



Statistical Notes

From the CENTERS FOR DISEASE CONTROL AND PREVENTION/National Center for Health Statistics

Priority Data Needs: Sources of National, State, and Local-Level Data and Data Collection Systems

Insun Kim and Kenneth G. Keppel

Introduction

Healthy People 2000's Priority Area 22 is focused on the need for surveillance and data systems to measure the health status of the population and to plan, implement, describe, and evaluate public health policies and programs (1). Objective 22.1 specifically addresses the need to develop a set of health status indicators appropriate for all levels of government and establish wide use of the indicators. In order to support the implementation of Objective 22.1, the National Center for Health Statistics (NCHS) of the Centers for Disease Control and Prevention (CDC) established Committee 22.1, composed of the members appointed from the key public health associations and organizations. The Committee was charged with developing a minimum set of community health status measures to address Objective 22.1. Its final report (2), released in 1991, contains the Committee's recommendations in the form of two summary lists: Health Status Indicators (HSIs) (3,4,5) and Priority Data Needs (PDNs). The purpose of this Statistical Note is to provide definitions, State-level data sources, and standardized core questions for PDNs. The details provided in this Note should help State, Tribal, and local health agencies collect and evaluate these data items and, thereby, adopt the measures in the assessment of their community's health status and program planning, development, and evaluation.

Priority Data Needs: Background

As part of their mandate to identify a set of indicators of community health status which would be relevant to public health practice, the Committee 22.1 identified PDNs as indicators that would be important for evaluating the health of a population; however, data for these indicators were not necessarily available for all levels of government. The Committee's recommendation that existing data collection systems be modified to accommodate the PDNs served as an impetus for the development of alternative collection mechanisms to measure the PDNs. One such mechanism was developed by the Information Transfer System, Inc., of Ann Arbor, MI (ITS), with a grant from the Agency for Health Care Policy and Research. A survey instrument was developed as a demonstration project having the following features: i) a cost-effective telephone sampling methodology for use at the local jurisdiction level, ii) a core questionnaire covering as many PDNs as possible in a manner that assured the highest level of comparability with data from State (e.g., Behavioral Risk Factor Surveillance Survey (BRFSS) (6)) and Federal surveys (e.g., National Health Interview Survey (NHIS) (7)), and iii) an overall research design that was as cost-effective as possible while maintaining a high level of reliability and validity.

In 1992 NCHS funded ITS to pilot test the design and instrumentation of the local survey. The pilot project covered data collection (using list-assisted random digit dialing and a



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



computer-assisted telephone interview), analysis, reporting, and consultation in a total of six pilot sites representing nine local health jurisdictions across the nation.

The Committee reconvened on September 11, 1996. Based on reviews of the pilot test (the design, instrumentation, and data collection system of the pilot survey) and the availability of published statistics from national and State surveys, the Committee approved the following changes and enhancements to the PDNs. The changes also reflect the midcourse revisions of the *Healthy People 2000* objectives (8) and interpretations of the previously published PDNs.

- The PDN for childhood immunization is defined to follow the schedule used by the National Immunization Survey (NIS) (9) and the NHIS.
- The PDN for adult immunization is subdivided into two categories—pneumonia and influenza—to reflect data availability.
- Water quality data are available separately for two beneficial uses of three water body types (10). Therefore, this PDN is subdivided into six subcategories. No survey questions are recommended for use at the local level because the PDN is not amenable to survey data collection.
- PDNs for Pap test and mammogram usage are defined according to the corresponding year 2000 objectives.
- Health care coverage and regular source of care were expressed in the original PDNs as negative indicators; that is, the higher the statistic the worse the health status. To be consistent with the other PDNs, the definitions of these two items are restated as positive indicators. Further, because data sources differ for children and adults, the health care coverage PDNs are subdivided into two age groups: i) under 18 years, and ii) 18–64 years. Regular source of dental services is defined as having last visited a dentist within the past year.
- PDNs for cigarette smoking and alcohol misuse are modified to be consistent with State-level surveys. Further, both items are subdivided for two separate age groups: i) adolescents in grades 9 through 12, and ii) adults 18 years and older.
- The PDN for obesity is changed to overweight and subdivided into adults and adolescents. The new definition is consistent with the corresponding year 2000 objectives and available data.
- For hypertension and hypercholesterolemia, the Committee decided to focus on the awareness of the respective conditions.
- The PDN for confirmed abuse and neglect of children is consistent with the definition used by the National Child Abuse and Neglect Data System of the National Center on Child Abuse and Neglect, Administration on Children, Youth and Families (11). No survey questions were recommended for use at the local level because the PDN is not amenable to survey data collection.
- Childhood blood lead screening is assessed with two PDN measures because screening is not conducted universally. A measure of the proportion of children screened in a community is considered a good indicator of service delivery and awareness of the condition. The second measure is the proportion of the screened children who have elevated blood lead levels.

