

CDC GUIDANCE ON SCIENTIFIC INTEGRITY
Office of the Associate Director for Science (OADS)
April 2016
Version 2.1



Table of Contents

Overview 1

Roles and Responsibilities 1

CDC Core Values 2

Foundations of Scientific Integrity 2

 Ensure a Culture of Scientific Integrity 2

 Ensure Credibility of Government Research 6

 Facilitate the Free Flow of Scientific and Technological Information 8

 Establish Principles for Conveying Scientific and Technological Information to the Public 11

Public Communications 14

 Response to Media Inquiries 15

 Speak on Official Work without Interference from Media Communication or Policy Office 15

 Mechanisms to Resolve Disputes that Arise During Clearance Process 15

Use of Federal Advisory Committees 17

 Recruitment Process 17

 Professional Biographical Information 17

 Membership Selection Process 18

 Public Availability of Conflict of Interest Waivers 18

 Federal Advisory Committee Reports, Recommendations, and Products 18

Professional Development of Government Scientists and Engineers 19

 Encourage Publication of Research Findings in Peer-Reviewed, Professional, or Scholarly Journals 20

 Encourage Presentation of Research Findings at Professional Meetings 21

 Scientists Serving as Editors of Editorial Board Members 21

 Scientists Participating in Professional or Scholarly Societies, Committees, and Task Forces ... 21

 Allow Government Scientists and Engineers to Receive Honors and Awards 23

Implementation 24

OVERVIEW

Purpose: The Centers for Disease Control and Prevention/Agency for Toxic Substances and Disease Registry (CDC/ATSDR—henceforth referred to as CDC) has numerous policies on various aspects of scientific integrity that may not be known to its scientists. This document provides an overarching summary of the policies, activities, and guiding principles that exist within CDC in support of four key areas of scientific integrity: (1) foundations of scientific integrity in government, (2) public communications, (3) use of federal advisory committees, and (4) professional development of government scientists and engineers. This guide allows CDC scientists, and those who support its scientific endeavors, to easily locate the appropriate policies that support the agency's principles for scientific integrity. The purpose of this guide is to ultimately strengthen scientific integrity in the conduct of CDC science, assure the public of the credibility of the agency's scientific findings and results, and provide a transparent platform to demonstrate CDC's commitment to a culture of scientific integrity. By embodying the principles of scientific integrity, CDC will continue to uphold the core values of accountability, respect, and integrity.

Scope: The guiding principles in this document represent an identification and synthesis of policies and activities that support scientific integrity in the four key areas. They are meant to complement and highlight the numerous CDC policies and activities that address and support scientific integrity and serve as an overarching framework under which existing policies and more detailed program guidance and activities will continue. Because of the integrated nature of the guiding principles outlined herein and the broadness of some policies, many of the same policies and activities may be cited across multiple sections of this guide.

ROLES AND RESPONSIBILITIES

Office of the Associate Director for Science (OADS): OADS provides service and support to CDC scientists as they work to protect people's health and improve the quality of their lives. The focus is on strengthening the quality and integrity of science at CDC and on implementing the laws, regulations, and policies related to quality and integrity in science. The OADS is also home to the **Office of Scientific Integrity**, which provides guidance on federally mandated regulations and assists CDC scientists with difficult ethical issues by using a framework of moral principles and values in a transparent and inclusive process. In addition, the **Office of Scientific Quality** establishes and promotes standards for internal scientific clearance and evidence-based guidelines to ensure that all scientific products authored by CDC staff members or published by CDC and released for public use are of the highest quality and are scientifically sound, technically accurate, and useful to the intended audience. OADS also establishes and promotes recommended peer review practices and procedures to ensure that funding of research and scientific programs supports the most meritorious ideas and projects and is based on a fair, impartial, and transparent review process. The office is also responsible for ensuring that the agency's internal extramural research processes avoids bias or the appearance of conflict of interest, both scientifically and fiscally, throughout the entire grant/cooperative agreement lifecycle.

CDC Guidance on Scientific Integrity

Scientific Oversight Offices: Associate Directors for Science (ADSs) throughout the agency are tasked with ensuring scientific quality and integrity. The ADS structure at CDC also provides an alternate route for raising issues of concern outside of the direct supervisory chain.

Center/Institute/Office (CIO) Directors: CIO Directors implement standards and policies that support the quality, impact, and credibility of CDC's research and public health programs. This oversight includes ensuring relevance of research agenda, conducting internal and external review processes, and achieving the highest standards of excellence in strategy, science, service, and systems in their respective units.

Division Directors: Division leaders provide technical expertise, frontline input, and oversight of their division by identifying and communicating opportunities to enhance efficiency and effectiveness (i.e., ideas, problems, solutions, and recommendations that impact divisions).

Supervisors: Managers ensure policies are enforced, practices are followed, and training is provided for appropriate conduct of science and reporting of scientific findings and results.

Scientists: Subject matter experts ensure accuracy, validity, and appropriateness of results and findings and ensure practices are consistent with guidelines on scientific integrity. Scientists must also ensure credibility of research conducted with external partners and implement appropriate policies regarding such collaborations.

CDC CORE VALUES

Accountability—As diligent stewards of public trust and public funds, we act decisively and compassionately in service to the people's health. We ensure that our research and our services are based on sound science and meet real public needs to achieve our public health goals.

Respect—We respect and understand our interdependence with all people, both inside the agency and throughout the world, treating them and their contributions with dignity and valuing individual and cultural diversity. We are committed to achieving a diverse workforce at all levels of the organization.

Integrity—We are honest and ethical in all we do. We will do what we say. We prize scientific integrity and professional excellence.

FOUNDATIONS OF SCIENTIFIC INTEGRITY IN GOVERNMENT

Ensure a Culture of Scientific Integrity

As the nation's public health agency, CDC places primary emphasis on scientific evidence for developing policies, guidelines, and recommendations. Central to this process is a commitment to transparency, honesty, and thorough consideration of the research outcomes. This approach is strengthened by observing high standards of professionalism, adhering to policies and systems for preserving the quality of information and rigorously evaluating data, research findings, and results, as well as strictly adhering to policies that protect human subjects,

CDC Guidance on Scientific Integrity

ensuring proper animal care and use, protecting privacy, engaging in responsible conduct of research, and ensuring professional ethics. Scientific documents (manuscripts, reports, guidelines, recommendations, etc.) are reviewed through a clearance process that captures discussions, deliberations, iterations, and approvals conducted prior to releasing information to the public. CDC ensures a culture of scientific integrity in research and activities through policies, procedures, and practices that address scientific integrity. Through CDC's core values (accountability, respect, and integrity); agency employees affirm that they are honest and ethical in all that they do, and that they prize scientific integrity and professional excellence. Through the core values, CDC employees also affirm a commitment to ensure that research and services are based on sound science, meet real public needs, and help achieve public health goals.

