



Policies and Practices for Scientific Integrity

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Disclaimer

- The views expressed in this presentation are those of the author and do not represent the policies of the Centers for Disease Control and Prevention

Overview

- Definitions
- Current guidance
- Operationalization and practice

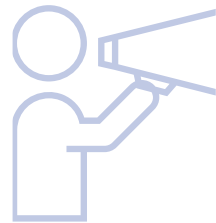
What is scientific integrity?

- Federal government: “The adherence to professional practices, ethical behavior, and the principles of honesty and objectivity when conducting, managing, using the results of, and communicating about science and scientific activities. Inclusivity, transparency, and protection from inappropriate influence are hallmarks of scientific integrity.”
- Department of Health and Human Services (HHS) definition of science: “Science refers to the full spectrum of scientific endeavors, including basic science, applied science, evaluation, engineering, technology, economics, social sciences, and statistics, as well as the scientific and technical information derived from these endeavors.”

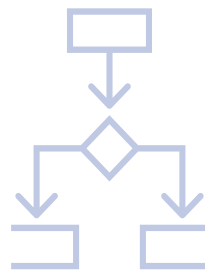
Scientific integrity includes but is not limited to:



Research integrity



Accurate communication



Ensuring policymakers have
best available information
for decision making

Recent history

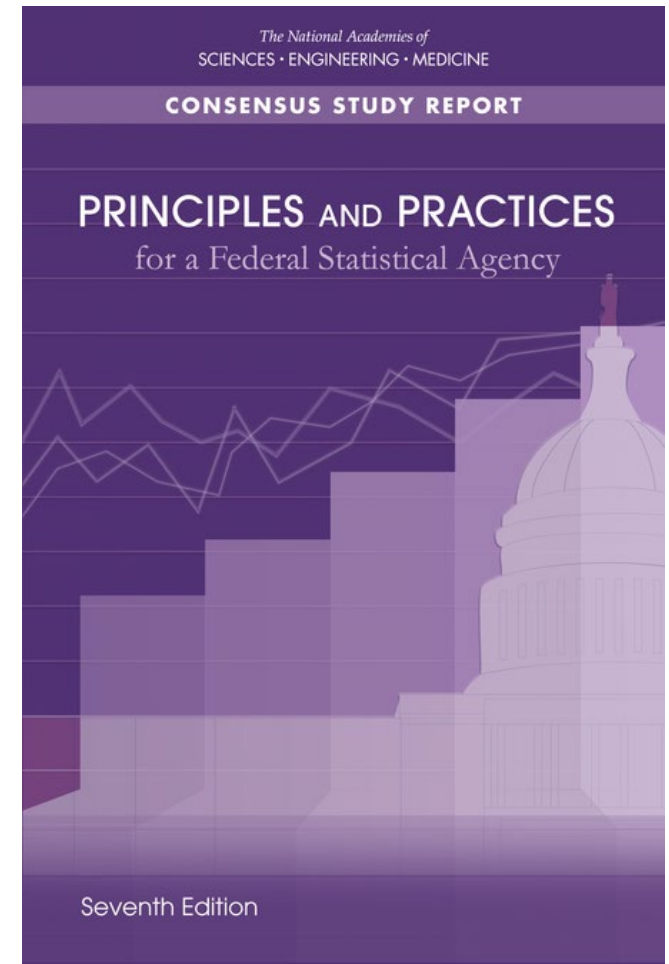
- Presidential Executive Order and Memorandum on Science Policy and Scientific Integrity
 - Executive Order: established the President's Council of Advisors on Science and Technology
 - Memo: builds on previous memos and stipulates several requirements and actions
 - Framework for Federal Scientific Integrity Policy and Practice
 - National Science and Technology Council Subcommittee on Scientific Integrity
- U.S. Department of Health and Human Services (HHS) Scientific Integrity Policy
 - Applies to all HHS employees and is based on recommendations by the White House Office of Science and Technology Policy and the National Science and Technology Council
 - Effective as of last week!

HHS Scientific Integrity policy – key areas

- **Protecting scientific processes** – prohibits political and other inappropriate influence, research integrity, responsibility conduct of research
- **Ensuring free flow of scientific information** – open and timely communication of science
- **Supporting policymaking processes** – scientific information used to support policy and decision making to be accurate and transparent
- **Ensuring accountability** – processes for addressing scientific integrity concerns
- **Protections** – protection of whistleblowers and promotion of diversity
- **Professional development for government scientists** – encouragement of interactions with broader scientific community
- **Federal Advisory Committees** – transparency in recruitment of members

Scientific integrity and Federal Statistical Agencies and Recognized Statistical Units

- The “Purple Book” has been in use since 1992
 - Product of the Committee on National Statistics (National Academies)
- 5 Principles
 - Relevance to policy issues and society
 - Credibility among data users and stakeholders
 - Trust among the public and data providers
 - Independence from political and other undue external influence
 - Continual improvement and innovation
- 10 Practices
 - A clearly defined and well-accepted mission
 - Necessary authority and procedures to protect independence
 - Commitment to quality and professional standards of practice
 - Professional advancement of staff
 - An active research program
 - Strong internal and external evaluation processes for an agency’s statistical programs
 - Coordination and collaboration with other statistical agencies
 - Respect for data providers and protection of their data
 - Dissemination of statistical products that meet user’s needs
 - Openness about sources and limitations of the data provided



Overlap between FSA guidance and new policy

FSA guidance

5 Principles

- Relevance to policy issues
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- Trust
- Independence
- Continual improvement and innovation

10 Practices

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HHS SI Policy

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- Ensuring accountability
- Protections
- Professional development for government scientists
- Federal Advisory Committees

OMB Statistical Policy Directives

- Identify minimum requirements for Federal principal statistical agencies when they engage in statistical activities
- **Directive #1** – Fundamental Responsibilities of Federal Statistical Agencies and Recognized Statistical Units
- **Directive #4** – Release and Dissemination of Statistical Products Produced by Federal Statistical Agencies

NCHS Practices to comply with Directives #1 and #4

- **Directive #1**

- Disclosure Review Board
- Dedicated Confidentiality Officer/Team
- Scientific clearance and approval process
- Detailed technical documentation and reports to support data releases

- **Directive #4**

- Public calendar with minimum 4 week notice of publications and releases
- No sharing of reports beyond controlled embargoed processes
- Availability of all collected data

Resources and more information

- [Science.gov - Scientific Integrity](#)
- [A Framework for Federal Scientific Integrity Policy and Practice \(whitehouse.gov\)](#)
- [01-22-Protecting the Integrity of Government Science.pdf \(whitehouse.gov\)](#)
- [Scientific Integrity at HHS | HHS.gov](#)
- [R46614 \(congress.gov\)](#) (Federal Scientific Integrity Policies: A Primer by Congressional Research Service)
- [Principles and Practices for a Federal Statistical Agency: Seventh Edition | The National Academies Press](#)



Thank you!

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