- The PDNs for incidence of hepatitis B and childhood oral health are unchanged. These measures, however, are not amenable to survey data collection.

Table 1 presents a summary of the revised PDNs, related *Healthy People 2000* objectives, applicable national data sources, and recommended data sources for State-level estimates. Data for recent data years are available for the PDNs (and for the HSI) through the Internet on the CDC FTP-server (12).

Detailed definitions of PDNs

Each PDN is listed below in a short-text format. The relevant year 2000 objectives are also given. Four sections follow for each definition:

PDN definition— represents a supplementary, detailed definition of the PDN, providing a more detailed classification and specific target age group.

Data sources— describes data collection systems used to produce national- and State-level estimates of the PDNs and highlights similarities and differences between the national- and State-level data sources. The most significant source of State-level data is the BRFSS. BRFSS is a State-based surveillance system in which all 50 States and the District of Columbia participate. This data system has three components: core, rotating core, and modules. The core questionnaire is administered yearly by all participating States, whereas items in the rotating core are collected in alternating years. Optional modules are selected by states, and the number of participating States may vary. The BRFSS is a CDC and State collaborative data system with funding from and the content determined by both CDC and the States. While there are differences in the design and operation of the survey among States (13), efforts are made to maximize the similarities to facilitate data comparisons among them.

Recommended data source for State-level estimates— identifies data systems designed to provide State-level data. A number of national data systems are based on reports submitted by States and have available State-level data for most States. Although included in the list, data from such data systems should be used with caution when comparing with other States because of wide variations in reporting practices and different procedures and criteria used.

Recommended core questions— are a minimum set of survey questions that could be used to measure PDNs at the local level. These questions have been selected from the existing surveys to promote the highest level of comparability with national- and State-level sources. In cases where questions were available from both national- and State-level data sources but the questions were not identical, the latter was selected. The national- or State-level survey from which the recommended core questions are derived is provided in brackets for ease of reference. Most questions were utilized in their original form from these surveys. The BRFSS does not obtain data on children under 18 years of age.

Table 1. Priority Data Needs*: Enhanced definitions, Year 2000 objectives, and sources of national- and State-level data

Priority data needs	Corresponding Year 2000 objectives	National data source	State data source
1. Children 2 years of age who have been immunized with the 4:3:1 series (See text for explanation)	20.11	NHIS, NCHS, CDC	NIS, NCHS, CDC
2. Adults aged 65 years and older who have been immunized for: a. Pneumococcal pneumonia b. Influenza	20.11	NHIS, NCHS, CDC	BRFSS, NCCDPHP, CDC
3. Assessed waterbodies that support: a. Consumable fish i. Rivers ii. Lakes iii. Estuaries b. Swimming i. Rivers ii. Lakes iii. Estuaries	11.10	NWQI, OW, EPA	---
4. Women 18 years and older who have received a Pap test within the preceding 3 years	16.12	NHIS, NCHS, CDC	BRFSS, NCCDPHP, CDC
5. Women 50 years and older who have received a mammogram within the preceding 2 years	16.11	NHIS, NCHS, CDC	BRFSS, NCCDPHP, CDC
6. Population insured for medical care a. Under 18 years b. 18 to 64 years	21.4	NHIS, NCHS, CDC	6.a: --- 6.b: BRFSS, NCCDPHP, CDC
7. Population with a regular source of: a. Primary care i. Under 18 years ii. 18 years and older b. Dental services i. Under 18 years ii. 18 years and older	21.3 13.14	NHIS, NCHS, CDC	7.a.1 and 7.b.i: --- 7.a.ii and 7.b.ii: BRFSS, NCCDPHP, CDC
8. Cigarette smoking a. 9th through 12th grades b. 18 years and older	3.5 3.4, 15.12, 16.6	8.a: --- 8.b: NHIS, NCHS, CDC	8.a: YRBS, NCCDPHP, CDC 8.b: BRFSS, NCCDPHP, CDC
9. Alcohol misuse a. 9th through 12th grades b. 18 years and older	4.7	9.a: MFS, NIDA, NIH 9.b: NHIS, NCHS, CDC	9.a: YRBS, NCCDPHP, CDC 9.b: BRFSS, NCCDPHP, CDC
10. Overweight a. 12 to 17 years b. 18 years and older	1.2, 2.3, 15.10, 17.12	10.a: NHANES, NCHS, CDC 10.b: NHIS, NCHS, CDC	10.a: --- 10.b: BRFSS, NCCDPHP, CDC
11. Hypertension awareness among persons 18 years and older	15.4, 15.5, 15.13	NHIS, NCHS, CDC	BRFSS, NCCDPHP, CDC
12. Hypercholesterolemia awareness among persons 18 years and older	15.8, 15.14	NHIS, NCHS, CDC	BRFSS, NCCDPHP, CDC

Table 1. Priority Data Needs*: Enhanced definitions, Year 2000 objectives, and sources of national- and State-level data—Con.

