National Center for Health Statistics



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

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Harold Roger PDMP 2022 National Meeting

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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.

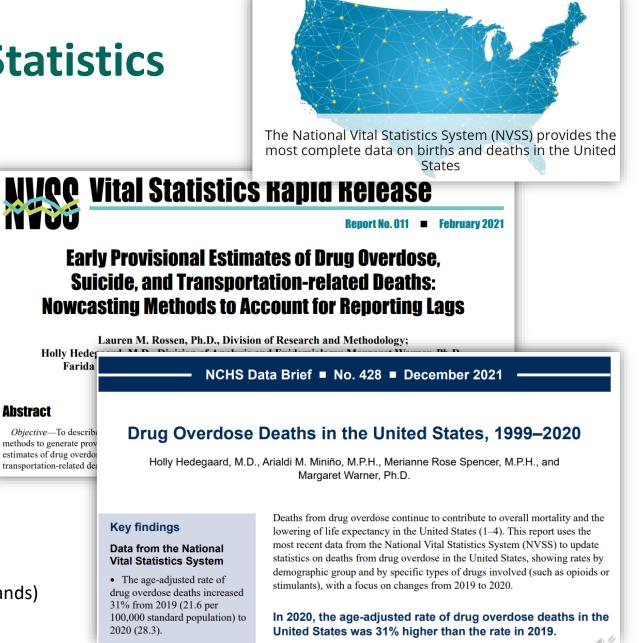
NCHS Data Systems



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

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Demographic information

Completed by the <u>funeral director</u> 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 <u>attending physician</u>, nurse practitioner, physician's assistant

For sudden and unexplained deaths, completed by medical examiner, coroner, Justice of the Peace

Demographic information

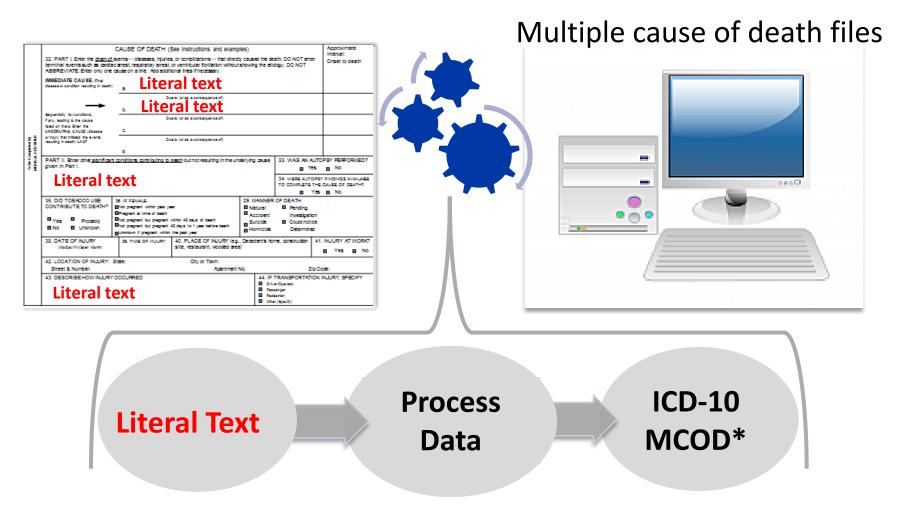
Cause-of-death section of the U.S. standard death certificate

- 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.

		CAUSE OF DEATH (See instructions and examples)		Approximate
	32. PART I. Enter the chain of eventsd	liseases, injuries, or complicationsthat directly caused the death. DO NO ar fibrillation without showing the etiology. DO NOT ABBREVIATE. Enter	OT enter terminal events such as cardiac	interval: Onset to death
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	resulting in death)	Due to (or as a consequence of):		
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2 W		Not pregnant, but pregnant 43 days to 1 year before death		
		Unknown if pregnant within the past year		
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	(Mo/Day/Yr) (Spell Month)		C	Yes 🗆 No
	42. LOCATION OF INJURY: State:	City or Town:		
	Street & Number:		ent No.: Zip Code:	
	43. DESCRIBE HOW INJURY OCCURRE	D:	44. IF TRANSPORTATION IN	JURY, SPECIFY:
			Driver/Operator Passenger	
			Pedestrian	
			□ Other (Specify)	

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

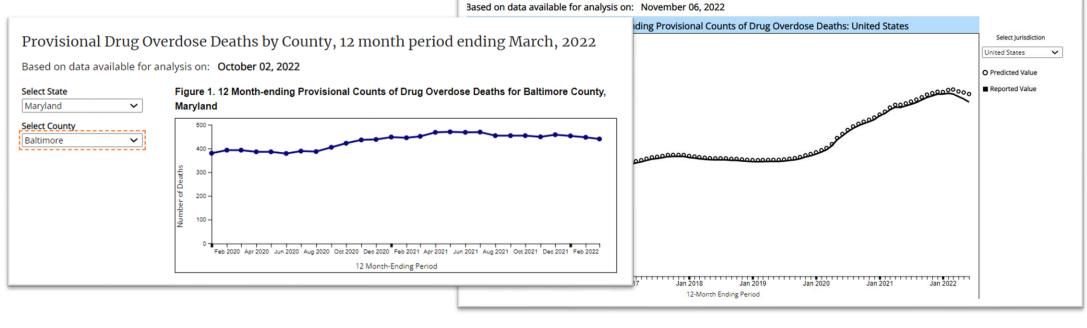


Where to find information on drug overdose deaths?

- Download public-use NVSS files directly from the NCHS website
 - <u>https://www.cdc.gov/nchs/data_access/vitalstatsonline.htm#Mortality_Multiple</u>
- Access NCHS published summaries, reports, briefs and statistical figures
 - Data briefs: <u>https://www.cdc.gov/nchs/products/databriefs.htm</u>
 - Health E-Stats: <u>https://www.cdc.gov/nchs/products/hestats.htm</u>
 - National Vital Statistics Reports: <u>https://www.cdc.gov/nchs/products/nvsr.htm</u>
 - Provisional estimates: <u>https://www.cdc.gov/nchs/nvss/vsrr.htm</u>
- 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
 - <u>https://www.cdc.gov/nchs/nvss/vsrr/provisional-drug-overdose.htm</u>
- Provides access to the timeliest vital statistics for public health surveillance
 12 Month-ending Provisional Number and Percent Change of Drug Overdose Deaths



CDC WONDER

 Using the CDC WONDER tool to query data: <u>https://wonder.c</u> dc.gov/mcd.html

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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?

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