

**National Association for Public Health  
Statistics and Information Systems**

**State Vital Statistics Registrar  
Training  
*Excerpts***

**NAPHSIS**  
Protecting Personal Identity  
Promoting Public Health

# HISTORY OF VITAL STATISTICS IN THE UNITED STATES

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- Vital Registration in the United States
  - Constitution does not provide for registration of vital events
  - Process evolved as state function in US
  - Different from many other countries that have national systems
  - Goal is to accurately record all vital events as they occur
  - Information on vital records was originally obtained for legal purposes
  - Over time collection of information greatly expanded to include statistical data for public health monitoring, research and analyses

# HISTORY OF VITAL STATISTICS IN THE UNITED STATES

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- First National Vital Statistics
  - First birth and death statistics published for entire US based on information collected in 1850 decennial census
    - Persons “born within the year”
    - Persons " married within the year”
    - “Disease, if died within the year”
  - Collection of birth and death statistics in census continued through 1900
  - Census data were inaccurate and incomplete
    - People do not remember all facts to report to census takers several months after event occurred
    - Census counts for deaths for 1850, 1860, and 1870 about 40% short of actual number of deaths

# HISTORY OF VITAL STATISTICS IN THE UNITED STATES

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- Development of Annual System for Collection of Vital Statistics from Registration of Vital Events
  - 1902 act made Bureau of the Census a full-time agency of the federal government
  - Bureau director was authorized to annually obtain copies of records filed in vital statistics offices of states and cities with adequate birth and death registration systems
  - Effort to obtain counts of death as part of the decennial census was abandoned

# HISTORY OF VITAL STATISTICS IN THE UNITED STATES

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- Development of Annual System for Collection of Vital Statistics from Registration of Vital Events (cont.)
  - Census Bureau began development of uniform system for registration of vital events
    - Developed model law for vital registration
    - Drafted standard forms
    - Prepared instructions for local registrars, physicians and others filing records
    - Prepared a system of mortality classification for statistical purposes
    - Developed rules of statistical practice
    - Established working relationships with external groups
    - Mentioned possibility of forming national association of registrars

# HISTORY OF VITAL STATISTICS IN THE UNITED STATES

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- Increased Need for Vital Records and Statistics
  - By 1930s responsibility for state vital records had largely moved from civil offices to health departments
  - Use of vital records for public health statistical analysis expanded
  - More individuals needed birth records to prove “facts” about themselves
    - Enactment of legislation such as Social Security and beginning of pension plans
    - In 1940 employment in defense industry required proof of citizenship
    - With World War II, legislation provided for a maternal and infant care program for dependents of service men

# HISTORY OF VITAL STATISTICS IN THE UNITED STATES

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- Move to Public Health Service
  - In 1943, based on a report from the Association of State and Territorial Health Officers, the Budget Bureau recommended
    - “A national vital records office” should be established in the US Public Health Service
    - The new office should assume functions of the Division of Vital Statistics in the Census Bureau
    - State and local vital statistics responsibility should be preserved
  - In 1946 the National Office of Vital Statistics was established in the Public Health Service

# HISTORY OF VITAL STATISTICS IN THE UNITED STATES

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- National Center for Health Statistics
  - In 1960 the National Office of Vital Statistics merged with the National Health Survey to become the National Center for Health Statistics (NCHS)
  - NCHS was reorganized in 1963 with the Division of Vital Statistics (DVS) becoming one of 5 operating divisions
    - Emphasis placed on analysis versus just collection and dissemination of data
    - Emphasis on methodological research including registration methods for vital events
    - Increased relationships with states

## ■ Introduction

- Represents state and local vital records, health statistics and information system agencies
- Mission: “NAPHSIS provides national leadership for both vital records and related information systems in order to establish and protect individual identity and improve population health.”
- Vision: “An accurate, timely, and secure record of all vital events in the nation.”