Quality and objectivity of scientific research and information: CDC has a responsibility to conduct the best science and is committed to disseminating scientific findings and results without being influenced by policy or political issues. Although CDC may conduct research in areas relevant for making policy decisions, the goal of such research is to provide the best evidence to drive policy in the right direction. CDC is committed to ensuring that all information products authored, published, and released by CDC for public use are of the highest quality and are scientifically sound, technically accurate, and useful to the intended audience. CDC is also committed to the timely release and availability of information to ensure the health of the public. As stated in the CDC policy on **Clearance of Information Products Disseminated Outside CDC for Public Use**, clearance of scientific documents at CDC will be conducted by professionals responsible for ensuring the quality of science reported by the agency. The required level of clearance officials in the approval chain will be determined based on the type of information product under review and the urgency, sensitivity, or importance of the content. As stated in the CDC **Authorship Policy**, CDC authors should ensure that information is high quality, appropriately communicated, and based on sound, ethical science. When appropriate and necessary, authors should engage the expertise of other subject-matter experts or obtain independent review. CDC authors are responsible for ensuring that all ethical considerations have been addressed, including Institutional Review Board (IRB) review, conflicts of interest, plagiarism and other research misconduct. CDC authors should strive to immediately release information when required to protect public health. CDC authors and clearance officials are required to use an agency-wide electronic workflow system, eClearance, which helps ensure consistent clearance procedures and manages, tracks, and documents the clearance process of information products.

CDC is committed to integrating the principle of information quality into every phase of information development including creation, collection, maintenance, and dissemination. CDC adheres to federal guidelines that “provide policy and procedural guidance to federal agencies for ensuring and maximizing the quality, objectivity, utility, and integrity of information (including statistical information) disseminated by federal agencies” (Pub. L. 106–554). HHS Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Disseminated by Federal Agencies, developed in accordance with the provisions of Pub. L. 106-554 and OMB government-wide requirements include CDC-specific guidelines that ensure the integrity of science and policy-making by requiring that information released to the public be

CDC Guidance on Scientific Integrity

objective. CDC strives to ensure standards of quality, objectivity, utility, and integrity of information that is disseminated to the public. Through the clearance review process, CDC seeks to provide information that is accurate, clear, complete, valid, unbiased, timely, and useful. In accordance with the CDC policy for **Peer Review of Research and Scientific Programs**, CDC research and science programs will be subject to periodic, independent, external peer reviews, which address quality, integrity, direction, and impact, and help ensure informed decisions and effective public health research and programs.

Protection of scientific integrity and investigation of misconduct allegations: The conduct of all science, research, and programs at CDC is governed by applicable Public Health Service Act provisions, other applicable laws, regulations, policies, and guidance documents on scientific integrity, with employee adherence to robust ethical standards for the responsible conduct of research, the protection of human subjects, animal welfare, and the prevention of inappropriate influence.

In accordance with the Standards of Ethical Conduct for Employees of the Executive Branch (**5 CFR 2635**), CDC employees shall not hold financial interests that conflict with the conscientious performance of duty, and shall avoid any actions that create the appearance that they are violating the law or ethical standards of public service. To avoid involvement in a real or apparent conflict of interest, certain designated CDC employees, whose duties and responsibilities require personal and substantial participation in decisions or exercising significant judgment with direct and substantial effect on financial, regulatory, or administrative activities, must disclose information about certain financial holdings to comply with the **Confidentiality Financial Disclosure System Policy for CDC/ATSDR**.

CDC has established high standards of intellectual honesty in the formulation, conduct, and reporting of scientific research. CDC employees are expected to adhere to all applicable federal laws and regulations, departmental, and CDC policies and guidelines governing research activities. Research misconduct, (defined by policies on research misconduct **42 CFR 93**), refers to fabrication, falsification, or plagiarism in proposing, performing, reviewing, or reporting research results. Under the CDC policy for **Responding to Allegations of Research Misconduct**, CDC employees shall be responsible for reporting observed, suspected, or apparent research misconduct to the Research Integrity Officer. Employees must cooperate in the review of allegations, and the conduct of inquiries and investigations. The policy requires that allegations of scientific misconduct be processed promptly, confidentially, and fairly, and that investigations must balance concerns for protecting the integrity of research as well as the careers and reputations of researchers. In instances when the observed conduct does not fall under the definition of research misconduct but may lead to loss of integrity, fact-findings should still be undertaken and preemptive measures instituted to prevent loss of integrity. The Associate Director for Science structure throughout CDC supports quality and integrity of science and serves as a channel through which such inquiries and mitigation may be handled.

Broad population representation in research and protection of research subjects and data: To benefit the health of all people, regardless of age, sex, race, ethnicity, national origin, religion, sexual orientation, socioeconomic status, or other characteristics, and to ensure that research

CDC Guidance on Scientific Integrity

involving human participants is sufficiently representative of population subgroups, all external and internal research funded by CDC must include women, minorities, and persons under the age of 21, unless otherwise justified, as described in the CDC policies for **Inclusion of Women and Racial and Ethnic Minorities in Research** and **Inclusion of Persons Under the Age of 21 in Research**.

CDC has an ethical and legal obligation to ensure that individuals are protected in all public health research activities it conducts. Therefore, it is imperative that a clear distinction is made between what constitutes public health research and public health nonresearch as outlined in the CDC policy on **Distinguishing Public Health Research and Public Health Nonresearch**. Policies for the ethical and responsible conduct of research include protections for human research participants. All research involving human participants that is conducted or supported by CDC must comply with the **Basic HHS Policy for Protection of Human Research Subjects** (45 CFR 46) and the CDC policy for **Human Research Protections**. Clinical investigations that involve the use of drugs, biologics, or devices—whether unlicensed or used outside standard medical practice—are subject to FDA regulations for the **Protection of Human Subjects** and **Institutional Review Boards** (IRBs) (21 CFR 50 and 56). This includes research by CDC employees or supported by CDC through funding or provision of other tangible support conducted in or out of the United States. CDC investigators conducting research involving human subjects must follow procedures and submit proposed activities to the CDC Office of Scientific Integrity for review and approval prior to the start of research, obtain **CDC's IRB** approval, and maintain documentation as described in the policy. In compliance with the Privacy Act (5 U.S.C. 552a) and, to the extent applicable, the Public Health Service Act (Section 301[d] and Section 308[d]), investigators must also protect the privacy and confidentiality of research participants in the collection, maintenance, use, and dissemination of personally identifiable information.

When CDC laboratories use in-house methods or systems to test human, animal, or environmental samples where individual identifiable test results that impact patient diagnosis, management, or treatment are reported, the methods or systems must meet minimum quality standards (e.g., Clinical Laboratory Improvement Act [CLIA], comparable standards) for performance specifications (e.g., accuracy, reliability), as described in the CDC policy for **Establishment of Method Performance Specifications before Reporting Results from In-House Developed Laboratory Tests**.

When animals are used in research or other activities conducted or supported by CDC, all CDC employees who care for or use animals in their work have the legal and ethical responsibility to treat animals humanely, and comply with federal laws, regulations, and policies including the **Public Health Service Policy on Humane Care and Use of Laboratory Animals**, the **Animal Welfare Act** and subsequent animal welfare regulations, and the CDC policy **Laboratory Animal Care and Use**. All CDC investigators must submit animal care and use protocols for review and approval by the CDC Institutional Animal Care and Use Committee (IACUC) through the CDC Animal Care and Use Program Office. All animal research funded by CDC by extramural researchers must have a protocol approved by the local institution's IACUC.

