

Overview of the National Health Interview Survey

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Centers for Disease Control and Prevention
National Center for Health Statistics**

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Questionnaire Contents

- **Roster of families and members**
- **Demographics**
- **Socioeconomic status**
- **Limitation of activity**
- **Injuries and poisonings**
- **Respondent assessment of health status**

Questionnaire Contents

- **Utilization of health care services**
- **Health insurance status**
- **Chronic conditions**
- **Health behavior**
- **Height and weight**
- **Supplements**

NHIS Sample Design

- **Household interview survey**
- **Nationally and regionally representative of the non-institutionalized civilian population of the United States**
- **Complex design**
- **Over-sample black and Hispanic populations**

NHIS Sample Design

- **Fielded continuously throughout year**
- **Each week – representative sample**
- **1995-2006 design**
 - ~40,000 households; ~105,000 persons
 - ~37,000 sample adults
 - ~15,000 sample children

1997 NHIS Redesign

- **Implemented Computer Assisted Personal Interviewing (CAPI)**
- **Major changes in questionnaire content and format**

NHIS Field Procedures

- **Trained interviewers from the US Census Bureau**
- **In-home personal interview**
- **Use of telephone permitted after initial contact**
- **Advance letter**
- **Informed consent**

Geographic Detail from NHIS

- **National**
- **4 Census Regions: Northeast, Midwest, South, West**
- **Metropolitan Statistical Areas (MSA)**
 - Know if household is in MSA, etc.
 - MSAs identified if >1 million population
- **State: plan to identify largest in future**

Questionnaire Coverage

Component

Includes

Household

All HH members

Family

All family members

Sample Child

One child/family

Immunization

Sample child

Sample Adult

One adult/family

Supplements

Any of the above

Component Response Rates: Unconditional

<i>Component</i>	<i>1999</i>	<i>2000</i>	<i>2001</i>	<i>2002</i>
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Percent

Family
88

86

87

88

Sample child
81

78

79

81

Sample adult
74

70

72

74

Component Response Rates: Conditional

<i>Component</i>	<i>1999</i>	<i>2000</i>	<i>2001</i>	<i>2002</i>
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Percent

Family
98

98

98

99

Sample child
92

91

91

92

Sample adult
84

81

83

84

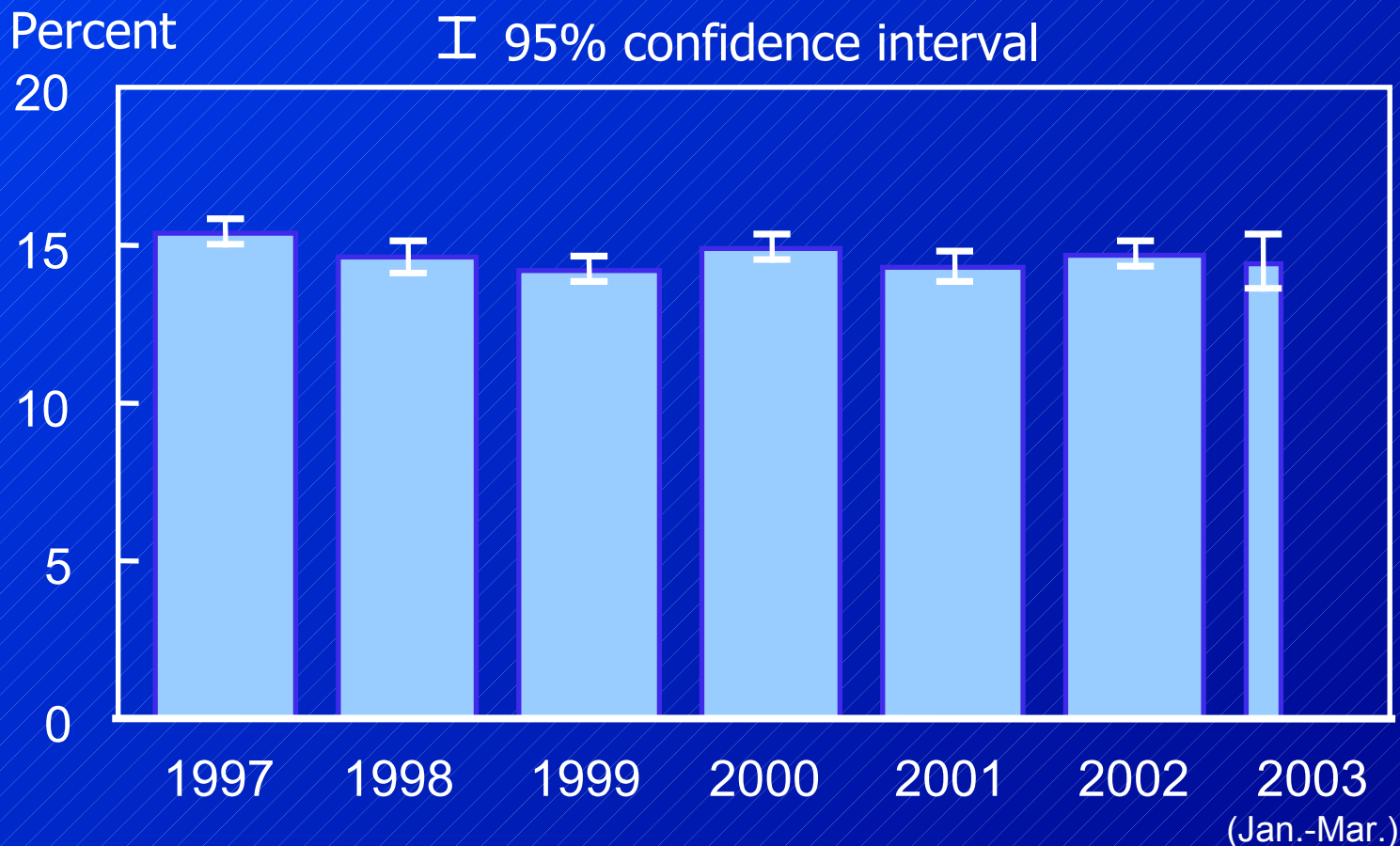
Integration of NHIS with Other Surveys

- **NHIS is linked to the National Death Index**
- **NHIS respondents serve as the sampling frame for the Medical Expenditure Panel Survey (MEPS)**
- **NHIS and MEPS are periodically linked**