Priority data needs	Corresponding Year 2000 objectives	National data source	State data source
13. Confirmed abuse and neglect of children (per 1,000 children)	7.4	NCANDS, NCCAN, ACF	NCANDS, NCCAN, ACF
14. Children 5 years and younger who have been: a. Tested for blood lead levels b. Tested and have blood lead levels greater than 15 µg/dL	11.4	NHANES, NCHS, CDC	---
15. Incidence of hepatitis B (per 1,000 population)	20.3	NNDSS, EPO, CDC	---
16. Children with one or more decayed primary or permanent teeth a. Aged 6-8 years b. 15 years	13.1	NSDC, NIDR, NIH	---

--- Data not available.

* Position of indicator does not imply priority.

Data source abbreviations:

BRFSS	Behavioral Risk Factor Surveillance System
MFS	Monitoring the Future Study
NCANDS	National Child Abuse and Neglect Data System
NHANES	National Health and Nutrition Examination Survey
NHIS	National Health Interview Survey
NIS	National Immunization Survey
NNDSS	National Notifiable Disease Surveillance System
NSDC	National Survey of Dental Caries in U.S. School Children
NWQI	National Water Quality Inventory
YRBS	Youth Risk Behavior Survey

Agency abbreviations:

ACF	Administration on Children, Youth and Families
CDC	Centers for Disease Control and Prevention
EPA	Environmental Protection Agency
EPO	Epidemiology Program Office
NCCAN	National Center on Child Abuse and Neglect
NCCDPHP	National Center for Chronic Disease Prevention and Health Promotion
NCHS	National Center for Health Statistics
NIDA	National Institute for Drug Abuse
NIDR	National Institute for Dental Research
NIH	National Institutes for Health
OW	Office of Water

Therefore, the phrase “same as BRFSS adult question” is indicated if BRFSS questions are utilized to address those under 18 years of age. If the questions have been modified from the source data system, this is also noted. All additional questions required to capture relevant responses are listed.

INDICATORS OF PROCESSES

1. Proportion of children 2 years of age who have been immunized with the basic series [as defined by the Immunization Practices Advisory Committee (14)]

Related Objective 20.11: Increase basic immunization series among children through age 2 to at least 90 percent.

PDN definition: Proportion of children 19–35 months of age who have been immunized with 4:3:1 series (four doses of diphtheria, tetanus toxoids and pertussis vaccine; three doses of poliovirus vaccine, and one dose of measles-mumps-rubella vaccine).

Data sources: The NIS is an ongoing telephone survey to provide estimates of vaccination coverage levels among children aged 19–35 months. Implemented in April 1994, NIS collects quarterly data from all 50 States and the District of Columbia. In addition, it currently provides estimates of vaccination coverage levels in 27 urban areas considered to be at high risk for undervaccination. The NHIS Immunization Supplement, administered in-person, also provides national-level estimates of immunization coverage among children aged 19–35 months. Data from this survey is used to adjust the NIS for non-phone bias. Both NIS and NHIS have identical question wording and sequence.

Recommended data source for State-level estimates: NIS

Recommended immunization questions for children:

For children 19–35 months of age [From the NIS and an NHIS Supplement]:

If shot record is available

Looking at the shot record, please tell me how many times (*child*) has received (*vaccine list*).

If no shot record is available

Has (*child*) ever received an immunization, that is a shot or drops?

If yes:

Has (*child*) ever received (*vaccine list*)?

If yes:

How many (*vaccine list*) shots did (*child*) ever receive?

Vaccine List

- a DPT/DT shot (sometimes called a DPT shot, diphtheria-tetanus-pertussis shot, baby shot, or three-in-one shot)?
- a polio vaccine by mouth (pink drops) or a polio shot?
- measles or MMR (Measles-Mumps-Rubella) shot?

2. Proportion of adults aged ≥ 65 years who have been immunized for pneumococcal pneumonia and influenza

Related Objective 20.11: Increase pneumococcal pneumonia and influenza immunization among noninstitutionalized, high-risk populations, as defined by

the Immunization Practices Advisory Committee, to at least 60 percent.

PDN definition: Proportion of adults aged 65 years and older a) who have ever been immunized for pneumococcal pneumonia, and b) who have been immunized for influenza within the preceding 12 months.

Data sources: The 1995 NHIS Year 2000 Objectives Supplement provides an estimate of adult vaccination coverage level for the nation, and the BRFSS provides estimates for all 50 States and the District of Columbia as part of a rotating core that is administered in alternating years. The NHIS and the BRFSS core use identical questions. Questions on adult vaccination became part of the NHIS core beginning in 1997.