CDC Guidance on Scientific Integrity

The policy on **Oversight and Clearance of Dual-Use Research of Concern** seeks to ensure that CDC's intramural research is consistent with its imperative to safeguard the nation's health and well-being. The policy outlines CDC's process for assessing dual-use potential and subsequent clearance requirements, ensuring that when projects meet dual-use research criteria, a process is in place to provide thoughtful and informed consideration of options that could mitigate or manage such risks.

Ensure Credibility of Government Research

CDC is committed to ensuring high standards of professionalism and adhering to policies and systems for preserving the quality of information, rigorously evaluating data, research findings, and results, as well as strictly adhering to policies that protect human subjects, ensure proper animal care and use, privacy, responsible conduct of research, and professional ethics. The agency scientific oversight offices are tasked with ensuring scientific quality and integrity. The **Office of Scientific Quality** was established within OADS to increase the impact of CDC research and science by promoting standards and recommended practices for scientific quality, relevance, credibility, transparency, and utility within the agency and throughout the public health community. The **Office of Scientific Integrity** ensures that CDC science activities and staff maintain high standards of scientific integrity by complying with the Federal laws, regulations, and policies, including U.S. Department of Health and Human Services (HHS) and Food and Drug Administration (FDA) regulations for the protection of human research participants, including support for CDC's Institutional Review Board (IRB), Animal Welfare Act and Public Health Service Policy on Humane Care and Use of Laboratory Animals, including support for the CDC Institutional Animal Care and Use Committee (IACUC), Paperwork Reduction Act, Public Health Service Act, the Health Insurance Portability and Accountability Act (HIPAA) Privacy Rule, and the Family Educational Rights and Privacy Act (FERPA).

Selection of candidates for scientific positions: CDC uses available hiring and compensation authority including HHS Policy for Title 42 Appointment of Scientists, Title 38 Physician and Dentist Pay, and qualification standards and procedures for research positions under **Title 5**. Decision makers and advisors, from team leads to the directors of the national Centers, Institute, and Offices (CIOs), are research scientists, physicians, nurses, and other public health professionals who were competitively selected based on scientific and technological knowledge, credentials, experience, and integrity. Scientific personnel hired under Title 42 special hiring authority must have "professional stature and experience that is commensurate with the duties of the position being filled" and have sufficient qualifications. These criteria ensure that the best scientific talent is recruited and retained to lead the science and research programs of the agency. CDC's **Physicians Comparability Allowance** policy authorizes payment of special allowances to enhance the recruitment and retention of physicians to solve documented severe recruitment and retention problems.

CDC Guidance on Scientific Integrity

CDC also follows the guidance set forth in the Office of Personnel Management (OPM) Group Coverage Qualification Standards for Professional and Scientific Positions (positions that primarily involve scientific inquiry or investigation, or research-type exploratory development of a creative or advanced scientific nature). CDC continuously competitively announces positions for medical officers. The agency has a formal Executive Compensation Committee that oversees these three activities shown above. Additionally, the **Peer Review Promotion Process for Title 5 Scientific Research Positions** is a standard operating procedure to ensure consistency and fairness in the peer review process throughout CDC. CDC also uses a **Fellowship Program** policy to encourage and promote scientific research, studies, and training through the expertise of U.S. citizen and non-citizen distinguished scientists and medical officers.

Peer review of data and research to support policy decisions: The **Guidance on External Peer Review of CDC Scientific Programs** and the CDC policy for **Peer Review of Research and Scientific Programs** provide general guidance on the independent, external peer review of all extramural and intramural research at CDC, including external peer review by Boards of Scientific Counselors and other external peer review groups of scientific programs and public health practice (non-research). CDC program scientists may nominate experts to serve as peer review panelists; however, the Scientific Review Administrator (SRA) in charge of the peer review meeting will make final determinations regarding the composition of the peer review panel and conflicts of interest. Intramural scientists may also advise Extramural Research Program Office (ERPO) staff regarding programmatic priorities to be considered during the secondary review process.

Clear standards governing conflicts of interest: The external peer review process includes an independent assessment of research and scientific programs by experts who are external to CDC. The CDC policy on **Peer Review of Research and Scientific Programs** states that reviewers must provide written assurance that their reviews are free of real or perceived conflicts of interest. Peer review addresses scientific technical quality and, as appropriate, assesses mission relevance, impact, and direction. Intramural scientists having real or perceived conflicts of interest with the applications under review may not attend or participate in initial peer review or secondary review meetings.

As stated in the CDC **Authorship Policy**, objectivity is an important value in science and is the basis for public trust. A **Guidance Document on Disclaimers for CDC Scientific Publications and Presentations** serves to clarify the use of disclaimers on CDC publications and presentations. The document also represents the interpretations and guidance from the CDC Excellence in Science Committee (EISC) and the CDC Office of the Associate Director of Science (OADS) on implementation of the disclaimer requirements in the Office of Management and Budget (OMB) bulletin. To ensure the scientific integrity and objectivity of information products authored in whole or in part by CDC staff, it is important to avoid situations in which financial or other interests might compromise or give the appearance of compromising the work. Disclosure of financial or other conflicts does not eliminate the potential for bias but rather provides additional information in which the objectivity of the science or information can be evaluated. For CDC information products, authors should comply with HHS/CDC guidelines for disclosing conflicts of interest in accordance with the **Supplemental Standards of Ethical Conduct for HHS employees** (5 CFR 5501).

CDC Guidance on Scientific Integrity

By prohibiting conflicts of interest, these rules guard against the possibility that an employee's scientific or policy work will be influenced by inappropriate considerations.

Prevent loss of integrity and investigate allegations of misconduct: Research misconduct, defined by the **Public Health Service Policies on Research Misconduct** (42 CFR 93), refers to fabrication, falsification, or plagiarism in proposing, performing, or reviewing research, or in reporting research results. Under the CDC policy for **Responding to Allegations of Research Misconduct**, all CDC employees shall be responsible for reporting observed, suspected, or apparent research misconduct to the Research Integrity Officer. Employees must cooperate in the review of allegations and the conduct of inquiries and investigations. The policy and procedures require that allegations of scientific misconduct be processed promptly, confidentially, and fairly, and that investigations must balance concerns for protecting the integrity of research as well as the careers and reputations of researchers. In instances when the observed conduct does not fall under the definition of research misconduct but may lead to loss of integrity, fact-findings should still be undertaken and preemptive measures instituted to prevent loss of integrity.

Appropriate whistleblower protections: The Notification and Federal Employee Antidiscrimination and Retaliation Act of 2002, also known as the No FEAR Act, requires that federal agencies be accountable for violations of antidiscrimination and whistleblower protection laws. All CDC staff are required to complete a mandatory **No FEAR Act** training. In accordance with the HHS Office of Research Integrity's **Guidelines for Institutions and Whistleblowers**, CDC is committed to complying with the policies, regulations, and procedures as outlined in the Act. Additional guidance is provided to all CDC managers and supervisors in the Human Resources Reference Guide.

