

## National Center for Health Statistics Quality Guidelines

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**Key Words: validity, comparability, reproducibility**

### 1. Background

The Office of Management and Budget (OMB) has mandated that all Federal agencies, by October 1, 2002, place on their websites guidelines for ensuring and maximizing the quality, objectivity, utility and integrity of their disseminated information. This mandate is not intended to suggest or imply that such guidelines do not now exist, but rather that agencies must take steps to assure their availability to the public.

### 2. Coverage

**The NCHS Quality Guidelines Cover the Following Areas:**

- Agency Mission
- Scope and Applicability
- Types of Information Disseminated
- Types of Dissemination Methods
- Quality Assurance Policies, Standards and Processes for Ensuring the Quality of Information Disseminated to the Public
- Administrative Complaint Procedures
- Influential Scientific, Financial and Statistical Information

### 3. Agency Mission

The National Center for Health Statistics (NCHS), a component of the Centers for Disease Control and Prevention (CDC), is one of the federal statistical agencies belonging to the Interagency Council on Statistical Policy (ICSP). The ICSP, which is led by the Office of Management and Budget (OMB), is comprised of the heads of the nation's ten principal statistical agencies plus the heads of the statistical units of four non-statistical agencies. The ICSP coordinates statistical work across organizations, enabling the exchange of information about organization programs and activities, and provides advice and counsel to OMB on statistical activities. The statistical activities of these agencies are predominantly the collection, compilation, processing or analysis of information for statistical purposes.

Within this framework, NCHS functions as the federal agency responsible for the collection and dissemination of the nation's vital and health statistics. Its mission is to provide statistical information that will guide actions and policies to improve the health of the American people.

To carry out its mission, NCHS conducts a wide range of annual, periodic, and longitudinal sample surveys and administers the national vital statistics systems. As the nation's principal health statistics agency, NCHS leads the way with accurate, relevant, and timely data. To assure the accuracy, relevance, and timeliness of its statistical products, NCHS assumes responsibility for determining sources of data, measurement methods, methods of data collection and processing while minimizing respondent burden; employing appropriate methods of analysis and ensuring the public availability of the data and documentation of the methods used to obtain the data. Within the constraints of resource availability, NCHS continually works to improve its data systems to provide information necessary for the formulation of sound public policy. As appropriate, NCHS seeks advice on its statistical program as a whole, including the setting of statistical priorities and on the statistical methodologies it uses. NCHS strives to meet the needs for access to its data while maintaining appropriate safeguards for the confidentiality of individual responses.

### 4. Scope and Applicability

NCHS will ensure that disseminated information meets the standards of quality set forth in the OMB, DHHS (Department of Health and Human Services) and NCHS guidelines. It is NCHS's policy to ensure and maximize the quality, objectivity, utility, and integrity of information that it disseminates to the public. NCHS strives to provide information that is accurate, reliable, clear, complete, unbiased, and useful. The Center is committed to integrating the principle of information quality into every phase of information development, including creation, collection, maintenance, and dissemination.

Except for a few clearly identified exceptions, the guidelines cover all information disseminated on or after October 1, 2002. The administrative mechanism for correction applies to information that the agency

disseminates on or after October 1, 2002, regardless of when the agency first disseminated the information.

#### 5. **Types of Information Disseminated by NCHS to the Public**

NCHS disseminates a variety of statistical and analytic information products. These include: statistical reports on topics such as births, deaths, life tables, health status, health services utilization and the provision of health care; statistical tabulations; publications in its "Healthy People 2010" series; "Health, US," the Secretary's annual report to the Congress; and public and restricted use data files. NCHS also disseminates the results of epidemiologic, demographic and methodological research

#### 6. **Types of Dissemination Methods**

NCHS statistical and analytic information products are distributed in one or a combination of the following media:

**Print** -- publications, reports, books, brochures, and pamphlets.

**Electronic** -- the NCHS website, CD ROMS, listservs, e-mail, automated voice and fax systems, hotlines and clearinghouses.

**Oral** -- speeches, presentations, commentaries for publication or broadcast, etc.

**Audio-Visual** -- broadcast scripts, audio or videotapes, and videocasting.

#### 7. **Quality Assurance Policies, Standards and Processes for Ensuring the Quality of Information Dissemination to the Public**

NCHS is recognized as one of the major statistical agencies in the federal government. In developing its statistical and analytic information products, NCHS routinely employs a number of widely accepted methods and procedures for ensuring quality, including independent assessments of statistical methodologies and observance of professional standards. In order to ensure the utility of its statistical and analytic information products, NCHS conducts independent research and consults with experts in areas such as data collection, data analysis and a variety of substantive topics and issues. Additionally, NCHS maintains ongoing contact with users, and participates in conferences, workshops, etc., in order to objectively assess and identify the current and future data needs of NCHS constituents. Further, NCHS employs a wide variety of dissemination mechanisms to make its statistical and analytic information products widely available and broadly accessible.