Recommended data source for State-level estimates: BRFSS

Recommended immunization questions for adults 65 years of age and over:

[From the BRFSS rotating core and an NHIS Supplement]:

- Have you ever had a pneumonia vaccination? This shot was first made available in 1977 and is usually given once in a person's lifetime.
- During the past 12 months, have you had a flu shot? This vaccination is usually given in the Fall and protects against influenza for the flu season.

3. Proportion of assessed rivers, lakes, and estuaries that support beneficial uses (fishing and swimming approved)

Related Objective 11.10: Reduce potential risks to human health from surface water, as measured by an increase in the proportion of assessed rivers, lakes, and estuaries that support beneficial uses, such as consumable fish and recreational activities. (Targets set separately for each subcategory)

PDN definition: Proportion of assessed rivers, lakes, and estuaries that fully support a) consumable fish and b) recreational activities. Note: Consumable fish is defined as [water body supporting] fish free from contamination that could pose a human health risk to consumers. Recreational activity is defined as [water body supporting] primary contact recreation, e.g., swimming, without risk of adverse human health effects such as catching waterborne diseases.

Data sources: The National Water Quality Inventory (10), coordinated by the Office of Water, U.S. Environmental Protection Agency (EPA), is a report to the Congress required by the EPA's Clean Water Act. It provides national- and State-level information on use-support status of rivers, lakes, and estuaries based on water quality assessment reports submitted by the States and other participating jurisdictions every 2 years.

Recommended data source for State-level estimates: It is important to note that States and other participating jurisdictions do not use identical survey methods or criteria to rate their water quality. Furthermore, most States do not survey all of their waterbodies, and the percentage of total

waters surveyed varies widely by State and by the type of water body. Thus, caution should be used when comparing data among States or comparing water quality information submitted during different reporting periods because States may modify their criteria or survey different waterbodies every 2 years. This item is not amenable to survey data collection.

4. Proportion of women receiving a Papanicolaou test at an interval appropriate for their age

Related Objective 16.12: Increase to at least 95 percent the proportion of women aged 18 and older who have ever received a Pap test, and to at least 85 percent those who received a Pap test within the preceding 1–3 years.

PDN definition: Proportion of women 18 years and older who have received a Papanicolaou test within the preceding 3 years

Data sources: The 1994 NHIS Year 2000 Objectives Supplement provides national data, and the BRFSS core provides State-level information. The NHIS and the BRFSS have different question wording and structure.

Recommended data source for State-level estimates: BRFSS

Recommended questions for Pap test:

For women 18 years and over [From the BRFSS core]:

- A Pap smear is a test for cancer of the cervix. Have you ever had a Pap smear?
If yes:
 - How long has it been since you had your last Pap smear?
-

5. Proportion of women receiving a mammogram at an interval appropriate for their age

Related Objective 16.11: Increase to at least 60 percent those women aged 50 and older who have received a clinical breast examination and a mammogram within the preceding 1–2 years.

PDN definition: Proportion of women 50 years and older who have received a mammogram within the preceding 2 years

Data sources: The 1994 NHIS Year 2000 Objectives Supplement provides data for national-level, and the BRFSS core provides State-level estimates of mammogram usage. Although similar, the NHIS and the BRFSS have different question structure.

Recommended data source for State-level estimates: BRFSS

Recommended questions for mammogram usage:

For women 50 years and over [From the BRFSS core]:

- A mammogram is an X-ray of each breast to look for breast cancer. Have you ever had a mammogram?
If yes:
 - How long has it been since you had your last mammogram?
-

6. Proportion of the population insured for medical care

Related Objective 21.4: Improve financing and delivery of clinical preventive services so that virtually no American has a financial barrier to receiving, at a minimum, the screening, counseling, and immunization services recommended by the U.S. Preventive Services Task Force.

PDN definition: Proportion of the population i) under 18 years of age, and ii) between 18 and 64 years of age who have any kind of health care coverage, including health insurance, prepaid plans such as health maintenance organizations (HMOs), or government plans such as Medicaid.

Data sources: The Current Population Survey (CPS) (15), a monthly nationwide survey of about 60,000 households conducted by the Bureau of Census of the U.S. Department of Commerce, collects information on health care coverage of individuals of all ages in its March Supplement. CPS releases State-level estimates of health care coverage for the population of all ages combined. For children under 18 years of age, only national estimates are available from CPS. For the population 18 years and older, the 1995 NHIS Family Resources Supplement and the BRFSS provide national- and State-level estimates, respectively. The wording of the NHIS, the CPS, and the BRFSS differ.

Recommended data source for State-level estimates: BRFSS (Persons 18–64 years of age)

Recommended questions for health care coverage:

6a. For adults 18–64 years of age [From the BRFSS core]:

- Do you have any kind of health care coverage, including health insurance, prepaid plans such as HMOs, or government plans such as Medicaid?

