Deaths of Despair in Pennsylvania and Beyond: A Demographer’s Take on Drug, Alcohol, and Suicide Mortality

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The views expressed in this presentation are those of the author and do not necessarily represent the views of these organizations.

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Outline of Presentation

- Trends in drug, alcohol, and suicide mortality (deaths of despair)
- The demography of deaths of despair (demographic and spatial differences)
- How did we get here?
- Combatting deaths of despair
Drug-induced means that drugs were listed as the underlying cause of death – the factor that directly contributed to the death. Suicides include intentional drug overdoses and intentional deaths from other causes.
Opioids are Largest Contributor to Drug-Related Deaths (where Specific Drug is Identified)

Percentage of Drug-Related Deaths Involving Specific Drugs

- Heroin
- Opioid Analgesics
- Synthetic Opioids *
- Methadone
- Cocaine
- Benzodiazepines
- Unspecified Drug

Data Source: CDC Wonder Multiple Cause of Death Files, 1999-2015
Chart: Shannon Monnat, smm67@psu.edu
*Synthetic opioids include fentanyl

Opioids are natural or semi-synthetic opioids (e.g., codeine, hydrocodone)
Synthetic opioids include fentanyl

The Demography of Deaths of Despair

Drug, Alcohol, and Suicide Mortality Rates by Age-Group

Drug-Induced

Alcohol-Induced

Suicide

Data Source: CDC WONDER Underlying Cause of Death Files, 1999-2015
Intentional Drug Overdoses are Included in the Suicide Category
Mortality Rates are Higher among Whites


Drug, Alcohol, and Suicide Mortality Rates by Metro Status

Data Source: CDC Wonder: Underlying Cause of Death Files, 1999-2015. Chart: Shannon Monnat, smm67@psu.edu. Intentional drug overdoses are included in the suicide category.

Pooled Drug, Alcohol and Suicide Mortality Rate (ages 25-64), 2006-2015

Data: U.S. Centers for Disease Control and Prevention. CDC WONDER: Multiple-Cause of Death Files. Note: Rates are age-adjusted.
How Did We Get Here?
The Spark

Why are Opioids so Addictive?
“A drug is a drug is a drug...
...and then there are opioids.”
– Fred Holmquist
Director at Dan Anderson Renewal Center for Addiction Treatment and Recovery

Prescription Opioids Include:
- Fentanyl (Duragesic®)
- Hydrocodone (Vicodin®)
- Oxycodone (OxyContin®)
- Oxymorphone (Opana®)
- Propoxyphene (Darvon®)
- Hydromorphone (Dilaudid®)
- Meperidine (Demerol®)
- Diphenoxylate (Lomotil®)
Pain as the Fifth Vital Sign & the Introduction of OxyContin

The Marketing of OxyContin

- Targeted the highest opioid prescribers across the country.
- Bonus systems for sales reps ranged from $15,000 to nearly $240,000 ($40 million total in 2001).
- Distributed 34,000 "starter" coupons.
- Branded promotional items for physicians (stuffed toys, hats, CDs, tools).

Heroin Has Caught up to Prescription Opioids

Heroin is Involved in More Young Adult Overdoses, Prescription Opioids are Involved in More Middle/Older Age Overdoses
How Did We Get Here?
The Kindling: Landscapes of Despair

Forgotten People and Places

“This was not new; it had been happening for fifteen years. And there was more to it than drugs. This scourge was...connected to the conflation of big forces: economics and marketing, poverty and prosperity. Forgotten places of America acted like the canaries in those now-shuttered Appalachian coal mines. Just no one in the country listened much until more respectable types sounded the same alarm.” – Sam Quinones

Economic Decline, Cynicism, Anxiety, Stagnation, Slippage

“Years of decline in the blue-collar economy manifested themselves in the material prospects of Middletown’s residents. The Great Recession, and the not-great recovery that followed, has hastened Middletown’s downward trajectory. But there was something almost spiritual about the cynicism of the community at large, something that went much deeper than a short-term recession.” – J.D. Vance, Hillbilly Elegy

“Since 1980, virtually all those I talked with felt on shaky economic ground. It was a story of unfairness and anxiety, stagnation and slippage—a story in which shame was the companion to need.” – Arlie Hochschild
Mortality Rates are Higher in Counties with More Economic Distress

Mean County-Level Drug, Alcohol, and Suicide Mortality Rate (2006-2015) by Level of Economic Distress

Quartile 1= lowest; Quartile 4= highest
Economic distress includes percent poverty, percent single parent families, percent households with public assistance, percent unemployed, percent with work disability & percent without health insurance