# CURRENT NAPHSIS PROJECTS AND RESOURCES

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- Inter-Jurisdictional Exchange (IJE) Agreement
  - Provides a method for states to get vital event data for their residents whose events occur in other states
  - Information exchanged through IJE
    - Non-resident vital event information (births, deaths, fetal deaths, and induced terminations of pregnancy) sent to state of residence
    - Death information also sent to state of decedent's birth for linking
    - For infants under one year of age at death, state of death may request a copy of birth certificate from state of birth

# CURRENT NAPHSIS PROJECTS AND RESOURCES

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- STEVE (State and Territorial Exchange of Vital Events)
  - Web based system for exchanging vital events between states using standard IJE file layouts
  - Software application developed by NAPHSIS
    - Automates point-to-point exchange of IJE vital event (birth, death, fetal death, and induced termination of pregnancy) data in a standardized file format
    - Replaces practice of exchanging paper copies and computer abstracts currently used by most states
    - Will automatically strip off and send reportable data to NCHS
    - Can send data to other approved state programs such as newborn hearing screening, immunization, voter registration, etc. via a system of "mailboxes" and data export tools

# CURRENT NAPHSIS PROJECTS AND RESOURCES

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- STEVE (cont.)
  - Can create customized data file that can be used for approved research
  - STEVE currently being used in a number of jurisdictions
    - Installed in five pilot states in 2009
    - All 57 jurisdictions expected to use STEVE along with NCHS
    - As of July 2013, 34 jurisdictions had installed STEVE with an additional 14 in progress or planning stages
    - In future STEVE can be expanded to include additional federal agencies and other trading partners

# CURRENT NAPHSIS PROJECTS AND RESOURCES

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- EVVE (Electronic Verification of Vital Events)
  - Provides federal and state agencies with a quick, easy way to obtain information from birth or death certificates
    - Government agencies can
      - Verify contents of a paper birth certificate (name, age, citizenship, parents)
      - Or, request an electronic certification if they do not have a paper birth certificate
    - Examples of agencies using EVVE system
      - Motor vehicle agencies
      - Medicaid offices
      - Social Security Administration
      - Office of Personnel Management
      - Health departments

# VITAL STATISTICS COOPERATIVE PROGRAM (VSCP)

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- Working Group for Completion of the VSCP
  - Established in 1981 to develop formula for equitable allocation of funds among states
    - Previously no equitable funding arrangement for states
    - Best negotiators got the most funds
  - Members from AVRHS (now NAPHSIS) and NCHS
  - Formula developed by Working Group attempted to determine “true cost” of providing data
    - Included costs for tasks at state/local areas necessary for producing vital statistics
    - Presented a rationale for “federal share” of costs
  - Formula used to distribute VSCP funds beginning with fiscal year 1983

# VITAL STATISTICS COOPERATIVE PROGRAM (VSCP)

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- Simplification of VSCP Formula
  - In 1998 a NCHS/NAPHSIS Working Group was established to evaluate the VSCP formula (3<sup>rd</sup> time)
  - Major changes to VSCP formula by Working Group
    - Greatly simplified the formula
    - Formula did not reflect various levels of automation used in registration areas
    - A formula based on cost was no longer relevant
  - New VSCP formula implemented in 5-year contract starting in fiscal year 2000 and remained in effect with contract revisions through 2011

# VITAL STATISTICS COOPERATIVE PROGRAM (VSCP)

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- Simplification of VSCP Formula (cont.)
  - Major changes to VSCP formula by Working Group (cont.)
    - New distribution formula would include
      - An equal funding base for all registration areas
      - A price per record for each type of record which declined as volume increases
      - A price for each area's square miles and for each licensed hospital
      - A salary adjustment factor which reflected differences in cost of staff in different areas
      - A cost of living adjustment each year
      - A minimum level of funding for low level registration areas

# VITAL STATISTICS COOPERATIVE PROGRAM (VSCP)

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- Current VSCP Contract
  - Implemented in 2012 as 5-year contract
  - Intent to improve the national vital statistics system – “getting from good to great”
  - Contract includes
    - Shortened timelines for submission of data to NCHS
  - Corrective Action Plan (CAP) for states not meeting contract requirements
  - NCHS/NAPHSIS partnership to help states with CAP improve
  - Provision for special projects for improving national vital statistics system

# NATIONAL DEATH INDEX (NDI)

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- Computerized Index of Death Record Information
  - Developed in 1980 to assist health researchers
    - Determine if their study subjects had died
    - In which state the death may have occurred
  - Maintained by NCHS as a resource for epidemiologists and other health researchers
    - Solely for statistical research purposes
    - May not be used for legal, administrative, or other non-research purposes
  - Death record information goes back to 1979 and death records are added annually
  - Fees are charged to the researchers for its use

# SOCIAL SECURITY ADMINISTRATION CONTRACTS

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## ■ Enumeration at Birth (EAB)