Facilitate the Free Flow of Scientific and Technological Information

To facilitate the free flow of scientific and technological information consistent with privacy and classification standards, CDC promotes the availability of scientific information by publishing research papers, disseminating guidelines and recommendations, participating in conferences and meetings with members of the public and private sector, and making a variety of information available to the public through the CDC website and other media.

Manage and provide access to public health data: Public health and scientific advancement are best served when public health data are released to, or shared with, other public health agencies, academic researchers, private researchers (if appropriate) and other partners in an open, timely, and appropriate way (**CDC/ATSDR Policy on Public Health Research and Nonresearch Data Management and Access**). At the same time, CDC recognizes the critical importance of maintaining standards of data quality; upholding individual and institutional privacy and confidentiality; protecting information based on national security concerns and law enforcement investigations and activities; protecting proprietary interests and business confidential information; protecting intellectual property rights; considering ethical matters; and ensuring impartiality in the sharing of public health data.

CDC is committed to ensuring that all information products authored by its staff members or published by CDC are released for public use in a timely manner, are of the highest quality and are scientifically sound, technically accurate, and useful to the intended audience (**Clearance of Information Products Disseminated Outside CDC for Public Use**). Centers and offices are encouraged to establish mechanisms to recognize and reward not only authorship, but also the

CDC Guidance on Scientific Integrity

other numerous essential contributions to public health science and to the process of developing and disseminating information products.

The spirit of collaboration with external partners in developing authorship capability among a wide range of staff members is promoted by the CDC **Authorship Policy**.

CDC facilitates dissemination of scientific information by publishing research findings and periodical reports to the public for free (online or printed), including the **Morbidity and Mortality Weekly Report (MMWR)** series, **Emerging Infectious Diseases (EID)**, **Preventing Chronic Disease (PCD)**, and in peer reviewed journals published outside the agency.

The Guide to Community Preventive Services (**The Community Guide**) is a publicly available online resource for evidence-based recommendations and findings about what works to improve public health. It identifies information about public health interventions and effectiveness, studied populations, costs, benefits and harms, and gaps in research.

CDC ensures data collected or sponsored by CDC researchers are available for public use. CDC's National Center for Health Statistics (NCHS) offers downloadable public-use data files through the (CDC) file transfer protocol (FTP) server. Users of this service have access to **data sets**, **documentation**, and **questionnaires** from surveys and data collection systems and must comply with **data use restrictions** to ensure that the information will be used solely for statistical analysis or reporting purposes. Public-use data files are provided to allow access to the full scope of the data. NCHS makes every effort to release data collected through its surveys and data systems in a timely manner. Several data sets are available:

- National Health and Nutrition Examination Survey (**NHANES**)
- National Health Care Surveys (**NHCS**)
- National Vital Statistics System (**NVSS**)
- National Survey of Family Growth (**NSFG**)
- National Health Interview Survey (**NHIS**)
- National Immunization Survey (**NIS**)
- Longitudinal Studies of Aging (**LSOA**)
- State and Local Area Integrated Telephone Survey (**SLAITS**)

The **CDC WONDER** database provides a single point of access to a wide variety of reports and numeric public health data, making CDC's information resources available to health professionals and the public. WONDER enables data dissemination, online data queries and analysis, and visualization and reporting for public health data collections. WONDER's partners include programs throughout CDC and other agencies. CDC WONDER furthers CDC's mission of health promotion and disease prevention by accelerating and simplifying access to public health information for state and local health departments, the Public Health Service, and the academic public health community. CDC WONDER is valuable to public health research, decision making, priority setting, program evaluation, and resource allocation.

Additionally, each national center of CDC has an Internet page that provides up-to-date evidence-based information for different categories of users (i.e., public health stakeholders, health practitioners, researchers, the media, and general public).

CDC Guidance on Scientific Integrity

The CDC Public Access Project will allow CDC to expand access to scientific information by making it available in open formats, connecting with more people and sharing its research, program activities, current public health recommendations and guidelines, and other information. The Public Access Project was launched in 2011. The project goals are to

Increase accessibility of results for the public, health care providers, educators, and scientists

Create a permanent archive of publications and other materials, including videos, tool kits, books, white papers, posters

Facilitate collaboration by creating a single, searchable, archive from many diverse sources

Improve health literacy through easy access to CDC publications

Increase accountability by making the results available to the public

Ensure transparency of official activities: The Office of Management and Budget (OMB) requires peer review for influential scientific information publications before they are disseminated to the public (**OMB Final Information Quality Bulletin for Peer Review**). Issues that must be considered include transparency of the review process, conflicts of interest, and appropriateness and independence of reviewers. The OMB bulletin also requires that Highly Influential Scientific Assessments (HISAs) expected to have an impact of more than \$500 million, are controversial, or are of significant interagency interest undergo rigorous review by experts outside HHS and allow for public participation in the peer review process. CDC reports information about the status of HISAs and Influential Scientific Information (ISI) activities on a publicly accessible CDC website (**OMB Information Quality Peer Review Agenda**).

CDC strives to ensure ready access to records and data that will help improve and promote the health of the American public, while complying with applicable federal laws such as the **Federal Records Act** and documenting the official activities of CDC. This compliance includes adhering to objectives, responsibilities, standards, guidelines, and instructions to ensure CDC meets all federal records management regulations, laws, and best practices for the management of electronic records (CDC **Records Management** policy).

Facilitate open communication among scientist and with the public: CDC recognizes that public health and scientific advancement are best served when scientific information is openly shared and used by the public, public health professionals, health care providers, educators, policy makers, businesses, and private-sector organizations. **Public Health Grand Rounds** is a monthly series created to strengthen CDC's common scientific culture and foster discussion and debate on major public health issues (e.g., obesity, tobacco use, HIV/AIDS, hospital-associated infections, malaria). It is an open and candid dialog about the issues, with emphasis on cutting-edge science and the potential impact different interventions may have toward improving health. Beginning September 2009, the sessions highlight how CDC and partner organizations are already addressing these challenges and discuss recommendations for future research and

CDC Guidance on Scientific Integrity

practice. The series is eligible for continuing education credits in seven categories. All sessions, including archives of the previous sessions, are open to the public through a live broadband link. The Public Health Grand Rounds is highly successful: external audiences have consistently grown in numbers, and in 2010, almost 200,000 external viewers watched these sessions.

CDC Scientific Workgroups foster an environment for cross agency and trans-disciplinary research. With membership from throughout the agency, the CDC scientific workgroups nurture the scientific interchange in a cross-cutting manner and in accordance with the **CDC Work Groups** policy.

The CDC **Excellence in Science Committee** (EISC) promotes CDC's scientific infrastructure and facilitates communication and collaboration that enhance scientific areas and activities needed for state of the art conduct of science. EISC is the primary scientific policy development body at CDC. EISC provides a forum for information exchange among Associate Directors for Science (ADSs) and leaders of CDC scientific workgroups. As advocates for scientific integrity, EISC serves as a consulting body for science-related issues. It makes recommendations to the national centers, or the CDC Director and ATSDR Administrator, when appropriate.