6b. For children under 18 years of age [Same as BRFSS adult question]:

- Does (child) have any kind of health care coverage, including health insurance, prepaid plans such as HMOs, or government plans such as Medicaid?
-

7. Proportion of the population with a regular source of primary care (including dental services)

Related Objectives:

13.14: Increase to at least 70 percent the proportion of people aged 35 and older using the oral health care system during each year.

21.3: Increase to at least 95 percent the proportion of people who have a specific source of ongoing primary care for coordination of their preventive and episodic health care.

PDN definition:

- a. Proportion of the population i) under 18 years of age, and ii) 18 years and older with one particular clinic, health center, doctor's office, or other place that the individual

usually goes to if sick or in need of advice about one's health.

- b. Proportion of the population i) 5–17 years of age, and ii) 18 years and older who have used the dental health care system during the preceding year.

Data sources: National-level data for both children and adults [7a.i and 7a.ii] are collected in the 1995 NHIS Family Resources Supplement. These items are part of the NHIS core beginning 1997. BRFSS provides State-level information on the usual source of care for the population 18 years and older [7a.ii and 7b.ii] as part of an optional module. For a regular source of primary care, NHIS and BRFSS use similar questions. For a regular source of dental services, the BRFSS question wording has been modified to add a phrase for questions related to dental services [7b] “or other dental health professional for any reason including a check up or because of a problem with your mouth, teeth, or gums.”

Recommended data source for State-level estimates: No nationwide data source for 7a.i or 7b.i; BRFSS for 7a.ii and 7b.ii

Recommended questions for source of primary care:

7a.i. For children under 18 years of age [Same as BRFSS adult question; similar to NHIS]:

- Is there one particular clinic, health center, doctor's office, or other place that your child usually goes to if your child is sick or needs advice about his or her health?

7a.ii. For adults 18 years and over [From a BRFSS module; similar to NHIS]:

- Is there one particular clinic, health center, doctor's office, or other place that you usually go to if you are sick or need advice about your health?

7b.i. For children 5–17 years of age [Modified from BRFSS adult question]:

- About how long has it been since (child) last visited a dentist or other dental health professional for any reason including a check up or because of a problem with (child's) mouth, teeth, or gums?

7b.ii. For adults 18 years and over [Modified from BRFSS module]:

- About how long has it been since you last visited a dentist or other dental health professional for any reason including a check up or because of a problem with your mouth, teeth, or gums?
-

INDICATORS OF RISK FACTORS (age-specific prevalence rates)

8. Cigarette smoking

Related Objectives:

3.4: Reduce cigarette smoking to a prevalence of no more than 15 percent among people aged 18 and older. Duplicate objectives: 15.12 and 16.6.

3.5: Reduce the initiation of cigarette smoking by children and youth so that no more than 15 percent have become regular cigarette smokers by age 20.

PDN definition:

- a. Proportion of adolescents in grades 9 through 12 who smoked at least one day during the past 30 days.
- b. Proportion of the population 18 years and older who have smoked at least 100 cigarettes in one's entire life, and who smoke currently.

Data sources: The Monitoring the Future Study (16), a school-based survey conducted by the National Institute on Drug Abuse of the National Institutes of Health (NIH), provides national-level estimates of cigarette smoking among high school seniors [8a]. State-level estimates of adolescent smoking [8a] are available in the Youth Risk Behavior Survey (YRBS), also a school-based survey, conducted by the National Center for Chronic Disease Prevention and Health Promotion of the CDC (17). Currently, estimates of adolescent smoking [8a] are also available for 16 local communities participating in YRBS. For the population 18 years and over [8b], the 1995 NHIS Year 2000 Objectives Supplement and BRFSS, respectively, provide national- and State-level information. Questions on adult smoking [8b] are part of the NHIS Core beginning in 1997, when NHIS and BRFSS use identical question wording.

Recommended data source for State-level estimates: YRBS for 8a and BRFSS for 8b

Recommended questions for cigarette smoking:

8a. For adolescents in grades 9–12 [From the YRBS]:

- During the past 30 days, on how many days did you smoke cigarettes? (Coded as current smoker if “1 day” or more)

8b. For adults 18 years and over [From the 1996 BRFSS core and the NHIS]:

- Have you smoked at least 100 cigarettes in your entire life?
If yes:
 - Do you now smoke cigarettes every day, some days, or not at all? (Coded as current smoker if “every day” or “some days”)
-

9. Alcohol misuse

Related Objective 4.7: Reduce the proportion of high school seniors and college students engaging in recent occasions of heavy drinking of alcoholic beverages to no more than 28 percent of high school seniors and 32 percent of college students. Note: Recent heavy drinking is defined as having five or more drinks on one occasion in the previous 2-week period as monitored by self-reports.

