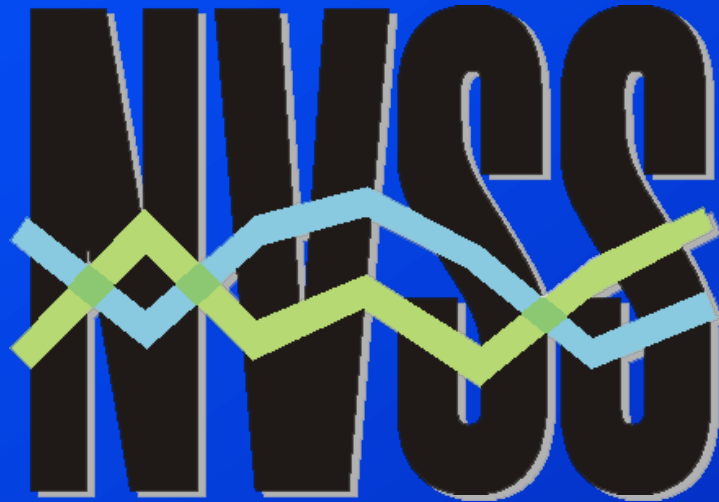


The National Vital Statistics System



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-self-governing States**
- **Nothing on registration in US Constitution**
- **Responsibility based in state law**
- **Responsibility with provider of services**

History

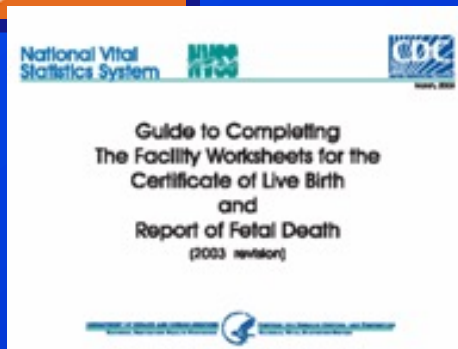
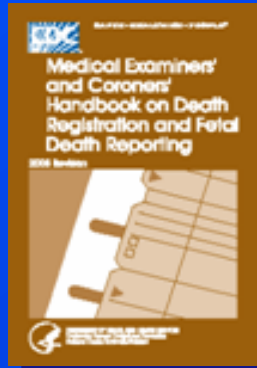
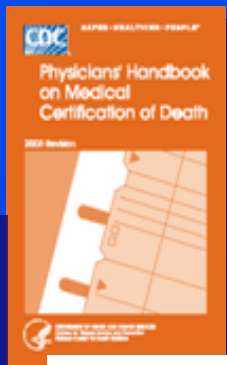
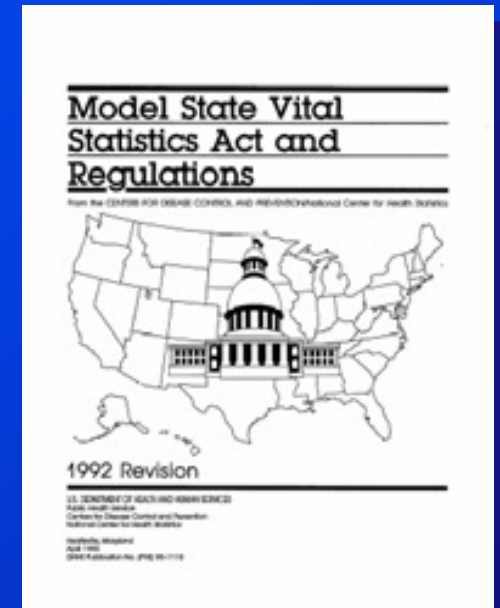
- 1933** • Birth and death registration areas include all States
- 1960** • National Center for Health Statistics created
- 1972** • Vital Statistics Cooperative program – 4 States sent data to NCHS on Computer tape
- Today** • 56 of 57 Registration areas send automated birth and demographic death data 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



- 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**

Irreconcilable differences

Three factors that increase the likelihood of divorce are age, whether one's parents are still married, and income, according to a survey of nearly 10,000 women.

Probability that a first marriage will last 10 years or longer is 40 percent, according to the survey.

Marriage success linked to parents' relationship

By M.A.J. McKenna
Palm Beach Post-Cox News Service

ATLANTA — Couples who live together are twice as likely to get married as those who are married. A woman's marriage would end within 10 years was 20 percent more likely if her parents were divorced.