Mortality Rates are Higher in Counties with More Economic Distress

Mean County-Level Drug, Alcohol, and Suicide Mortality Rate (2006-2015)

Mortality Rates are Highest in Counties where Median Household Income Has Declined since 1980

Mean County-Level Drug, Alcohol, and Suicide Mortality Rate (2006-2015) by Median Household Income Change
Mortality Rates are Lowest in Counties with the Greatest Presence of Health-Promoting Institutions

Social Capital Promoting Establishments Include: number of religious, civic, bowling, fitness, golf, and sports organizations and associations per capita

Non-College Educated Whites are Far Less Positive about their Relative Standard of Living than are Blacks and Hispanics

“There is no group of Americans more pessimistic than working-class whites.”
– J.D. Vance, Hillbilly Elegy


Landscapes of Despair – Luzerne County, PA

- Manufacturing jobs declined from 42,000 to 19,000 since 1980 (55% decline).
- Median household income has remained stagnant since 1980.
- Above average poverty, unemployment, and disability rates.
- Chronic out-migration of young adults.
- Over past 15 years, drug overdoses tripled and suicides by causes other than drugs doubled.
- Traditionally Democratic county that went for Obama twice and hadn’t gone for a Republican since 1988.
- Accounted for 59% of Trump’s victory margin in PA.

More job cuts at Air Products’ manufacturing plant.

Transparency America: Switching sides in struggling Pa. county.

In Pennsylvania, troubles lead some to drugs, others to Trump.

With New President, People Hope Jobs Come to Luzerne County.
Deaths of Despair Have Far Reaching Impacts

Financial & Social Costs
- Medicare, Medicaid, Veteran's Administration, Social Security/Disability
- Workplace productivity
- Incarceration
- Foster care system
- Burden on first responders and health care professionals
- Annual financial burden of drug and alcohol abuse estimated at $442 billion

Disease transmission
- HIV
- Hepatitis C
- Sexually transmitted infections

Where Do We Go From Here?

Strategies to Combat Deaths of Despair
Fall into Three Baskets

- Prevention
  - Supply
  - Demand
- Treatment
  - Rapid-response
  - Long-term
  - Harm-reduction
- Recovery
  - Relapse should be viewed similarly to other chronic medical illness (i.e., diabetes, hypertension)
Preventing Substance Use Initiation

• Supply
  – Reforming opioid prescribing practices (CDC opioid prescribing guidelines
    https://www.cdc.gov/drugoverdose/prescribing/guideline.html)
  – Prescription drug monitoring programs
  – Prescription take-back programs
  – Aggressive enforcement against “pill mills”
  – Educating public (PSAs), medical students, and physicians (target dentists
    and ER docs)
  – New approaches for chronic pain treatment
  – Will a border wall make a difference?

• Demand
  – Setting realistic expectations for children, teaching healthy coping strategies,
    preparing children for both disappointment and success
  – Social cohesion, social support, and community ties are buffers against
    substance misuse.
  – People need opportunities for meaning in their lives.
  – Comprehensive strategies for job growth and skill-training, particularly in
    places hardest hit by declines in manufacturing and other blue-collar labor.

Treatment

• Rapid-Response Emergency Treatment (preventing death)
  – Naloxone (Narcan®)-the overdose-reversal drug (only effective for
    opioid overdose)

• Substance abuse and mental health treatment
  – Medication-assisted treatment for opioid use disorder (methadone,
    buprenorphine (Suboxone®), extended-release naltrexone)
  – Integrating drug treatment into healthcare settings (very few
    healthcare systems provide a full “bundle” of services)

• Harm reduction approaches (controversial)
  – Needle/syringe programs
  – Safe drug consumption spaces

Recovery

Relapse should be viewed as similar to other chronic medical illness (i.e., diabetes,
hypertension)

Opportunities, choices, and behaviors do not occur in a vacuum. They exit within the
context of larger social structures: family, the economy, educational institutions, health care
systems, political systems, social safety nets.
Moving Forward

• The problem is bigger than opioids
• Health in all policies and institutions

Individual's opportunities, choices, behaviors, health, and well-being do not manifest in a vacuum. They exist within the context of larger social structures: family, the economy, educational institutions, health care systems, political systems, and community.
Drugs, Alcohol, and Suicide Represent Growing Share of U.S. Mortality

Deaths of Despair and Support for Trump in the 2016 Election

Drugs, Death, and Despair in New England

Rural Adolescents are More Likely than their Urban Peers to Abuse Prescription Painkillers

Addiction Resources
PA Dept. of Drug and Alcohol Programs