PDN definition: Proportion of a) adolescents in grades 9 through 12, and b) the population 18 years of age and older who had five drinks or more on at least one occasion within the preceding 30 days.

Data sources: National-level estimates of alcohol use among high school seniors [9a] are available in the Monitoring the Future Study (16). YRBS (17) collects state-level information on 9a. Estimates of adolescent heavy drinking are also available for 16 local communities participating in YRBS. The 1997 NHIS Adult Core collects national-level

information on alcohol use among population 18 years and older. State-level information on alcohol misuse among population 18 years and older is available in alternating years as part of BRFSS rotating core. NHIS questions are not comparable to those of BRFSS.

Recommended data source of State-level estimates: YRBS for 9a and BRFSS for 9b

Recommended questions on use of alcohol:

9a. For adolescents in grades 9–12 [From the YRBS]:

- During the past 30 days, on how many days did you have 5 or more drinks of alcohol in a row, that is, within a couple of hours?

9b. For adults 18 years and over [From the BRFSS rotating core]:

- Considering all types of alcoholic beverages, how many times during the past month did you have 5 or more drinks on an occasion?
-

10. Overweight

The original reference to obesity has been changed to overweight.

Related Objective 1.2: Reduce overweight to a prevalence of no more than 20 percent among people aged 20 and older and no more than 15 percent among adolescents aged 12–19. Duplicate Objectives: 2.3, 15.10, and 17.12.

PDN definition: Proportion of a) children 12–17 years of age, and b) the population 18 years and older who are overweight.

Data source: National Health and Nutrition Examination Survey (NHANES) (18) collects national-level information on overweight among adolescents [10a]. No data system provides State-level information on 10a. NHIS and BRFSS, respectively, provide national- and State-level information on overweight among the population 18 years and older based on self-reported information [10b]. Both NHIS and BRFSS use identical questions to measure this item.

Recommended data source for State-level estimates: No nationwide data source exists for 10a; BRFSS for 10b

Recommended questions for overweight:

10a. For adolescents 12–17 years of age [Same as BRFSS adult question]:

- About how much does (child) weigh without shoes? (in pounds)
 About how tall is (child) without shoes? (in feet and inches)

10b. For adults 18 years and over [From the BRFSS core and NHIS]:

- About how much do you weigh without shoes? (in pounds)
 About how tall are you without shoes? (in feet and inches)
-

NOTE: Body mass index, or BMI, is calculated as weight (kg)/height (m)². For people 20 years of age and over, overweight is defined as BMI equal to or greater than 27.8 for men and 27.3 for women. For adolescents, overweight is defined as BMI equal to or greater than 23.0 for males 12–14 years, 24.3 for males 15–17 years, 25.8 for males 18–19 years, 23.4 for females 12–14 years, 24.8 for females 15–17 years, and 25.7 for females 18–19 years.

11. Hypertension

Related Objectives:

15.4: Increase to at least 50 percent the proportion of people with high blood pressure whose blood pressure is under control.

15.5: Increase to at least 90 percent the proportion of people with high blood pressure who are taking action to help control their blood pressure.

15.13: Increase to at least 90 percent the proportion of adults who had their blood pressure measured within the preceding 2 years and can state whether their blood pressure was normal or high.

PDN definition: Proportion of the population 18 years and older who have been told by a health care professional that he/she has high blood pressure (awareness).

Data sources: The 1994 NHIS Year 2000 Objectives Supplement provides national-level estimates. State-level estimates are available in the BRFSS as part of the rotating core administered in alternating years. BRFSS and NHIS have similar wording but different question structure.

Recommended data source for State-level estimates: BRFSS

Recommended questions for hypertension:

For adults 18 years and over [From the BRFSS rotating core]:

- About how long has it been since you last had your blood pressure taken by a doctor, nurse, or other health professional?
If other than “never”:
 Have you ever been told by a doctor, a nurse or other health professional that you have high blood pressure?
-

12. Hypercholesterolemia

Related Objectives:

15.8: Increase to at least 60 percent the proportion of adults with high blood cholesterol who are aware of their condition and are taking action to reduce their blood cholesterol to recommended levels.

15.14: Increase to at least 75 percent the proportion of adults who have had their blood cholesterol checked within the preceding 5 years.

PDN definition: Proportion of the population 18 years or older who have ever been told by health care professional that he/she has high blood cholesterol (awareness).

Data sources: The 1993 NHIS Year 2000 Objectives Supplement provides national-level estimates of this item. State-level estimates are available in BRFSS in alternating years as part of the rotating core. NHIS and BRFSS have similar question wording.

