National Committee on Vital and Health Statistics (NCVHS)

Hubert H. Humphrey Building, Room 705A, Washington, DC
September 11-12, 2017

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On behalf of
Council of State and Territorial Epidemiologists (CSTE)
How do we use the data? Why are they important?
Why are they important?

• It's the denominator - ultimate foundation
• Everyone gets one

• Death certificates *Granddaddy* of all surveillance systems
How do we use the data?

• Manner and cause of death, and circumstances at birth
  • Look across the population to draw conclusions
  • Important to improve health status, health equity, quality of health and health outcomes
Death records, as part of public health surveillance

Just to name a few...

- **Cause of death**
  - Chronic diseases (premature mortality rates)
  - Infant mortality (maternal and child health), inc. SIDS
  - Life expectancy
  - Injuries (motor vehicle crashes), poisonings (combating opioid abuse)
  - Post disaster
- **Maternal mortality**
- **Adverse pregnancy outcomes reporting system (APORS)**
- **Violent death reporting**
- **Census of fatal occupational injuries**
- **Reportable disease case ascertainment and data completeness**
- **Disease control**
  - Death data to identify next of kin and contacts to TB cases
  - Use death certificate data to identify potential missed sites of TB exposure (i.e. funeral homes, worksites, etc.)
Birth Records, as part of public health surveillance

Just to name a few...

- Newborn health and outcomes
- Newborn screening
- Birth defects surveillance (new - congenital Zika)
- Linkage of birth records to mother's prenatal care and behaviors, neonatal abstinence syndrome
- Linkage infant death and birth certificates
- Disease control - example: TB, Hep B
- Pregnancy risk assessment monitoring system (PRAMS)
- Early hearing detection and intervention (EHDI) program
- Birth certificate data populating registries (e.g., immunization, newborn screening, etc.)
How does data sharing, transmission & protection work?
Data security and protection

• Across public health data security and protection is paramount

• Across all jurisdictions, staff members receive specialize training
Data Sharing & Transmission -- It’s Complicated

Vital records
Challenges & Opportunities
CSTE Position Statements: Define and recommend which diseases and conditions are under national surveillance (Nationally Notifiable)
Position Statement

Tables

Death certificate data is part of the foundation for case ascertainment and public health reporting and data completeness.

Examples: influenza-associated pediatric mortality, TB, HIV
Challenge: Completeness and Accuracy

• Little or no training on how to complete a death certificate
• Lack of understanding of uses and longevity of uses
  • Attending physician
  • Medical examiners
• No standards or guidelines for completeness of data capture or data quality
Post Storm or Event Mortality Surveillance
Examining Opioid and Heroin-Related Drug Overdose in Colorado

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Opportunity

- Decision support
- Bidirectional communication
- Cause of death query systems
  - What is it?
    - Rapid query issued back to the person that completed the death certificate to obtain more complete and accurate mortality statistics
  - How useful?
    - Proven successful to improve data quality
    - Correct issues right away
Recommendations

Expand Automation
- Electronic filing is only the beginning
- Decision support, bidirectional communication
- Linkages
  - Medical examiner data and toxicology results
  - Electronic medical records

Invest in Data Quality
- Training and education
- How to complete
- How the data is used
- Preserve the literals, ICD10 coding is not everything
- Cause of death query systems

Let the Data Flow
- One public health: *timely*, automated standards based sharing as early as possible
- Develop model language to share the data within and across public health, for de-identifiable as well as identifiable data