National Committee on Vital and Health Statistics (NCVHS)
Next Generation Vital Statistics: A Hearing on Current Status, Issues and Future Possibilities

Hubert H. Humphrey Building, Room 705A, Washington, DC
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Presented by
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On behalf of
Council of State and Territorial Epidemiologists (CSTE)

Council of State and Territorial Epidemiologists

How do we use the data? Why are they important?

Why are they important?

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

Great grandfather
Norman Vinton
1885-1984

- 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

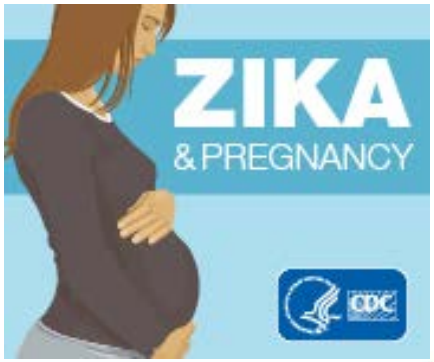
Just to name a few...

- 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

Challenges & Opportunities

Challenge: Timeliness & ICD-10 Coding

CSTE Position Statements: Define and recommend which diseases and conditions are under national surveillance (Nationally Notifiable)

Council of State and Territorial Epidemiologists

17-ID-10

Committee: Infectious Disease

Title: Public Health Reporting and National Notification for Shiga Toxin-Producing *Escherichia coli* (STEC)

I. Statement of the Problem

Culture-independent diagnostic testing (CIDT), defined as the detection of antigen or nucleic acid sequences of the pathogen, is rapidly being adopted by clinical laboratories. For Shiga toxin-producing *Escherichia coli* (STEC), these are generally PCR-based testing methods which do not require a stool culture and thus do not yield an isolate. While concerted efforts are being made to ensure reflexive culture is performed at the clinical laboratory or the state public health laboratory, CIDT-positive reports are not always culture-confirmed. The current STEC case definition classifies a positive CIDT result detecting Shiga toxin, that is not culture-confirmed, as a suspect case. Modification of this case definition is needed to address the following three concerns:

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

TableV. Recommended sources of data and extent of coverage for ascertaining cases of Influenza-Associated Pediatric Mortality

Source of data for case ascertainment	Coverage: Population-wide
clinician reporting	X
laboratory reporting	X
reporting by other entities (e.g., hospitals, veterinarians, pharmacies)	X
death certificates	X
hospital discharge or outpatient records	X
extracts from electronic medical records	X
telephone survey	
school-based survey	
other _____	

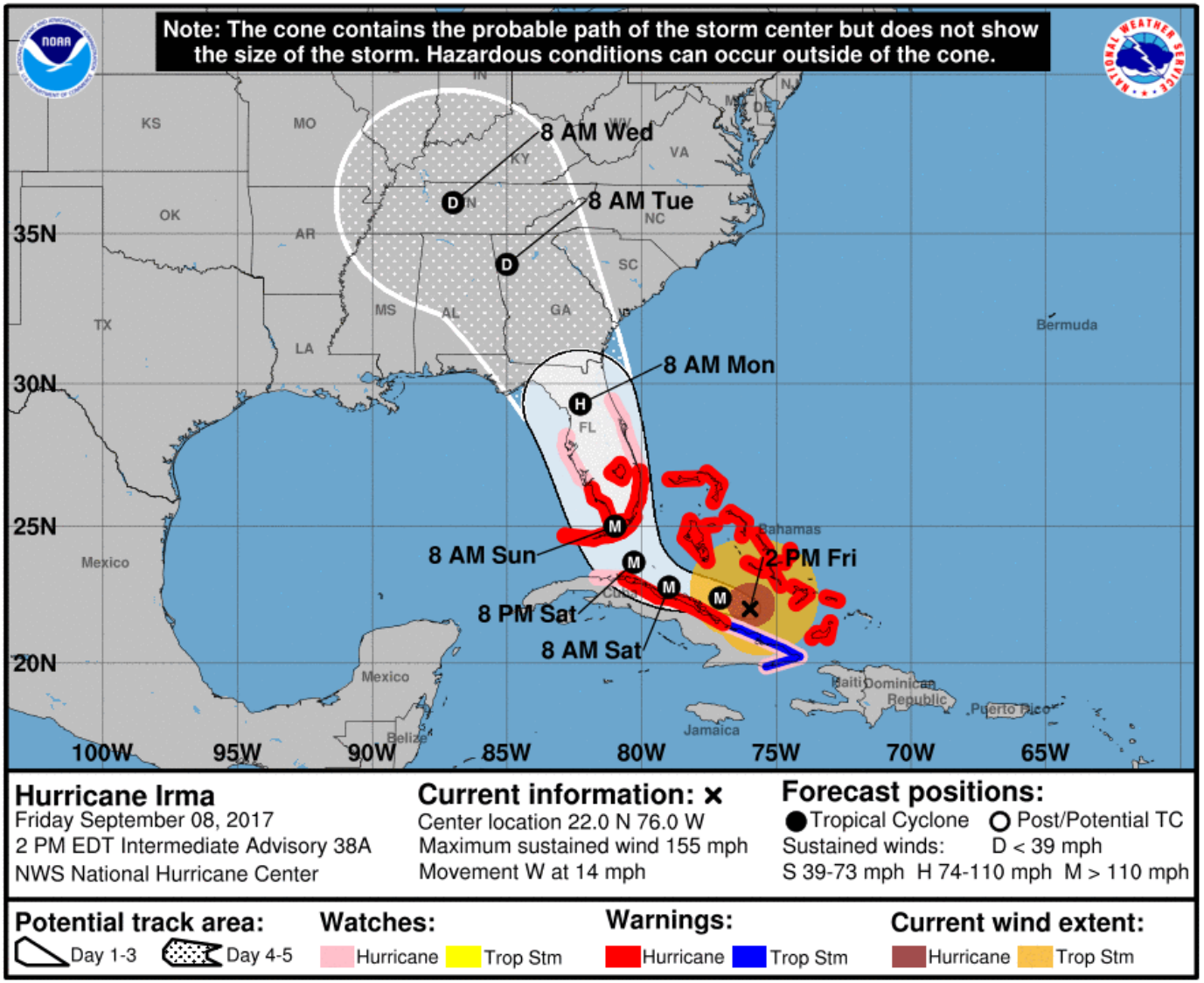
B. Table of criteria to determine whether a case should be reported to public health authorities

Criterion	Reporting
Clinical Evidence	
Death of a person < 18 years of age	N
Illness clinically compatible with influenza infection	N
Cause of death not related to influenza	A
Recovery from febrile, respiratory illness prior to illness leading to death	A
Laboratory Evidence	
Identification of influenza A or B virus infections by at least one of the	

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



Combating Opioid Abuse

CSTE

COLORADO
Department of Public Health & Environment

Center for Health and Environmental Data

Office of eHealth and Data

- Health Surveys & Evaluation Branch
- Public Health Informatics Branch
- Registries and Vital Statistics Branch

health watch

November 2016 No. 100

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

PH Informatics funding

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