The **CDC Vital Signs** monthly fact sheets are a call to action for a single, important public health topic. Each issue consists of several parts, including an MMWR early release the first Tuesday of every month; a professionally designed fact sheet for consumer audiences, a dedicated website that mirrors the fact sheet about the current topic, a media release, and a series of announcements via social media (Twitter, Facebook, etc.). CDC Knowledge to Action **Science Clips** is a weekly compilation of literature featuring CDC-authored publications, key scientific articles selected by subject-matter experts, and public health articles posted in the media. Science Clips include access to abstracts in PubMed and to full free text content, if available; subscriptions to RSS feeds for specific topics of interest; and ability to feature Science Clips on state and local health department websites through content syndication. Since June 2010, Science Clips are shared via the Health Alert Network (HAN) email list.

CDC-Sponsored Conferences: Sponsorship of relevant conferences can provide opportunities to actively further CDC's mission. Many CDC-sponsored conferences are scientific meetings that provide a venue for presenting scientific results and for discussing and evaluating science that affects public health and might result in policy development or practice. The guiding principles to ensure that scientific meetings will be conducted in a meritorious and unbiased manner are set forth in the agency policy for **Securing Approval for Sponsorship of Conferences**

Establish Principles for Conveying Scientific and Technological Information to the Public
In harmony with CDC efforts to provide information that is accessible to the largest public audience possible, there are principles for the accurate and clear presentation of information. Through research reports, guidelines, and recommendations, CDC seeks to convey the strength of the evidence of the results, the limitations, and the appropriate application of information.

CDC policies, procedures, and programs address principles for, and promote the distribution of, scientific information from CDC to the public. Each of these emphasizes accuracy, clarity, quality, and a commitment to scientific evidence in the development of advice and

CDC Guidance on Scientific Integrity

recommendations for clinicians, public health practitioners, community organizations, state and local health departments, and the public on how to improve the effectiveness of public health interventions and practices.

Evidence based public health guidelines and recommendations: CDC is currently revising and developing the next generation of recommended standards for developing and disseminating agency guidelines. These will include materials and Internet tools, training, and high-quality methods and frameworks to obtain evidence that support guidelines, ensure credibility, and promote acceptance by the users. **CDC Guidelines: Improving the Quality** is a guide that offers several recommendations and a detailed process for CDC staff who develop guidelines. Careful attention should be given to this guide when planning and coordinating, assessing need, developing frameworks, gathering evidence, reviewing, and writing guidelines.

The **Morbidity and Mortality Weekly Report (MMWR)** series, published by CDC, is the primary vehicle for scientific publication of timely, accurate, objective, and authoritative public health information and recommendations for the news media and public health community (public health practitioners, teachers, educators and students, clinicians, and researchers). Authors who submit articles to MMWR must adhere to detailed publication standards provided in the **Instructions to Authors**. Submissions must undergo a clearance review process by subject-matter experts and editors to ensure clarity, accuracy, and usefulness.

The Community Guide conducts systematic reviews of public health interventions. The Task Force on Community Preventive Services uses the results of these reviews to issue evidence-based recommendations and findings to the public health community. The Task Force is an independent, nonfederal, volunteer body of public health and prevention experts, whose members are appointed by the Director of CDC. The Community Guide requires a rigorous systematic review of scientific studies through a formal process to identify all relevant studies, assess their quality, and summarize the evidence. The scientific process reduces bias, improves power and precision, summarizes evidence about effectiveness, analyzes whether findings can be generalized, and identifies knowledge gaps and needs for additional research. The task force categorizes and issues findings as

Recommended (the systematic review of available studies provides strong or sufficient evidence that the intervention is effective)

Recommended Against (the systematic review of available studies provides strong or sufficient evidence that the intervention is harmful or not effective)

A rationale statement may accompany these findings to explain a recommendation or other conclusion.

Free and timely release of public health data: As stated in the **CDC/ATSDR Policy on Public Health Research and Nonresearch Data Management and Access** (and consistent with the OMB, HHS, and CDC Guidelines for Ensuring the Quality of Information Disseminated to the Public), CDC seeks to make accessible public health data it has collected and generated, subject to limits imposed by law, ethical considerations, resources, technology, data quality, and must ensure the complete protection of data from physical and electronic risks to privacy and confidentiality. This policy addresses public health data management through all stages of the process and making data accessible. Before any data are made accessible, all phases of data

CDC Guidance on Scientific Integrity

collection, transmission, editing, processing, analysis, and storage must be evaluated for quality.

In its communication with the public and the news media, CDC is committed to openness, free exchange of information and data, accuracy, timeliness, and responsiveness. Further, CDC offers the widest practical and appropriate dissemination of information about public health research, science, programs, and recommendations. In compliance with the Code of Conduct for CDC Media Relations Employees policy for **Release of Information to News Media**, CDC media relations employees are to be honest and accurate, respond promptly, and promote the free flow of scientific and technical information.

Policies and Guidance

CDC-HR-2005-02 Merit Promotion Plan

CDC-HHS-HR-2006-01 HHS Performance Management Appraisal Program

CDC-HR-2002-02 Physicians Comparability Allowance

CDC-HR-2002-10 On-the-Spot Awards Program

CDC-HR-2004-01 Priority Placement Program

CDC-GA-2002-09 Peer Review of Research and Scientific Programs

CDC-GA-2005-06 Clearance of Information Products Distributed Outside CDC for Public Use

CDC-GA-1996-01 Inclusion of Women and Racial and Ethnic Minorities in Research

Guiding Principles for Public-Private Partnerships

CDC-GA-1997-02 Securing Approval for Sponsorship of Conferences

CDC-GA-2005-19 Confidential Financial Disclosure System Policy for CDC/ATSDR

CDC-GA-2006-03 Internal Controls Program

CDC-SA-2003-01 Laboratory Animal Care and Use Policy

CDC-SA-2006-01 Inclusion of Persons under the Age of 21 in Research

CDC Guidance on Scientific Integrity

CDC-SA-2009-01 Establishment of Method Performance Specifications Before Reporting Results From In-House Developed Laboratory Tests

CDC-SM-2007-01 Oversight and Clearance of Dual-Use Research of Concern Policy

CDC-GA-1998-01 Export Controls for Biologicals, Chemicals and Related Technical Data and Equipment

CDC-GA1999-02 CDC and ATSDR Specimen Packaging, Inventory and Repository (CASPIR™)

CDC-SA-2010-01 Human Research Protections

Federal Select Agent Program (42 CFR Part 73)

CDC-GA-2005-07 Records Management

CDC-GA-2005-14 CDC/ATSDR Policy on Public Health Research and Nonresearch Data Management and Access

CDC-SA-2002-01 Responding to Allegations of Research Misconduct

CDC-GA-2008-02 Procedures and Public Release Policy for After Action Reports, Improvement Plans, and the Corrective Action Program

CDC-SA-2010-02 Distinguishing Public Health Research and Public Health Nonresearch

CDC-GA-2006-05 Coordination and Management of Domestic Field Staff Assignments

PUBLIC COMMUNICATIONS

CDC issues a variety of guidelines, recommendations, principles and policies for conveying scientific and technological information to the public.

When CDC learns of confusion about a CDC-issued public health message and determines that clarification or additional information should be published, CDC will take reasonable steps, using plain language, to address confusion. In addition, when CDC issues or releases a product in an expedited time frame or based on uncertain or incomplete information and determines additional information should be published to clarify the original public health message, even if there is no evidence of confusion, it will take appropriate steps to publish the additional information.