U.S. life expectancy highest ever

By ERIN McCLAM
The Associated Press

you follow what's generally considered a good lifestyle, and you have good genes, you can beat a lot of stuff that can get in the way of a long life.

health risks and demographics. The number does not take into account medical breakthroughs that might happen years from now to extend those lives even further.

Among whites, life expectancy was put at 77.4 last year, compared with 71.8 among blacks.

THE WASHINGTON POST

Child Welfare Improving, Study Says

Down to Lowest Levels in 20 Years

NATIONAL NEWS

Teen Death, Youth Poverty

By GLENDA COOPER
Washington Post Staff Writer

The teen death rate and the rate of births to teenage mothers continued their declines in the late 1990s, dropping to the lowest point in two decades thanks to better economic opportunities and intensified community efforts, according to a report released today.

The report, "America's Children: Key National Indicators of Wellbeing 2001" found that the boom of the last decade created a generation of children who are better off and better educated than their parents and siblings, but whose lives are still marked by poverty and discrimination.

Minorities' health improving, but gap persists, report shows

By Joyce Howard Price
THE WASHINGTON TIMES

Federal health officials yesterday 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)

	All	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

Teen births drop to new low in 2001

Babies born out of wedlock up again

By Cheryl Weitzstein
THE WASHINGTON TIMES

The teen birthrate reached another record low in 2000, continuing a trend that began in 1991, the federal government said yesterday.

The birthrate for teens fell to 48.7 births per 1,000 teens ages 15 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 teens.

The decline is "very encouraging news," Health and Human Services Secretary Tommy G. Thompson said yesterday.

At the same time, the number of babies born to single women reached a new record high in 2000, the NCHS reported. In 1999, 1,308,560 babies were born out of wedlock. In 2000, the number of out-of-wedlock births jumped to 1,345,917. The

"The decline is 'very encouraging news,'"
Health and Human Services Secretary Tommy G. Thompson

NCHS report released last October. With the exception of four years — 1942, 1948, 1995 and 1997 — the 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 2000:
 • Total U.S. births reached 4,064,948, a 3 percent increase from 1999 and one of the highest birthrates in a decade.
 • Birthrates for whites

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)**

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) _____
- Asian Indian
- Chinese
- Filipino
- Japanese
- Korean
- Vietnamese
- Other Asian (Specify) _____
- Native Hawaiian
- 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
- Some college credit, but no degree
- Associate degree (e.g., AA, AS)
- Bachelor's degree (e.g., BA, AB, BS)
- 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**

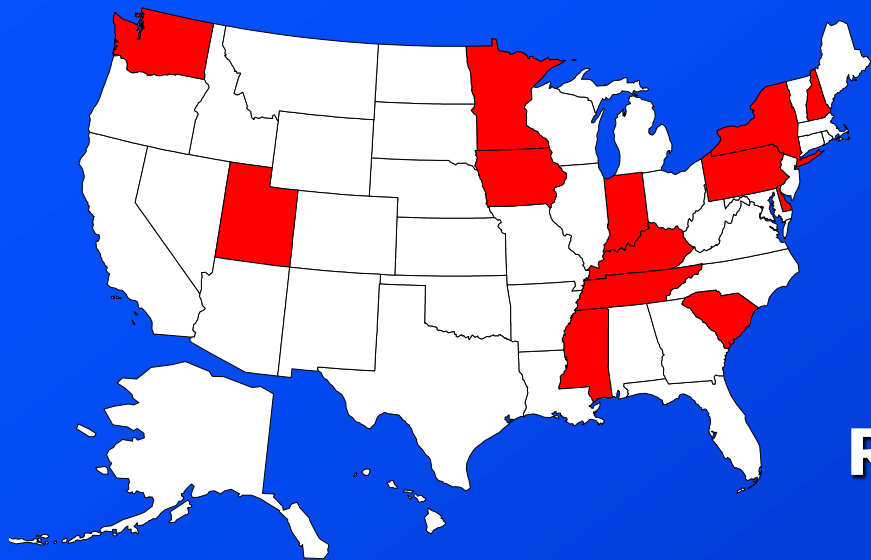
Items added

- **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

