U.S. Vital Statistics Mortality Data: Past Uses and Future Directions



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The National Vital Statistics System (NVSS)

57 independent registration areas:

- 50 States, District of Columbia, New York City
- Puerto Rico, U.S. Virgin Islands, Guam, American Samoa, the Commonwealth of the Northern Marianas.

Vital Statistics Cooperative Program (VSCP):

- A data sharing partnership between the federal government and the 57 registration areas
- NCHS administers the VSCP and the NVSS

Research and Future Challenges

Life Tables by Race/Ethnicity and Race-Ethnic Disparities in Cause-Specific and All Cause Mortality:

- National and state level life tables, including by some race/ethnic groups
- Cause-specific mortality
- Geographic variation in mortality

Challenges and Future Directions

- Reporting of age and race/ethnicity and comparability with other data sources (e.g., need for linkage studies)
- Cause of death coding (e.g., state variation?)
- Access to geographic detail (collaboration with registration areas)

Research and Future Challenges

Mortality Data Linkages: NCHS and Other Surveys Linked to the National Death Index (NDI):

- National Health Interview Surveys (NHIS) linked to Multiple Cause of Death Data
- National Health and Nutrition Examination Surveys (NHANES) linked to Multiple Cause of Death Data
- National Longitudinal Mortality Study linked to the National Death Index (NDI)
- Other surveys, e.g., Health and Retirement Study, linked to the NDI

Challenges and Future Directions

- Timely maintenance of a national NDI
- Timely linkages of NCHS and other surveys to the NDI
- Access to linked files in and outside of Research Data Centers
- Expanded remote and physical access to the RDCs

Research and Future Challenges

Mortality Data Linkages: Birth and Infant Death Records:

Key national level data source for analyzing:

- Race/ethnic disparities in neonatal, post-neonatal and infant mortality and trends over time
- Variation in infant mortality by maternal characteristics, health behaviors (e.g., smoking, use of prenatal care)
- Geographic variation in neonatal, post-neonatal and infant mortality
- Local area variation (e.g., neighborhood context) in infant mortality

Challenges and Future Directions

- Uneven adoption of the 2003 birth certificate by registration areas
- Timely linkage to infant death records
- Access to linked files in and outside Research Data Centers
- Direct researcher collaboration with individual registration areas

Data Access: Future Challenges

Data Linkages

- How to maintain researchers' access to data sources that have been linked to death records?
- How to increase access to geographic detail?
- Linkage to other administrative data sources:
 - Medicare and Medicaid data; Social Security data
 - Immigration data
 - Others?

Challenges:

- Closer collaboration with registration areas & other federal agencies
- Legal restrictions on data release
- Increased use of RDCs increased demand on staff time (e.g., review of user applications and output)