CDC Guidance on Scientific Integrity

Response to Media Inquiries

In compliance with the Code of Conduct for CDC Media Relations Employees policy for **Release of Information to News Media**, CDC media relations employees are to be honest and accurate, respond promptly, and promote the free flow of scientific and technical information. In its communication with the public and the news media, CDC is committed to openness, free exchange of information and data, accuracy, timeliness, and responsiveness. Further, CDC offers the widest practical and appropriate dissemination of information about public health research, science, programs, and recommendations. In keeping with the desire for a culture of openness, CDC employees may, consistent with this policy, speak to members of the press about their work.

Speak on Official Work without Interference from Media Communication or Policy Office

CDC is committed to ensuring that all information products authored by its staff members or published by CDC are released for public use in a timely manner, are of the highest quality and are scientifically sound, technically accurate, and useful to the intended audience (**Clearance of Information Products Disseminated Outside CDC for Public Use**). Consistent with policy for **Release of Information to News Media**, presenters at public events, such as conferences or meetings, may conduct interviews with media regarding their presentation while on site without interference from CDC media employees.

CDC media relations employees will adhere to the following code of conduct:

- Be honest and accurate in all communications
- Honor publication embargoes
- Respond promptly to media requests and respect media deadlines
- Act promptly to correct the record or erroneous information, when appropriate
- Promote the free flow of scientific and technical information
- Protect non-public information

CDC will release information consistent with the Freedom of Information Act (FOIA) provisions.

Mechanisms to Resolve Disputes that Arise During Clearance Process

In compliance with the Code of Conduct for CDC Media Relations Employees policy for **Release of Information to News Media**, CDC media relations employees are to be honest and accurate, respond promptly, and promote the free flow of scientific and technical information. “CDC employees who present personal or individual views must make clear that they are presenting their personal or individual views—not the views of CDC or HHS—and they should not be sourced as a CDC or HHS representative in the piece.” (CDC-CM-2009-01)

National center directors have ultimate responsibility for the technical, scientific, and programmatic accuracy of all information that is related to their respective programs and released by CDC (CDC-CM-2009-01). The Office of the Director for each center must develop procedures for resolving disputes that arise during the clearance process (CDC-GA-2005-06).

CDC Guidance on Scientific Integrity

CDC adheres to these principles in its communication with the media and public:

CDC communication is science-based, timely, accurate, respectful, credible, and consistent (STARCC).

CDC embraces intellectual honesty and transparency in its release of information to fully empower public decision making.

CDC accepts scientific debate and respects the peer-review process.

CDC's communication is empathetic, respectful, non-judgmental, and never arrogant toward others.

CDC considers diverse cultural and societal values and beliefs when developing messages.

CDC does not use trickery or deceptive communication techniques to advance public health recommendations or its reputation.

CDC is accountable for its actions and recommendations, whether they are good or bad, popular or not.

CDC's good reputation is not sacrificed for the sake of any past, current, or future employee or partner.

CDC respects the right of its detractors to voice their opposition and does not impute the source's motives but does vigorously correct errors and challenge misjudgments.

CDC embraces the idea that plain language works best to eliminate ambiguity in its research results and health recommendations for the public.

CDC admits its mistakes, past and present, and takes responsibility for correcting them.

CDC does not withhold information only to avoid embarrassment.

Training is offered one or more times annually to all scientific/technology professionals at CDC:

- CDC Media Relations Training
- CDC High Stakes Communication Training
- CDC Crisis and Emergency Risk Communication Training
- CDC Risk Smart Communications Training

Policies and Guidance

CDC-CM-2009-01 CDC Media Relations Policy: Release of Information to News Media

CDC-GA-2005-06 Clearance of Information Products Disseminated Outside CDC for Public Use

CDC Guidance on Scientific Integrity

CDC-GA-2002-02 Freedom of Information Act

CDC-GA-2001-08 Employee Testimony in Litigation

CDC-IS-2012-01 National Security Information

CDC-GA-2005-14 CDC/ATSDR Policy on Public Health Research and Nonresearch Data Management and Access

CDC-IS-2005-02 Controlled Unclassified Information

CDC Press/Media Relations Officers

Standards of Conduct for Employees of the Executive Branch, 5 CFR 2635

OMB Statistical Policy Directive No. 4: Release and Dissemination of Statistical Products Produced by Federal Statistical Agencies. OMB, March 7, 2008.

USE OF FEDERAL ADVISORY COMMITTEES

Federal advisory committees are a key component of CDC's overall strategy to engage the public and stakeholders in its efforts and commitment to improve people's health.

Recruitment Process

The process used by CDC to recruit candidates for its advisory committees is addressed in CDC's **Federal Advisory Committee Management Handbook**. CDC uses a broad range of recruitment tools that consistently yields a diverse pool of qualified candidates. Solicitation of individual names comes from staff, leaders in pertinent fields, and scientific and professional organizations. Nominees may also be received from agency officials, members of Congress, the general public, current or former committee members, professional organizations, universities and colleges, the IMPAC II database (containing names of past committee members), and the CDC committee management database of current and past committee members. Additionally, nominees may be solicited through Federal Register Notices (including self-nominations) or newspapers.

Professional Biographical Information

CDC maintains a **Federal Advisory Committee** website that serves as a portal for public access to information about each committee including its membership, meeting minutes, and charter.

Member biographical information includes current professional affiliation, title, city and state, and term of appointment. Other efforts to improve transparency of committee composition include the following:

- Committee websites that provide detailed biographical information about members, by-laws, meeting agendas and, as appropriate, other committee documents

- Committee meeting materials (e.g. pamphlets, booklets, papers, handouts) with photos and biographical information about members

CDC Guidance on Scientific Integrity

Professional biographical information is made available to the public subject to Privacy Act and other statutory/regulatory considerations

Membership Selection Process

CDC follows the General Services Administration's guidance for ensuring that the advisory committee is representative and balanced (**Federal Advisory Committee Membership Balance Plan**).

All committee charters established, re-chartered, amended, or renewed include balanced membership plans. "Balance" refers to the points of view represented and the functions to be performed by Federal advisory committees. The balance plan addresses such matters as expertise, knowledge, and contribution to the relevant subject area and diversity (gender, ethnic, racial, geographic) among members. The HHS Secretary or CDC Director, in accordance with the charter, will assess and consider membership balance whenever they appoint new committee members to serve on a particular committee.

Public Availability of Conflict of Interest Waivers

Consistent with the mandates of the Office of Government Ethics, CDC implements rigorous processes requiring advisory committee members to confidentially report their financial interests each year (see **Ethics Rules for Advisory Committee Members**). Federal law prohibits a committee member with certain conflicts of interest from participating in an advisory committee meeting unless a waiver is granted. Consistent with Federal law (18 U.S.C. 208 and 5 CFR 2640.304), CDC will continue to make Conflict of Interest waivers granted to committee members available to the public upon request.