Selected NHIS Supplements

<i>Topic</i>	<i>Co-sponsor(s)</i>	<i>Year</i>
Healthy People 2000/2010	Multiple	All
Mental health	NIMH	1999
Cancer control	NCI/CDC	2000, 2005
Children's mental health	NIMH	2001-
Complementary and alternative medicine	NCCAM	2002
Cell phone usage	(NCHS only)	2003, 2004

Sample Graph from Early Release Program Released September 30, 2003



Percent of persons of all ages without health insurance coverage:
United States, 1997-2003

NHIS Re-engineering Project

Main Components of Re-engineering Project

Update data collection system

- Replace current CAPI software with Blaise instrument**
- CAPI instrument adopted in 1997 is now antiquated**
- Migrate from a DOS to a Windows platform**

Main Components of Re-engineering Project

Re-engineer the data processing system

- **Use database technology**
- **Move routine processing to earlier stages**
- **Minimize the tendency to “over edit”**
- **Develop automated systems for editing and analysis**
- **Train staff to maintain and develop**

Expected Benefits

- **Improved data quality**
- **Even better timeliness – release of microdata six months after data collection ends**
- **Easier production of Early Release estimates**
- **Strengthened analytical capabilities**
 - **Less time editing and more time analyzing**
 - **New analytic tools**

Coping with a Flat Budget

Sample cuts

- **1 week in April 2002**
- **2 weeks in July 2002**
- **2 weeks in October 2002**
- **3 weeks in April 2003**
- **2 weeks in December 2003**
- **? weeks in 2004**

Coping with a Flat Budget

- **Cancellation of interviewer retraining in January 2003**
- **Postponement of implementation of sample redesign from 2005 to 2007**

In-house Analysis in the Division of Health Interview Statistics

Editing

- **Most analysts also edit data**
- **Re-engineering will simplify editing, free up some analyst time, and facilitate analysis**

Topics of Some Current Projects

Subject Matter Studies

- **Marital status and health**
- **Utilization of mental health services by U.S. children**
- **Physical activity among adults**
- **Asthma prevalence in U.S. children and adults**
- **National trends and correlates of skin cancer screening**
- **Prevalence of selected health behaviors among U.S. adults**
- **The emotional and behavioral health of children**

Topics of Some Current Projects

- **Access to health care among Hispanic children**
- **Psychometric properties of the parent-reported Strengths and Difficulties Questionnaire for American children**
- **Epidemiology of COPD and smoking**
- **Prevalence of self-reported diabetes, use of glucose regulating medications, and usual source of care among adults in the United States by race and Hispanic origin**
- **Functional limitations among adults**
- **Health insurance coverage among Hispanic persons**

Topics of Some Current Projects

- The relationship between health insurance, managed care, and access to healthcare
- **Analysis of SLAITS' National Asthma Survey**
- The role of socioeconomic status in receipt of a yearly influenza immunization among employed target group adults 18-64 years of age
- Cigarette smoking and cessation among Asian-Americans
- Selected estimates from NHIS: Before/after the 9/11 attacks
- Race reporting by Hispanic respondents
- **Analysis of SLAITS' National Survey of Early Childhood Health**

Topics of Some Current Projects

Methodological Studies

- **Analysis of the determinants of family income nonresponse**
- **Multiple imputation of missing income data at the individual and family levels using sequential regression imputation**
- **Reasons for partials and break offs in the NHIS**
- **Using Blaise audit trails with the NHIS**
- **Plan and operation of the 2002 Joint Canada/United States Survey of Health**
- **Innovations in Spanish translation**

**Special Topic:
Estimating the Prevalence
of Uninsured Children
Using Data from SLAITS**

SLAITS: The State and Local Area Integrated Telephone Survey

- **Developed by CDC/NCHS**
- **Addresses need for subnational data**
- **Uses sampling frame from the National Immunization Survey**

Sampling Frame: National Immunization Survey

- **Designed to produce immunization coverage estimates for 50 states and 28 metropolitan areas**
- **Random-digit-dial telephone survey**
- **Screens about 1 million households annually**
- **Target population: 19-35 months old**

Key Features of SLAITS

- **Expands on the National Immunization Survey**
 - **Random-digit-dial telephone survey**
 - **Computer assisted telephone interviewing (CATI)**
- **Customized content and sample**

National Survey of Children with Special Health Care Needs, 2001

- **Produced national and state-based estimates on the prevalence and impact of children with special health care needs (CSHCN)**
- **Will be repeated in 2005**

National Survey of CSHCN Interview Process in 2001

- Screened 2.6 million telephone lines to identify households with children <18**
- Screened all children to identify CSHCN**
- Detailed questionnaire for 38,866 CSHCN (~750 per state)**
- Asked about health insurance coverage for an additional 176,296 children without special health care needs**

Results and Discussion

	<i>National Survey of CSHCN</i>	<i>National Health Interview Survey</i>	<i>National Survey of America's Families</i>	<i>Current Population Survey</i>	<i>Medical Expenditure Panel Survey</i>
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Insurance coverage rate

Insured	91.7	89.0	87.4	88.3	85.5
Uninsured	8.3	11.0	12.6	11.7	14.6