Recommended Data Source for State-Level Estimates:
BRFSS

Recommended questions for hypercholesterolemia:

For adults 18 years and over [From the BRFSS rotating core; similar to a NHIS Supplement]:

- Blood cholesterol is a fatty substance found in the blood. Have you ever had your blood cholesterol checked?
If yes:
 Have you ever been told by a doctor or other health professional that your blood cholesterol is high?
-

13. Confirmed abuse and neglect of children (per 1,000 children)

Related Objective 7.4: Reverse to less than 22.6 per 1,000 children the rising incidence of maltreatment of children younger than age 18.

PDN definition: Substantiated or indicated abuse and neglect of children (per 1,000 children) following investigation by State child protective service agencies.

Data sources: The NCANDS (11) provides national- and State-level data on child abuse and neglect based on reports submitted by State child protective services agencies. State summaries include reports of alleged maltreatment, disposition of investigation of alleged child abuse and neglect, and data on the victims and perpetrators of substantiated and indicated maltreatment. The data from NCANDS represent the most complete and accurate information available about child abuse and neglect known to the State child protective services agencies.

Recommended data source for State-level estimates: NCANDS was developed through a Federal-State partnership. It is important to note, however, that there is a wide variation in the sources of data, data collection methods, and the level of evidence used to substantiate a report that becomes part of NCANDS.

INDICATORS OF HEALTH STATUS OUTCOME

14. Percentage of children under 5 years of age who are tested and have blood lead levels less than 15 µg/dL

Related Objective 11.4: Reduce the prevalence of blood lead levels exceeding 15 µg/dL and 25 µg/dL among children aged 6 months–5 years to no more than 300,000 and zero, respectively.

PDN definition: Percentage of children aged <5 years of age who have been a) tested and b) tested and have blood lead levels >15 µg/dL.

Data sources: NHANES provides national estimates of elevated blood lead levels among children. No national data system currently exists to monitor this indicator at the State level. Lead screening programs at the State level range from limited programs targeting certain high risk populations to

determine the extent of the problem in the State to programs that require children to be screened in certain situations such as before entering day care. Their screening standards and classification criteria also vary widely. The National Center for Environmental Health of CDC is presently working toward a Federal-State partnership to establish a national data collection and analysis program.

Recommended data source for State-level estimates: No comparable State sources.

Recommended questions for blood lead levels:

14a. For children 5 years and under [From the NHANES]:

- Has (child) ever been tested for lead poisoning?

14b. For children 5 years and under [From the NHANES]:

- Has (child) ever been tested for lead poisoning?
If "yes":
 Did the result indicate that (child) has lead poisoning or high lead?
-

15. Incidence of hepatitis B, per 100,000 population

Related Objective 20.3: Reduce viral hepatitis B to 40 per 100,000 people.

PDN definition: Reported incidence of hepatitis B (per 100,000 population).

Data sources: National Notifiable Disease Surveillance System (NNDSS) (19), coordinated by the Epidemiology Program Office of the CDC, provides national- and State-level incidence of hepatitis B. The number of cases and incidence rate appear in the Morbidity and Mortality Weekly Report (MMWR) and the MMWR Annual Summary of Notifiable Diseases.

NOTE: For tracking of the *Healthy People Year 2000* objective, the Viral Hepatitis Surveillance Program (20) provides national estimates of hepatitis B incidence corrected for underreporting in NNDSS using an algorithm that adjusts the reported incidence upward by approximately 6-fold.

Recommended data source for State-level estimates: No comparable data source at the State level. Because of wide variations in reporting practices among States, an algorithm for adjusting hepatitis B incidence rate within States has not yet been developed. Accordingly, State-level incidence rates of hepatitis B from the NNDSS are deemed unreliable. This item is not amenable to survey data collection due to low incidence.

16. Proportion of children aged 6–8 and 15 years with one or more decayed primary or permanent teeth

Related Objective 13.1: Reduce dental caries (cavities) so that the proportion of children with one or more caries (in permanent or primary teeth) is no more than 35 percent among children aged 6–8 and no more than 60 percent among adolescents aged 15.

PDN definition: Proportion of children a) aged 6–8, and b) 15 years with one or more decayed primary or permanent teeth.

Data sources: National Survey of Dental Caries in U.S. School Children (21), conducted during the 1986–87 school year by the National Institute for Dental Research, NIH, provides national- and regional-level estimates of dental caries among children. All children in selected classes were given a standardized examination by oral health professionals for dental caries and for other oral health concerns. No data system is currently in place to collect comparable information at the State or local level.