Federal Advisory Committee Reports, Recommendations, and Products

The Federal Advisory Committee Act (5 U.S.C. Appendix, Section 5(b)(3)), and the Federal Advisory Committee Act implementing regulations (41 CFR 102-3.105(g)) require that the advice, recommendations, and reports of advisory committees will not be inappropriately influenced by the committee appointing authority, a federal agency, or by any special interest, but will instead be the result of the advisory committee's independent judgment. Reports, recommendations, and products produced by FACs should be treated as solely the findings of such committees rather than of the U.S. Government, and thus are not subject to intra- or inter-agency revision.

Polices and Guidance

Federal Advisory Committee Act, 5 U.S. Code Appendix

GSA Federal Advisory Committee Management, Final Rule, 41 Code of Federal Regulations Parts 101-6 and 102-3

CDC-GA-2000-02 Federal Advisory Committee Meeting Minutes

CDC-GA-2001-05 Financial Disclosure for Federal Advisory Committee Members Appointed as Special Government Employees

CDC Guidance on Scientific Integrity

HHS General Administration Manual, Chapter 9-00

HHS Committee Management Handbook

CDC Federal Advisory Committee Management Handbook

PROFESSIONAL DEVELOPMENT OF GOVERNMENT SCIENTISTS AND ENGINEERS

CDC is committed to investing in human capital and workforce development which is critical to accomplishing the agency's mission. CDC's workforce is its most important asset, and strategic learning investments enhance recruitment and retention efforts, increase skill sets, introduce innovative practices, provide incentives, and reward employees. This commitment to workforce development is expressed in the following agency activities:

CDC University provides employees with training opportunities that support CDC's mission and goals (see **CDC University**). **The School of Public Health Science, Research, and Medicine** offers training through a cooperative curriculum development effort of CDC University (CDCU) and the Advisory Council to the School of Public Health Science, Research, and Medicine. Together, the Council and CDCU use competency gap analysis to drive curriculum priorities.

CDC promotes outside training opportunities for civil service employees to advance their ability to protect public health (**Long Term Education Program**).

CDC provides employees with flexible learning opportunities through use of Individual Learning Accounts (ILAs) **Management of Training: Individual Learning Accounts**.

Employees and supervisors are responsible for developing an agreement in the form of a competency-based Individual Development Plan (IDP) (Refer to **Information on Individual Development Plans**).

The Initiative for Leadership Enhancement and Development (I LEAD) is a competency-based framework for CDC's leader-building efforts. I LEAD offers a structured pathway through the leadership curriculum called a **Leadership Development Map (LDM)**

CDC's formal mentoring program, administered by CDC University, is a structured extension of informal mentoring that is an integral part of CDC culture.

Short-term scientific rotations support the professional development of a scientist interested in pursuing a career track as an Associate Director for Science (ADS) or in the science leadership, management and policy field.

CDC Scientific Workgroups foster an environment for cross agency and trans-disciplinary research. With membership from throughout the agency, the CDC scientific workgroups nurture the scientific interchange in a cross-cutting manner (Refer to the **CDC Work Groups** policy).

The CDC policy on **Developing Continuing Education** outlines the policies and procedures for CDC or joint-sponsored activities when continuing education credits are to be awarded by CDC.

CDC Guidance on Scientific Integrity

CDC recognizes that the professional development of government scientists and researchers benefits CDC's scientific programs and builds the agency's credibility and reputation. As such, CDC has instituted policies and made venues available to promote and encourage professional growth as demonstrated in the following sections.

Encourage Publication of Research Findings in Peer-Reviewed, Professional, or Scholarly Journals

Publishing: CDC encourages professional dissemination of findings of scientific research by employees and CDC-funded researchers. Multiple venues exist for scientists and researchers to publish their work. Research studies may be published in the Morbidity and Mortality Weekly Report (MMWR) for example, or in non-CDC publications including journals, books, chapters, editorials, reviews, proceedings, or abstracts. Additional avenues to present scientific information include CDC publications such as Emerging Infectious Diseases (EID) and Preventing Chronic Disease (PCD). Selected CDC-authored publications are posted at the CDC **Science Clips website** to enhance awareness of emerging scientific knowledge for the public health community and interested members of the public. CDC promotes scientific authorship by offering courses to improve manuscript writing skills through **CDC University**. CDC also promotes scientific authorship by paying fees associated with publication of work done by CDC scientists.

Authorship: Research publications are typically authored or co-authored by CDC staff scientists as part of their official duties. However, publications may also be authored by CDC partners or advisory committees, or CDC-convened working groups. To ensure the scientific integrity and objectivity of information products authored in whole or in part by CDC staff, it is important to avoid situations in which financial or other interests might compromise or give the appearance of compromising the work. CDC authors should comply with HHS/CDC guidelines for disclosing conflicts of interest and refer to the CDC **Authorship Policy** for guidance on authorship criteria, roles and responsibilities for publication, and copyright rules for federal employees. Works created by employees of the United States Government as part of their employment are considered a "Work of the United States Government." Copyright protection is not available for these works in the United States (See policy on **Reproduction of Copyrighted Materials**). However, employees are also advised that the federal government is subject to copyright law and must act to ensure that third parties' rights are not violated.

CDC management provides a wide range of opportunities for scientists to develop authorship capability. Centers and offices should also encourage a spirit of collaboration among staff members, and external partners, and should provide opportunities for partners to serve as authors on CDC publications. It is CDC's policy to ensure and maximize the quality, objectivity, utility, and integrity of information that it disseminates to the public as set forth in the policy on **Clearance of Information Products Distributed Outside CDC for Public Use**. CDC ensures that disseminated information is in accordance with the standards of quality set forth in the OMB and HHS Guidelines (**Guidelines for Ensuring the Quality of Information Disseminated to the Public**).

CDC Guidance on Scientific Integrity

Encourage Presentation of Research Findings at Professional Meetings

Conference attendance by CDC scientists: CDC researchers are encouraged to participate in professional society meetings and other public venues to share their results with colleagues in the public and private sectors. CDC may pay for an employee to attend a conference as a developmental assignment under the **HHS Conference Travel Policy** and in accordance with Federal Travel Regulations.

CDC-sponsored conferences: Sponsorship of relevant conferences can provide opportunities to actively further CDC's mission. Many CDC-sponsored conferences are scientific meetings that provide a venue for presenting scientific results and for discussing and evaluating science that affects public health and might result in policy development or practice. The guiding principles to ensure that scientific meetings will be conducted in a meritorious and unbiased manner are set forth in the agency policy for **Securing Approval for Sponsorship of Conferences**.

Collaborations with the private sector for conference sponsorship: Partnerships with nonfederal organizations enable CDC to expand its public health networks, thereby improving the usefulness of research and the dissemination and effectiveness of health interventions. Collaborations with the private sector might involve professional education, including conference sponsorship. The agendas and missions of private organizations may overlap to a greater or lesser degree with those of CDC. Even where such overlap exists, CDC and private organizations can have fundamental differences. CDC's **Guiding Principles for Public-Private Partnerships** discusses the need to assess the suitability of potential collaborations with not-for-profit and for-profit organizations. The Office of General Council (OGC) should be consulted when contemplating co-sponsorships and/or collaborations with any entity.

