevent Drug Use Among Youth
- An Examination of Beliefs and Opinions about Drug Use in Relation to Personal Stigmatization towards Drug Users
- Social capital and cigarette smoking among Latinos in the United States
12 Reasons Teens Use Prescription Drugs

- Easy to get from parent's medicine cabinets: 62%
- Available Everywhere: 52%
- They are not illegal drugs: 51%
- Easy to get through other people's prescriptions: 50%
- Can claim to have prescription if caught: 49%
- They are cheap: 43%
- Safer to use than illegal drugs: 35%
- Less shame attached to using: 33%
- Easy to purchase over the internet: 32%
- Fewer side effects than street drugs: 32%
- Can be used as study aids: 25%
- Parents don't care as much if caught: 21%
ADDRESSING THE OPIOID EPIDEMIC

Making a Difference: State Successes

New York
75% ↓

2012 Action:
New York required prescribers to check the state’s prescription drug monitoring program before prescribing painkillers.

2013 Result:
Saw a 75% drop in patients who were seeing multiple prescribers to obtain the same drugs, which would put them at higher risk of overdose.

Florida
50% ↓

2010 Action:
Florida regulated pain clinics and stopped health care providers from dispensing prescription painkillers from their offices.

2012 Result:
Saw more than 50% decrease in overdose deaths from oxycodone.

Tennessee
36% ↓

2012 Action:
Tennessee required prescribers to check the state’s prescription drug monitoring program before prescribing painkillers.

2013 Result:
Saw a 36% drop in patients who were seeing multiple prescribers to obtain the same drugs, which would put them at higher risk of overdose.

Cortland County Drug Treatment Admissions

- Rx-Drugs
- Heroin
ADDRESSING THE OPIOID EPIDEMIC

- Doctor **AND** patient education
  - “Pain”
  - Prescribing
  - Planning
    - Removal
BE A GOOD CONSUMER

At A Glance: This Prescriber in 2013

4,177
Medicare Part D Prescriptions Filled, Including Refills
Rank: 1249 out of 2802

$258K
Total Retail Price of All Prescriptions
Rank: 1393 out of 2802

256
Patients Receiving at Least One Drug in Part D

72%
Patients 65 Years and Older

50%
Subsidized Claims for Low-Income Patients

How Does This Prescriber Compare to Peers?

In the same specialty and state. Caveats »

DRUGS THAT PRESENT SPECIAL RISKS

Schedule Two Controlled Substances
Schedule Three Controlled Substances
Brand Name Drugs

COSTS OF PRESCRIBING

Prescription Price
Prescriptions per Patient

7% of this provider’s 256 patients filled at least one prescription for a schedule two drug, compared to an average of 4%.

14% of this provider’s 256 patients filled at least one prescription for a schedule three drug, compared to an average of 8%.

22% of this provider’s prescriptions were for brand-name drugs, compared to an average of 25%.

$62 was the average price of a prescription from this provider, compared to $68 among peers.

16 is the average number of prescriptions (including refills) per patient, compared to an average of 17.

Propublica – Doctor’s Checkup
ADDRESSING THE OPIOID EPIDEMIC

• “Angel” initiatives are a good start
  - $55 – Treat someone
  - $200 – Jail someone

• Focus on building communities where everyone is “an Angel”
QUESTIONS?