In order to assure the objectivity of its statistical and analytic information products, i.e., that they are accurate, reliable, and unbiased, NCHS obtains these data through accepted statistical theory and practice. Dissemination of data also follows generally recognized guidelines in terms of defining acceptable standards regarding minimum response rates, maximum standard errors, cell size suppression, quality of coding and other processing operations. NCHS also maintains staff expertise in areas such as concept development, survey planning and design (including questionnaire development and testing), data collection, data processing and editing, data analysis, evaluation procedures, and methods of dissemination.

NCHS assures the security of its statistical and analytic information products through the enforcement of rigorous controls that protect against unauthorized access to the data, revision or corruption of the data, or unauthorized use of the data. Some of the major controls used at NCHS include access control, user authentication, encryption, access monitoring, provision of unalterable electronic content, and audit trails.

All NCHS statistical and analytic information products undergo a formal clearance process before dissemination. Publications and reports, whether in electronic or paper form, are reviewed by a designated official within the author's office or division and by the NCHS Associate Director for Science (ADS). These reviews cover the clarity of descriptive text, the appropriateness of the methodology, the soundness of the analysis, the adherence to confidentiality and disclosure avoidance restrictions, the readability of tabular and graphic presentations of data, etc. In addition, all public use tapes are reviewed for accuracy and appropriate confidentiality protections. Oral presentations are subject to appropriate supervisory review.

NCHS statistical and analytic information products are derived using generally acceptable statistical practices and methodologies which are well documented and available to the public. These procedures enable responsible statisticians and analysts outside of NCHS to replicate the NCHS statistical methods and obtain results consistent with those obtained by NCHS.

#### 8. **Administrative Complaint Procedures**

As part of the guidelines documentation, there will be a detailed procedure outlining what an individual (or group) can do to challenge the accuracy of any statistical product disseminated by NCHS. For example, the complaint must include a detailed description of the specific information that is being

challenged, why the information is being challenged, documentation to support the challenge, and a description of how the complainant is affected by the incorrect information.

There will be a specific amount of time in which to respond to the complaint. If there is agreement with the complainant, there will be an indication of what action, if any, will be taken to correct the information. If there is disagreement with the complainant, the response must include documentation that refutes the complainant's allegation. Another set of procedures will outline what the complainant can do in order to appeal the initial decision. An appeal will be reviewed by someone other than the official who responded to the initial complaint.

## 9. Influential Information

As the primary Federal agency responsible for the collection and dissemination of statistical health data on the US population, NCHS data products are often used as benchmarks for supporting or evaluating policies designed to address the health needs or concerns of certain population sub-groups. In recognition of the potential impact some of its statistical and analytic data products may have on health policy and initiatives, NCHS requires that these products meet the highest possible quality standards.

In order to accomplish this goal, quality standards are embedded throughout all survey processes and procedures, beginning with the conceptualization and design of a survey, through data dissemination. The appropriateness of many of these standards is measured by independent assessments (e.g., peer review) conducted by qualified persons. Further, NCHS strives to assure that its processes and procedures are appropriate, well documented, and capable of being replicated by qualified persons outside of NCHS in order to derive results consistent with those obtained by NCHS.

Wherever confidentiality restrictions preclude the general availability of NCHS data sets, methodologies, etc., NCHS makes every effort to provide qualified researchers limited access to confidential files through its Research Data Center, which was established for that purpose.

## 10. Research Data Center

The NCHS Research Data Center (RDC) is a research facility at the NCHS headquarters in Hyattsville, Maryland, where researchers can be allowed access

via one of several methods to restricted data files required to complete approved projects. Restricted data files are those which contain information, such as lower levels of geography (e.g., state, county, or lower), but do not contain direct identifiers (e.g., name or social security number).

An advisory and proposal review committee receives, reviews, and approves researcher proposals. Researchers may not remove any materials from RDC until they have received a disclosure avoidance examination by RDC staff and may not remove any NCHS restricted data files nor linked data files.

## 11. Summary

NCHS Quality Guidelines are consistent with the agency's mission. In order to obtain and assure the highest possible Quality Standards for its surveys and data systems, NCHS employs widely accepted statistical methodologies and maintains expertise in a variety of statistical disciplines. Additionally, NCHS follows established protocols and procedures in major activities, including: survey design and questionnaire development; data collection; data processing; data analysis; and data dissemination. Further, NCHS provides data users with a mechanism for challenging the validity of its data products, and assures that these challenges receive thorough review and consideration.

Collectively, these guidelines, procedures and activities support the inherent philosophy of the agency's mission, i.e., to provide statistical information that will guide actions and policies to improve that health of the American people.