### — Background

- Parents had to wait to get birth certificate to apply for Social Security Number (SSN) for their child
- To improve process, SSA established EAB program to allow parents to request child's SSN at hospital
- Question was added to birth certificate for parents to indicate if they wanted the state vital statistics office to send birth notification to SSA
- Implemented as pilot in 1987 and expanded to all states by 1997
- In 1997, SSA was also required by the Taxpayer Relief Act to collect the SSNs of the child's parents which are passed to the IRS for tax administration

# SOCIAL SECURITY ADMINISTRATION CONTRACTS

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- Enumeration at Birth (EAB) (cont.)
  - EAB Contract
    - Originally states sent data files to SSA usually on tape
    - Association negotiated contract with fee per record sent with a guaranteed minimum
    - With the implementation of Electronic Birth Records transmission of data to SSA greatly improved
    - To encourage states to speed up the process, SSA begin paying more for faster transmission

# SOCIAL SECURITY ADMINISTRATION CONTRACTS

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- Social Security Administration Death
  - Background
    - SSA wanted death information from states to cut off benefit payments
    - States began sending data files of death information to SSA
    - Some states required that SSA not disclose state death information to other agencies
    - In 1993, federal legislation allowed SSA to disclose death information received from states to other federal agencies if those agencies paid benefits to individuals

# SOCIAL SECURITY ADMINISTRATION CONTRACTS

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- Social Security Administration Death (cont.)
  - SSA Death Contract
    - NAPHSIS negotiated contract with fee per record sent with a guaranteed minimum
    - Originally states sent data files to SSA usually on tape
    - As electronic death records began to be implemented, SSA provided support to states through NAPHSIS
    - To get information on deaths as soon as possible, SSA worked with NAPHSIS to develop software for use with EDR systems
      - Allows funeral director to verify decedent's SSN when entering death information in EDR
      - SSA is notified of death and terminates benefits
    - The current 5-year death contract began in January 2012

# MODEL STATE VITAL STATISTICS ACT

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- Purpose of Model Law
  - Promotes uniformity among states in
    - Definitions
    - Registration practices
    - Disclosure and issuance procedures
  - Helps ensure that vital records will be readily acceptable in all places as prima facie evidence of the facts recorded therein
  - Enhances the level of comparability of vital statistics data among states

# MODEL STATE VITAL STATISTICS ACT

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- Purpose of Model Law (cont.)
  - Provides guidance to state vital statistics registrars and state legislators when revising their state laws, including
    - Requires registration of all vital events occurring in state
    - Specifies time period for registration
    - Contains penalties for failure to comply with the law
    - Provides for compilation and/or publication of vital statistics
    - Specifies method for funding vital statistics office
    - States requirements for release of vital records

# MODEL STATE VITAL STATISTICS ACT

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- 2011 Revision of Model Act and Regulations
  - Multiple changes in new model law
    - Guidance in moving toward electronic certification and registration of vital events
    - Refocus away from paper-based registration and certification
    - More emphasis on security issues than previous model law

# US STANDARD CERTIFICATES AND REPORTS

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- Models for States to Use in Developing Their Records
  - Close collaboration between NCHS and states in development of standard certificates
  - Contain information for legal and administrative purposes
    - Serve as legal and personal identification
    - Provide information needed by federal, state and local government agencies for numerous social programs and administrative purposes
  - Source of data for national, state and local vital statistics
  - Standardize procedures for data preparation and processing to promote a uniform national data base
  - Represent minimum basic data set necessary to meet requirements of the VSCP contract

# US STANDARD CERTIFICATES AND REPORTS

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- Periodic Review of Standard Certificates
  - Reviewed approximately every 10 to 15 years
  - Evaluated to ensure their intended uses at local, state, and national levels are met
    - Reflect changing conditions and user needs
    - Revise and improve quality of information collected and collection methods
    - Assess if current items are still needed and/or if new items should be added
  - Review includes
    - Persons involved in registration and statistical processes at all levels of government
    - Participation of major data users and providers
    - Input from national organizations and government agencies

# US STANDARD CERTIFICATES AND REPORTS

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- 2003 Revision of Standard Certificates
  - Evaluation process for 2003
    - Began with survey of state vital registration and statistics executives to determine whether revisions were needed
    - Consensus was birth and death certificates and fetal death report should be revised

# US STANDARD CERTIFICATES AND REPORTS

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- 2003 Standard Certificate of Live Birth
  - Substantial changes particularly in medical portion
    - Revisions to medical risk factors, obstetric procedures, complications of labor and/or delivery, method of delivery, abnormal conditions of the newborn, congenital anomalies
    - Questions added about maternal morbidity, mother's height and weight, WIC participation, principle method of payment for delivery, infections present, breast-feeding status
  - Checkbox items were re-designed to elicit more specific responses from data providers
  - Specific items were added to certificate to address data collection needs and to facilitate the linkage of data sets

