Data Snapshot:
Opioid Poisoning Deaths among Illinois Women of Reproductive Age

Illinois Department of Public Health
Office of Women’s Health and Family Services
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Opioid poisonings (i.e., “overdoses”) are on the rise nationally and in Illinois.

Neonatal abstinence syndrome, a collection of withdrawal symptoms experienced by infants exposed to opioids in utero, is also increasing.

Opioid use among a woman of reproductive age therefore carries double weight, as it impacts her own health, and also the health of her children and any future pregnancies.

This analysis examines trends and demographic patterns in opioid poisoning deaths among:

- Illinois women of reproductive age (ages 15-44 years old)
- Illinois women with a pregnancy during the last year (pregnancy-associated deaths)
Methods

- **Data Source**: Illinois death certificates
- **Time Period**: 2008 – 2017 (all years are “final” data)
- **“Drug poisoning death”** = underlying cause of death ICD-10 codes X40-X44, X60-X64, X85, or Y10-Y14
- **Among drug poisoning deaths**, opioid poisonings were identified by multiple-cause mortality codes:
  - T40.0 = opium
  - T40.1 = heroin
  - T40.2 = natural and semi-synthetic (“prescription”)
  - T40.3 = methadone
  - T40.4 = synthetic (including fentanyl)
  - T40.6 = other and unknown type
Methods

• Among all Illinois women of reproductive age:

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\text{Mortality Rate} = \frac{\# \text{opioid poisoning deaths}}{\# \text{women ages 15–44 in population}} \times 100,000
\]


• Among women with a pregnancy during the last year:

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\text{Pregnancy-Associated Mortality Ratio} = \frac{\# \text{opioid poisoning deaths}}{\# \text{live births}} \times 100,000
\]

– Live birth counts derived from Illinois birth certificates
DEATHS TO WOMEN OF REPRODUCTIVE AGE
(WOMEN AGES 15-44)
Opioid-Related Poisoning Death Rate among Illinois Women of Reproductive Age (WRA)

- The rate of opioid-related poisoning deaths for WRA **tripled** from 2008 to 2017
- 347 WRA died from opioid poisoning during 2017
- Nearly 2,000 total WRA have died from opioid poisoning since 2008

*Data Source: Illinois death certificates, 2008-2017*
Types of Opioids Involved in Opioid-Related Poisoning Deaths among Illinois Women of Reproductive Age (WRA), 2017

- Heroin was involved in nearly half of opioid poisoning deaths among Illinois WRA in 2017
- Synthetic opioids (e.g., fentanyl) were involved in 55% of opioid poisoning deaths for WRA in 2017

Bars do not add up to 100% because more than one opioid may have been listed on the death certificate

Data Source: Illinois death certificates, 2017
Opioid-Related Poisoning Death Rate among Illinois Women of Reproductive Age (WRA), By Opioid Type

- The rate of heroin-related deaths for WRA increased **11-fold** in nine years
- The rate of synthetic-opioid-related deaths for WRA increased **9-fold** in four years

Data Source: Illinois death certificates, 2008-2017
Opioid-Related Poisoning Death Rate among Illinois Women of Reproductive Age (WRA), By Race/Ethnicity

- The opioid poisoning death rate is highest among non-Hispanic White WRA
- But White, Black, and Hispanic WRA all have experienced increases in opioid-related deaths over the last decade

Data Source: Illinois death certificates, 2008-2017
Opioid-Related Poisoning Death Rate among Illinois Women of Reproductive Age (WRA), By Age Group

- The rate of opioid-related deaths is highest among women 30 and older
- All groups have seen an increase in opioid-related deaths, but the relative increase was smallest among women ages 15-24

Data Source: Illinois death certificates, 2008-2017
Opioid-Related Poisoning Death Rate among Illinois Women of Reproductive Age, By County of Residence

- The rate of opioid-related deaths is highest among WRA living in urban counties outside the Chicago area.
- All areas have experienced an increase in opioid-related deaths for WRA over the last decade.

Data Source: Illinois death certificates, 2008-2017
PREGNANCY-ASSOCIATED DEATHS
(DEATHS WITHIN ONE YEAR OF PREGNANCY)
Average Annual Number of Pregnancy-Associated Deaths Due to Opioid Poisoning, Illinois Residents, 2009-2017

- The number of pregnant/postpartum women dying from an opioid-related poisoning increased over time.
- In 2017 alone, there were 18 pregnancy-associated deaths related to opioid poisoning.

Data Source: Illinois death certificates, 2009-2017

- Pregnancy-associated deaths related to opioid poisoning increased 10-fold over a 9-year period
- The pregnancy-associated mortality ratio related to opioid poisonings nearly doubled in just one year from 2016 to 2017

Data Source: Illinois death certificates, 2008-2017
Proportion of Pregnancy-Associated Deaths that were due to Opioid Poisoning, Illinois Residents, 2008-2017

- Opioid-related poisonings have also become a leading cause of pregnancy-associated death
- In 2017, opioid poisoning was the most common cause of pregnancy-associated death
- In 2017, nearly 1 in 5 deaths of pregnant or postpartum women were due to opioid poisoning

Data Source: Illinois death certificates, 2008-2017

- Pregnancy-associated deaths caused by opioid poisonings were most common among white women, women with a high school education or less, and women residing in small/medium urban counties outside the Chicago area.

For more information, contact:
Amanda Bennett
Amanda.C.Bennett@Illinois.gov

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