The National Vital Statistics System





U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES Centers for Disease Control and Prevention National Center for Health Statistics

SAFER • HEALTHIER • PEOPLE™

Vital Statistics

• Birth

Death

Fetal death

 Induced termination of pregnancy

Marriage

Divorce

The "official" records

National Vital Statistics System

- 57 reporting areas
- Decentralized
- US historical development-selfgoverning States
- Nothing on registration in US Constitution
- Responsibility based in state law
- Responsibility with provider of services

History

- **1933** Birth and death registration areas include all States
- **1960** National Center for Health Statistics created
- 1972 Vital Statistics Cooperative program 4 States sent data to NCHS on Computer tape
- **Today** 56 of 57 Registration areas send automated birth and demographic death data to NCHS
 - EBC 95 percent of births
 - EDC electronic death registration under development in several States
 - Data transmitted continuously to NCHS expedited data release

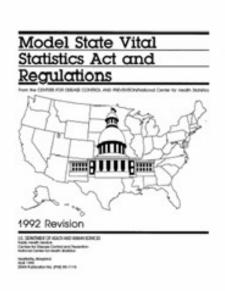
Federal Role Defined by the Public Health Service Act – Sec 306 (h) (1)

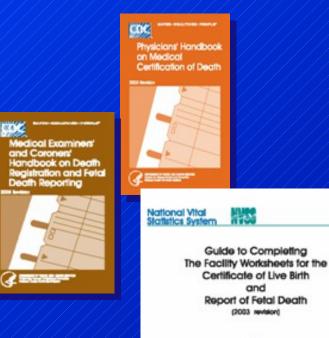
- Annual collection of data from the records of births, deaths, marriages, and divorces
- Satisfactory data in necessary detail and form
- Detailed data on ethnic and racial populations
- Each State or registration area shall be paid by the Secretary the Federal share of its reasonable costs

Promoting Consistency and Uniformity

- Model State Vital Statistics Act and Regulations
- Standard Certificates and Reports standardized worksheets

CDE





Training materials – handbooks, videos, instruction manuals
Technical assistance – ICD 10
Software – ACME, MICAR, etc...

Uses of Vital Statistics

Mortality data are widely used

- Life expectancy
- Leading causes
- Injury mortality
- Occupational mortality
- Causes of death
- Infant mortality
- National Death Index

Natality data used for many purposes

- Birth and fertility rates
- Nonmarital births
- Births to teens
- Prenatal care
- Low birthweight and preterm births
- Cesarean delivery
- Birth timing mother's age
- Pregnancy rates



The report, "America's Children: N port released today. National Indicators of Wellbeing 200 found that the boom of the last decade created a generation of children who better off and better educated than t others and sisters, but whose

By Joyce Howard Price THE WASHINGTON THREE

Federal health officials vesterday released a new report that shows significant improvement in the health of racial and ethnic minorities even though major ethnic disparities persist.

DEATH DISPARITY

Age-adjusted U.S. death rates for selected causes of death by race and Hispanic origin (per 100,000 population)

	Al	White	Black	Hispanic	Asian'
Total deaths, 1990:	518	483.7	785.2	395.2	285.5
Total deaths, 1998:	471.7	452.7	710.7	342.8	264.6
-					

to 19, the National Center for Health Statistics (NCHS) said in its preliminary report on births in 2000. This represents a nearly 22 Percent decline from 1991, when there were 62.1 births per 1,000 Description.

The decline is "very encouraging news," Health and Human Services Secretary Tommy G. Thompson said posterday. At the same time, the number of

babses born to single women reached a new record high in 2000, the NCHS reported.

In 1999, J. Jon 360 babies were born out of wedlock. In 2000, the number of out-of-wedlock births jumped to J.345.917. The sectors

Secretary Tommy G. Thompson

NCHS report released last October number of unwed births has risen every year since 1940, when 89,500 babies were born out of wedlock, the NCHS said in its October report, "Nonmarital Childbearing in the United States, 1940-99."