# US STANDARD CERTIFICATES AND REPORTS

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- 2003 Standard Certificate of Death
  - Items were added to facilitate ICD-10 coding and to improve the quality of cause of death data
    - Did tobacco use contribute to death?
    - More information on pregnancy status at death for females
    - Decedent's role if transportation accident
  - To improve reporting on sensitive items such as Occupation, business/industry, Hispanic origin, race and education of decedent, a section was designated "for statistical use only"
  - Extensive instructions for the medical certifier were added as a detachable page to the certificate
  - Instructions for the funeral director were also added as a separate page to the certificate

# US STANDARD CERTIFICATES AND REPORTS

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- Implementation of 2003 Standard Certificates
  - 2003 standard birth certificate
    - Extensive changes to the items and format
    - Most states were using automated systems to collect birth information from medical facilities
      - 2003 changes meant major revisions were needed to computer programs
      - Many states already planned to move to an Internet-based electronic birth record system for birth data
      - Changing computer systems was extremely expensive and many states did not have funds available
      - NCHS was unable to provide any funding to assist in implementing the new certificates
      - Most states wanted to wait to implement 2003 format until funds were available to reengineer entire birth system

# US STANDARD CERTIFICATES AND REPORTS

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- Implementation of 2003 Standard Certificates (cont.)
  - 2003 standard birth certificate (cont.)
    - As states reengineered their computer programs for an Internet-based electronic birth record system they used the 2003 birth certificate format
      - The timing was different for each state
      - Some states became “early adopters” of the 2003 certificate while others are still in the process of implementing the 2003 version
      - NCHS received different VSCP data sets from states causing processing and analysis problems

# US STANDARD CERTIFICATES AND REPORTS

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- Implementation of 2003 Standard Certificates (cont.)
  - 2003 standard death certificate
    - Same problems with implementation applied to 2003 death certificate
    - Many states were developing Internet-based electronic death registration systems and decided to implement 2003 revision during this development
    - Again, NCHS did not have funding to support implementation
    - Some funding was available from the Social Security Administration because they wanted to improve timeliness of reporting the fact of death
    - As with births, states are at different stages in the implementation process for the 2003 death format with some states yet to implement

- Linking Birth and Death Records
  - Necessary to prevent fraudulent use of birth records
  - Match death records to live birth records
    - In state deaths
    - Out-of-state deaths received through IJE
    - Military deaths and deaths in foreign countries
  - Mark birth record as deceased
  - Document date of death and state or country of death with birth record
  - Certifications of birth records marked deceased should be similarly marked

- Confidentiality of Vital Records Information
  - Necessary to
    - Protect individual privacy
    - Safeguard personal and medical information of individuals
    - Prevent fraud and identity theft
  - Should be specified in vital records law and regulations
    - Data or information contained in vital records should not be disclosed except as specified in law
    - Vital records should not be available for public inspection
    - Only authorized individuals should be able to obtain certifications or information from vital records

- Confidentiality of Vital Records Information (cont.)
  - Care should be taken to prevent inadvertent release of personally identifiable information
    - Information that can be used to distinguish or trace an individual's identity
    - Includes names, Social Security numbers, address
    - When linked to other personal or identifying information, such things as date and place of birth, medical information, facility where event occurred, etc. may be used to identify individuals
  - Disclosure of identifiable information for health and scientific research purposes
    - Personally identifiable information may generally be disclosed
    - Researcher must submit a written request
    - State registrar must approve request

- Confidentiality of Vital Records Information (cont.)
  - Disclosure of identifiable information to government agencies in the conduct of their official duties
    - Should have written agreement signed by agency official
    - Agency should specify intended uses of information obtained from vital records
    - Confidentiality and security of information provided should be protected by agency
    - Agreement should prohibit re-release by of any personally identifiable information other than that spelled out in agreement or without explicit permission of the state registrar
    - Agency should acknowledge that ownership of any vital record information provided remains with state registrar

- Confidentiality of Vital Records Information (cont.)
  - Programs/agencies commonly receiving files of identifiable information
    - For public health purposes
      - Immunization
      - Newborn screening
      - Newborn hearing
      - Cancer registries
      - Other disease or congenital anomalies registries
    - For administrative purposes (may be required by law)
      - Voter registration
      - Medicaid
      - Motor vehicle licensing agency
      - Law enforcement