Using Death Records for Research
Overview of the National Vital Statistics System

Merianne Rose Spencer, M.P.H.
Measures Research and Evaluation Branch
Division of Analysis and Epidemiology

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Presentation Outline

- Overview of National Center for Health Statistics (NCHS)
- Describe the National Vital Statistics System
- Review ways to access NCHS mortality data and statistics
  - Data briefs and reports
  - CDC WONDER
  - Other sources
- Wrap up and future directions
Overview and Background
The National Center for Health Statistics

The nation’s principal health statistics agency since 1960.

- data collection, analysis and dissemination of nationally-representative health data

NCHS is one of 13 designated Federal Statistical Agencies as defined by the Office of Management and Budget:

- bound by OMB standards and policies
- member of the Interagency Council on Statistical Policy
- the collection, compilation, processing, or analysis of information for the description, estimation, or analysis of the characteristics of groups without identifying the individuals or organizations that comprise such groups.
NCHS Data Systems

- National Vital Statistics System
- National Health Interview Survey
- National Health and Nutrition Examination Survey
- National Health Care Surveys
What is the National Vital Statistics System (NVSS)?

- NVSS encompasses the processing and coding of birth and death certificate records from 57 jurisdictions*.
- Cause-of-death (ICD-10 codes) are assigned to death records received by jurisdictions at NCHS.
- Data is coded, processed and then disseminated for health statistics, surveillance and research.

*50 states, New York City, District of Columbia and 5 US territories (American Samoa, Guam, Norther Marianas, Puerto Rico, and Virgin Islands)
Data Source: Death Certificate

Demographic information
Completed by the funeral director using information from the best qualified person: spouse, parent, child, another relative, or other person who has knowledge of the facts

Medical information
For natural causes, completed by attending physician, nurse practitioner, physician’s assistant
For sudden and unexplained deaths, completed by medical examiner, coroner, Justice of the Peace

Demographic information
Cause-of-death section of the U.S. standard death certificate

- Part I – Chain of events that directly caused the death
- Part II – Significant conditions contributing to death
- Box 43 – Describe how the injury occurred

Referred to as the literal text.
Coding ICD-10 multiple causes of death

* International Classification of Diseases 10th Revision   Multiple Causes of Death
Accessing NVSS Mortality Data to Understand Drug Poisonings
Where to find information on drug overdose deaths?

- Download public-use NVSS files directly from the NCHS website
  - [https://www.cdc.gov/nchs/data_access/vitalstatsonline.htm#Mortality_Multiple](https://www.cdc.gov/nchs/data_access/vitalstatsonline.htm#Mortality_Multiple)

- Access NCHS published summaries, reports, briefs and statistical figures
  - Data briefs: [https://www.cdc.gov/nchs/products/databriefs.htm](https://www.cdc.gov/nchs/products/databriefs.htm)
  - Health E-Stats: [https://www.cdc.gov/nchs/products/hestats.htm](https://www.cdc.gov/nchs/products/hestats.htm)
  - Provisional estimates: [https://www.cdc.gov/nchs/nvss/vsrr.htm](https://www.cdc.gov/nchs/nvss/vsrr.htm)

- Use interactive online platform to generate tabulations
  - CDC WONDER, Vital Statistics Rapid Release Program
Vital Statistics Rapid Release Program

- Can access provisional monthly national-, state, and county-level drug overdose death counts
- Provides access to the timeliest vital statistics for public health surveillance
Using the CDC WONDER tool to query data: https://wonder.cdc.gov/mcd.html
Future Directions
Future Directions

- Information on causes and manner of death relies on quality data from the death investigation process of medical examiners and coroners.

- Prescription Drug Monitoring Programs (PDMP) data are a critical component in providing prescription history to medical examiners and coroners.
  - There is opportunity to synergize data sources to help better understand what specific drugs are involved in deaths, and to draw additional context about poisoning issues.

- Collaborating Office of Medical Examiners and Coroners (COMEC)
  - Public health relies on medical examiners and coroners for quality data about deaths, including drug overdose deaths.
  - Medicolegal death investigations are crucial for understanding causes of death and conducting surveillance on drugs, including prescription drugs.
Questions?

Merianne Rose T. Spencer, M.P.H.
Injury Epidemiologist
National Center for Health Statistics
Division of Analysis and Epidemiology
MSpencer@cdc.gov
301-458-4377

Margaret Warner, Ph.D.
Health Scientist
National Center for Health Statistics
Division of Vital Statistics
mmw9@cdc.gov
301-458-4556

For more information, contact CDC 1-800-CDC-INFO (232-4636)
TTY: 1-888-232-6348
www.cdc.gov

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.