Other highlights from yesterday's NCHS report on births in

· Total U.S. births reached 4.064,948, a 3 percent increase from 1999 and one of the highest birthrates in a decade.

· Blitter Bleesensterner

Other Vital Statistics Data Sets Linked birth/infant death file

 Unique data file which links death certificates for infants under one year to their respective birth certificate. This provides critical maternal characteristics that can be linked with the death certificate information.

Complementing National Natality Datasets

- Matched multiple birth file (twins, triplets, quads)
- Fetal death

Perinatal file (live births, infant deaths, fetal deaths)

Future for Vital Statistics

Revised Birth Certificate

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Revised Death Certificate

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Revised Birth Certificate

- More detail on cigarette smoking
- Method of delivery
- More height & weight info
- Congenital anomalies

Infertility treatment

• WIC

- Infections during pregnancy
- Maternal morbidity
- Breast feeding
- Payment for delivery

New worksheets developed and tested – to encourage data collection from the most appropriate sources

Revised Death Certificate

- Decedent's marital status distinguishes "Married" from "Married, but separated"
- Place of death includes hospice
- If female, pregnancy status at time of death to identify maternal and pregnancy-related deaths

- If transportation injury, decedent's status with respect to vehicles
- Did tobacco use contribute to death?
- Separate instructions for funeral director and person completing medical portion

New Data on Race and Educational Attainment for Births and Deaths

 Data on race and ethnicity conforming to 2000 Census data collection

 Data on education conforming to 2000 Census data collection

22. MOTHER'S RACE (Check one or more races to indicate what the mother considers herself to be)

□ White

- □ Black or African American
- □ American Indian or Alaska Native

(Name of the enrolled or principal tribe)

- \square Asian Indian
- □ Chinese
- 🗆 Filipino
- □ Japanese
- □ Korean
- □ Vietnamese
- □ Other Asian (Specify) _
- □ Native Hawaiian
- $\hfill\square$ Guamanian or Chamorro
- 🗆 Samoan
- □ Other Pacific Islander (Specify)
- □ Other (Specify) _

51. DECEDENT'S EDUCATION (Check the box that best describes the highest degree or level of school completed at the time of death)

- □ 8th grade or less
- □ 9th 12th grade; no diploma
- □ High school graduate or GED completed
- \Box Some college credit, but no degree
- □ Associate degree (e.g., AA, AS)
- □ Bachelor's degree (e.g., BA, AB, BS)

 $\hfill\square$ Master's degree (e.g., MA, MS, MEng, MEd, MSW, MBA)

□ Doctorate (e.g., PhD, EdD) or Professional degree (e.g., MD, DDS, DVM, LLB, JD)

Where are we Now?

 Births registered electronically for well over a decade, but States are using individually developed legacy systems not adaptable for the revised certificates.

 Death registration has never been electronic. Need to get hospitals, physicians, and funeral directors to use electronic systems and update their technology.

 In sum, implementing new certificates requires States to re-engineer their data collection systems for birth and deaths.

Progress to Date

 Work complicated and intense, historic new approach to improving timeliness and data quality – States accustomed to working independently

 Work on functional requirements phase now nearly complete

 Individual States or, hopefully, collections of States will be able to use the requirements to better develop more standardized re-engineered systems

NCHS Role in Transition

- NCHS does not have funds to take this effort to the next stages – i.e., to build the prototypes
- Georgia and New York City heavily involved in developing functional requirements; hope they can take this to next stage – to develop prototypes for birth and death
- Significant resources needed not now available

The National Survey of Family Growth (NSFG)

Purpose of the NSFG

- Provide reliable national data on marriage, divorce, contraception, infertility, and the health of women and infants in the U.S.
- Complements birth statistics; 5 surveys since 1973
- "Snapshot" of U.S. fertility, family formation, and reproductive health
- Track national health objectives and evaluate health & social policies:
 - Welfare Reform, nutrition monitoring, family planning services