References

1. U.S. Department of Health and Human Services. Healthy People 2000: National health promotion and disease prevention objectives. Washington: Public Health Service. 1991.
2. Centers for Disease Control and Prevention. Consensus set of health status indicators for the general assessment of community health status United States. MMWR 40(27): 449–51. 1991.
3. Freedman MA. Health status indicators for the year 2000. Healthy people 2000 statistical notes, number 1. Hyattsville, Maryland: National Center for Health Statistics. 1991.
4. Klein RJ and Hawk SA. Health status indicators: Definitions and national data. Healthy people 2000 statistical notes, number 3. Hyattsville, Maryland: National Center for Health Statistics. 1992.
5. Plepys C and Klein R. Health status indicators: Differentials by race and Hispanic origin. Healthy people 2000 statistical notes, number 10. Hyattsville, Maryland: National Center for Health Statistics. 1995.
6. Centers for Disease Control and Prevention. State- and sex-specific prevalence of selected characteristics Behavioral Risk Factor Surveillance System, 1992 and 1993. MMWR 45 (SS-6). 1996.
7. National Center for Health Statistics. Current Estimates from the National Health Interview Survey. Vital Health Stat 10. Hyattsville, Maryland: Public Health Service. Published annually.
8. U.S. Department of Health and Human Services. Healthy people 2000: Midcourse review and 1995 revisions. Washington: Public Health Service. 1995.
9. National, state, and urban area vaccination coverage levels among children aged 19–35 months United States, April 1994 March 1995. MMWR 45(7): 145–150. 1996.
10. U.S. Environmental Protection Agency. National water quality inventory: 1994 report to Congress. EPA841–R–95–005. Washington, DC. 1995.
11. U.S. Department of Health and Human Services, National Center on Child Abuse and Neglect. Child maltreatment 1994: Reports from the states to the National Center on Child Abuse and Neglect. Washington, DC. 1996.
12. Latest data for the nation and for each State are available for Health Status Indicators and Priority Data Needs through <http://www.cdc.gov/nchswww/datawh/ftpser/ftpser.htm>
13. Gentry EM, Kalsbeek WD, Hogelin GC, et al. The behavioral risk factor surveys. Part II. Design, methods, and estimates from combined state data. American J of Preventive Medicine 1:9–14. 1985.
14. Centers for Disease Control and Prevention. Recommended childhood immunization schedule United States, 1995. MMWR 44 (RR-5). 1995.
15. Current Population Reports. Health insurance coverage: 1994. Census Bureau P60 190. Bureau of the Census, Economic and Statistics Administration. Washington: U.S. Department of Commerce. 1995.
16. National Institute on Drug Abuse. National survey results on drug use from the Monitoring the Future Study, 1975–1994. NIH 95 4026. 1995.
17. Centers for Disease Control and Prevention. Youth risk behavior surveillance United States, 1995. MMWR 45(SS-4). 1996.
18. McDowell A, et al. Plan and operation of the second National Health and Nutrition Examination Survey, 1976–1980. National Center for Health Statistics. Vital Health Stat 1(15). 1981.
19. Centers for Disease Control and Prevention. Summary of notifiable diseases, United States, 1994. MMWR 43(53). 1994.
20. Centers for Disease Control and Prevention. Hepatitis surveillance report. No 56. Atlanta, Georgia. 1995.
21. Brunelle JA. Oral health of United States children: The national survey of dental caries in U.S. school children, 1986–87. Bethesda, Maryland: NIDR. NIH 89 2247. 1989.

Published issues of *Healthy People 2000 Statistical Notes*

Number	Title	Date of Issue
1	Health Status Indicators for the Year 2000	Fall 1991
2	Infant Mortality	Winter 1991
3	Health Status Indicators: Definitions and National Data	Spring 1992
4	Issues Related to Monitoring the Year 2000 Objectives	Summer 1993
5	Revisions to <i>Healthy People 2000</i> Baselines	July 1993
6	Direct Standardization (Age-Adjusted Death Rates)	March 1995
7	Years of Healthy Life	April 1995
8	Evaluating Public Health Data Systems: A Practical Approach	June 1995
9	Monitoring Air Quality in <i>Healthy People 2000</i>	September 1995
10	Health Status Indicators: Differentials by Race and Hispanic Origin	September 1995
11	Operational Definitions for Year 2000 Objectives: Priority Area 20, Immunization and Infectious Diseases	February 1997
12	Operational Definitions for Year 2000 Objectives: Priority Area 13, Oral Health	May 1997
13	<i>Healthy People 2000</i> Midcourse Revisions: A Compendium	August 1997
14	Operational Definitions for Year 2000 Objectives: Priority Area 14, Maternal and Child Health	December 1997

**DEPARTMENT OF
HEALTH & HUMAN SERVICES**

Centers for Disease Control and Prevention
National Center for Health Statistics
6525 Belcrest Road
Hyattsville, Maryland 20782-2003

**OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, \$300**

To receive this publication regularly, contact
the National Center for Health Statistics by
calling 301-436-8500
E-mail: nchsquery@cdc.gov
Internet: <http://www.cdc.gov/nchswww/nchshome.htm>

**FIRST CLASS MAIL
POSTAGE & FEES PAID
PHS/NCHS
PERMIT NO. G-281**