Scientists Serving as Editors or Editorial Board Members of Professional or Scholarly Journals

To the extent allowed by the Standards of Ethical Conduct, CDC encourages its qualified scientists to participate on editorial boards or to serve as editors of professional journals. The **HHS Supplemental Standards of Ethical Conduct** (5 CFR 5501) states that written approval is required prior to engaging, with or without compensation, in such duties to a non-Federal entity as an officer, director, or board member, or as a member of a group, such as a planning commission, advisory council, editorial board, or scientific or technical advisory board or panel, which requires the provision of advice, counsel, or consultation.

Scientists Participating in Professional or Scholarly Societies, Committees, and Task Forces

CDC scientists are allowed participation in professional or scholarly societies, committees, task forces and other specialized bodies of professional societies, including addressing concerns related to serving as officers or on governing boards of such societies.

Serving in an official capacity: CDC scientists are encouraged and often expected to participate in external working groups, task forces, committees, and professional society organizations.

CDC Guidance on Scientific Integrity

Most activities related to an employee's official duties do not require written approval and are considered an extension of official duties, although it is prudent for an employee to alert his/her supervisor of such participation. However, participation beyond ordinary membership (e.g., holding office, committee membership) must be approved in advance through the Ethics Program Activity Office. As stated previously, official duties requiring written approval include: serving on an advisory committee, serving as a federal liaison, serving on a standard-setting body, or serving as an officer, trustee or on the board of directors of an outside organization. Such activities require submission of a waiver to avoid implicating criminal financial conflict of interest statutes found in 18 U.S.C. 202-209. Collaboration with the private sector, including professional organizations, can raise concerns about potential conflicts of interest between CDC's general responsibilities and responsibilities growing out of the collaboration. Thus, CDC's **Guiding Principles for Public-Private Partnerships** outlines principles to ensure that CDC attends to its primary mission and to govern the assessment of the potential collaboration. Additionally, CDC staff assigned or detailed to non-profit public health organizations and liaison staff based in national-level partner organizations must act in accordance with CDC policy on the **Coordination and Management of Domestic Field Staff Assignments**.

Participation as a member: CDC promotes membership in professional organizations. To encourage such participation, CDC policy on **Procurement of Agency Membership in Professional Organizations**, allows payment for agency membership in a professional organization when it is determined that the membership is of benefit to CDC or ATSDR. Only one membership per agency per professional organization is allowed. Title 5 U.S.C. 5946, prohibits the use of appropriated funds for the payment of individual membership fees or dues for officers or employees of the Government. Additionally, the CDC Financial Management Office should be consulted prior to the purchase of agency memberships in professional organizations.

Participation as an official of an organization: Pursuant to 18 U.S.C. 208, official participation in an outside organization as an officer, director, or trustee is prohibited except when (1) participation is authorized by statute; (2) waiver is submitted in accordance with 18 U.S.C. 208 (b)(1); (3) the release of fiduciary obligations associated with participation are consistent with state law. Employees who will be collaborating with the private sector should receive orientation and guidance from the CDC Ethics Officer about the agency's principles, criteria, and recommendations for collaborating with the private sector (See CDC's **Guiding Principles for Public-Private Partnerships**). The CDC Ethics Officer shall serve as a consultant to employees developing private sector collaborations. The Ethics Officer will involve others (e.g., Office of the General Counsel) as needed.

Serving in a personal capacity: CDC employees may participate in activities outside the workplace if the employment or activity does not conflict with HHS duties and does not violate a federal statute or regulation. Employees must obtain approval before engaging in an outside activity that requires the use of professional qualifications readily identified with CDC employment. Additionally, in accordance with 18 U.S.C 208, employees who serve as an officer, director, trustee, or employee of nonprofit organizations may not participate in matters affecting the financial interest of that organization, absent a waiver or exception. CDC employees are encouraged to contact the **Ethics Program Activity Office** for consultation and submission of the **Request for Approval of Outside Activity** (form HHS-520).

CDC Guidance on Scientific Integrity

Allow Government Scientists and Engineers to Receive Honors and Awards for Their Research and Discoveries

Government scientists and engineers should be allowed to receive honors and awards for their research and discoveries, to the extent allowable by applicable federal law, with the goal of minimizing, to the extent practicable, disparities in the potential for private-sector and public-sector scientists and engineers to accrue the professional benefits of such honors or awards. CDC scientists are recipients of numerous honors, awards, and other forms of recognition, acknowledged through both internal and external means:

Internal awards and recognition: CDC awardees are often acknowledged and have their work highlighted on CDC's intranet, through Science Clips, and during CDC awards ceremonies. Centers and offices are encouraged to find ways to recognize and reward not only authorship but other numerous essential contributions to public health science and to the process of developing and disseminating information products. Excellence in scientific authorship is also recognized through internal venues that highlight research with major impact and honors and awards for scientific excellence (e.g. the Shepard Award, CDC/ATSDR awards, center awards). CDC also has an Incentive Awards Program, carried out in accordance with the Government Employees Incentive Awards Act, to reward superior accomplishments, which includes, for example, the On-the-Spot Award (See **On-the-Spot Award Program** policy). This award provides supervisors with a mechanism to immediately recognize employees whose significant extra efforts and contributions help CDC accomplish its goals and objectives or who perform in an exemplary manner.

Awards from outside sources: In certain circumstances an award may be accepted for meritorious public service or achievement, including work performed at CDC. Awards may not be accepted from entities with interests that may be substantially affected by the performance or nonperformance of the employee's official duties. Additionally, CDC employees may not accept outside compensation for performing official duties. Employees are prohibited from accepting compensation for teaching, speaking, or writing that "relates to their official duties" or if invited to perform work by a prohibited source that has government matters pending. An award that has a market value of more than \$200 requires prior written determination by the Departmental Ethics Committee (DEC) that the award is part of an established program of recognition. CDC researchers may contact the **Ethics Program Activity Office** for consultation and to obtain the HHS Office of the General Council Ethics Division **Form for Review/Approval of Awards**.

Official duty honoraria: CDC employees are allowed and encouraged to participate in speaking engagements, but they are prohibited from accepting compensation for teaching, speaking, or writing that "relates to their official duties." Federal employees may not accept contributions or supplementation of their government salary for performance of an official duty.

CDC Guidance on Scientific Integrity

Policies and Guidance

CDC-HR-2000-01 Fellowship Program

CDC-HR-2008-01 Long Term Education Program

CDC-HR-2005-05 Management of Training: Individual Learning Accounts

CDC-GA-2005-08 Authorship Policy

Guiding Principles for Public-Private Partnerships

CDC-GA-1997-02 Securing Approval for Sponsorship of Conferences

CDC-GA-2004-2 Procurement of Agency Membership in Professional Organizations

CDC-GA-2004-10 Developing Continuing Education

CDC-GA-2006-04 CDC Work Groups

CDC-HR-2002-10 On-the-Spot Awards Program

IMPLEMENTATION

The policies and activities outlined in this document apply to all CDC science and research programs. The scientific oversight offices (Associate Directors for Science) throughout the agency are charged with upholding the principles of scientific integrity stated in these policies and contained within their respective centers, institutes and offices.

Training: CDC will use this guidance as framework for training of its staff to increase awareness of all the laws, regulations, policies and guidance on scientific integrity.