Demographic and public health research

 Major funding from NICHD, OPA, CDC, ACF, others What's New in Cycle 6?
Men included for first time in 2002
Information on children fathered; father involvement; recent sexual activity and contraceptive use

- Oversamples: Hispanics, Blacks, and teens
- Data for men and women on:

Marriage, divorce, and cohabitation

HIV risk behaviors

 Attitudes toward marriage, children, families

Status of Cycle 6

- Completed interviews with 12,572 men and women 15-44 in March 2003
- Achieved 79% response rate
- Cuts in teens and other samples to offset increases for:
 - New questionnaire development
 - Finding people, especially men, at home
- Data file preparation release Summer 2004
- Major reports on men, women, and teens in 2004

Planning for Cycle 7

Exploring continuous interviewing to collect data more frequently and more efficiently

- More cost-efficient fieldwork
- More frequent and timely data
- First priority: A larger national sample, starting in 2006

Other possibilities:

- Wider age range
- Include military population; incarcerated population
- State or city samples

Ultimate design and schedule will depend on resources \$\$\$

Other DVS Activities

- **Early Childhood Longitudinal Study Birth Cohort**
 - Followback survey, now underway, conducted by NCES
 - Comprehensive study of all aspects of infant and child health and development
 - Uses birth certificates for sampling frame
 NCHS key role in obtaining State
 - cooperation
- **Recent NCHS followback surveys**
 - National Maternal and Infant Health Survey, 1988
 - National Mortality Followback Survey, 1993

Other DVS Activities (cont.) Future for followback surveys

- Immense research potential to explain factors surrounding sentinel events of birth and death
- Very expensive and resource intensive \$\$\$
- NCHS hopes to resume leadership role in followback surveys in near future

Challenges in Creating National Data Sets for Births and Deaths

Tracking who's doing what, when

Implementation schedules

- Some will implement entire standard certificate
- Some will implement partial certificate
- Some will implement multiple race only
- Some will implement mid-year
- Putting together a National data set
 Comparability between jurisdictions
 Comparability over time

Implementation of the Revised Race/Ethnicity Standard ...

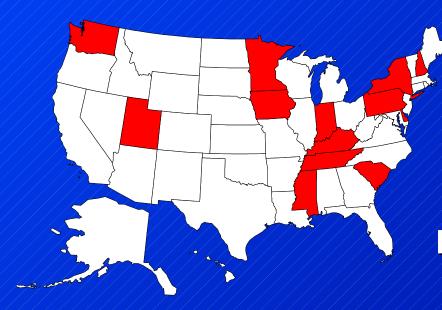
- Has not yet occurred in State birth and death record systems, with a few exceptions;
- Several States are sending multiple-race data to NCHS in 2003 for processing with NCHS' coding and editing software: California, Washington, Hawaii currently transmitting, and others are on the way or soon will be.
- NCHS transmits the edited codes back to the States for their own use.

The Compatibility Problem...

- Race data are not compatible between States;
- Race data are not compatible between vital records and data collected in the 2000 census or produced for post-censal estimates.
- OMB recognizes the problem of incompatibility between data systems and allows agencies to employ a "bridge period."
- Provide consistent numerators and denominators for transition period, before all data are available in the new format.
- To get national rates, we must bridge numerator data as an interim measure until all States collect multiple-race vital statistics.

Challenges to National Data Sets for Other Key Birth and Death Items Items modified or changed Birth: Education, Prenatal care, Smoking, Maternal weight gain Death: Place of Death, autopsy findings, marital status **Items added** Birth: Fertility therapy, WIC, Maternal morbidity, Source of payment for delivery Death: Relationship of informant to decedent, date of death, tobacco, pregnancy status, transportation injury Sources potentially changed Health/medical items on birth certificate from medical records NOT parents

2004 – Revised Birth Data Expected



2004 – Revised Death Data Expected

